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LEAD638 LEADING IN A VIRTUAL ENVIRONMENT

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# I

## INTRODUCTION

In 1997, there were 13 million telecommuters in the United States (JALA, n.d.a). In 2003, this number climbed to 23.5 million (Carbasha, 2004). AT&T claims that there are significant employee, employer, and environmental benefits to telecommuting (AT&T, 2004a). Factors driving companies to implement telecommuting include a transition to an increasingly information intensive workplace, advances in computer and telecommunications technology, sociological trends such as the advent of dual wage earners, more single parent families, and an increasing emphasis in balancing work and family life, environmental consciousness such as reducing transportation fuel consumption and pollution, and organizational pressures to reduce costs and improve productivity (Joice, 1999).

What is telework anyway? How can our organization effectively use teleworking approaches? What are its benefits and obstacles to successful implementation? If telework is an opportunity that makes sense for our organization to pursue, what are the steps we might take to successfully implement telework?

Telecommuting and telework are terms first coined in 1973 as a result of a pilot project testing associated concepts at the University of Southern California (JALA, n.d.b; Joice, 1999). There seem to be no unequivocal definitions of these terms and they are often used as synonyms, but some useful distinctions can be drawn.

Telecommuting is a more common term in the United States (Gil Gordon, n.d.; JALA, n.d.a). A distinguishing characteristic of the term telecommuting is that it refers to the notion of moving work to the worker rather than requiring the worker to commute to a work place. A

significant aspect of telecommuting is a reduction in traffic congestion and pollution associated with urban areas (JALA, n.d.b).

Telework is a term popular in Europe and not used as much in the United States (Gil Gordon, n.d.; JALA, n.d.a). The definition of the prefix tele- is at or over a distance, so a meaningful definition of telework is work at a distance (Gil Gordon, n.d; Merriam-Webster, n.d.). Telework is also defined as the use of computer and telecommunications technology to accomplish work in lieu of traveling. This would include home-based businesses, sales, support, or other employees remotely located from a company office (at home, a customer site, or another facility), interaction with customers and other third parties that are in a different location. This definition of telework includes telecommuting, but not all telework is telecommuting (JALA, n.d.b).

This paper explores the idea and feasibility of telework for the employees of the Information Technology Services (ITS) organization. Since the ITS organization is primarily located at company headquarters, telecommuting or allowing employees to work from home rather than commuting to the office is the form of telework most appropriate to consider. This paper proposes how to effectively implement telecommuting and consists of several sections that both explain aspects of telecommuting and telework and relates these aspects to the ITS telecommuting proposal:

Benefits of Telecommuting. This section describes the potential opportunities of telecommuting and how they apply to the ITS organization.

Obstacles of Telecommuting. This section describes the obstacles to realizing the potential benefits of telecommuting.

Teleworker Selection Criteria. This section describes the types of employees that are good candidates for telecommuting and how they are selected for the program.

Teleworker Training Needs. This section describes the types of training necessary for teleworkers and their managers.

Teleworker Performance Evaluation. This section describes how to evaluate the performance of telework employees.

Communication Methods for Managers of Teleworkers. This section describes the approach for communication between managers and teleworkers.

Teleworker Equipment Requirements. This section describes considerations for the equipment needs of teleworkers.

Conclusion. This section summarizes the telecommuting proposal.

## II

### BENEFITS OF TELECOMMUTING

There are significant benefits to the stakeholders involved in providing telecommuting options to employees. Benefits can be grouped into categories of stakeholders: employee, organization, and community.

Benefits to employees center on improved quality of life and encompass higher morale, lower stress, a feeling of increased control over life and work circumstances, improvements in balancing work/personal/family life, reduced commuting costs (auto, fuel, and parking), and reduced wardrobe costs (Joice, 1999; AT&T, 2004b). One study of teleworking employees identified these advantages (ranked in order): more flexible schedules, avoiding travel time to office, more productive, being close to family, and improvement in work quality (Tremblay, 2002).

Benefits to the organization center on improved productivity, more satisfied employees, and cost efficiencies.

Productivity improvements of information workers are often cited but difficult to measure, but in the most conservative case, do not decrease (Joice, 1999). However, credible reports of productivity improvements are common: “The main advantage to employers is greater productivity (gains of up to 60% have been reported). ... [This] can be attributed to fewer interruptions and improved concentration; increased motivation and morale; and a higher energy level on the job due to the elimination of wasted time and frustrations of commuting.” (Telework benefits all, 1997). Additionally, teleworkers report that eliminating their commute to work results in more hours on the job (AT&T, 2004a) and spending less time in the office reduces non-productive time (such as social time around the water cooler) (AT&T, 2004b).

Employee benefits such as those previously described ultimately result in benefits to the organization in terms of happier workers and improvements in the ability of the organization to attract and retain qualified employees. Employee perceptions of benefits provide insight of interest to employers. According to a survey conducted by AT&T in 2000 of their own employees, benefits include (AT&T, 2004a):

- Increased productivity. Telecommuting provides a minimum of one hour additional work time per day and most teleworkers report they get more work done when working out of their home rather than the office. .
- Improved employee retention. Teleworkers report they are more satisfied with their jobs, more satisfied by their personal and family lives, and are more likely to stay in jobs that offer telecommuting and turn down competing job offers. Managers report that telecommuting is a significant factor in attracting and retaining qualified employees.
- Reduced office space overhead costs. Cost efficiencies include a reduction in facility costs due to a decrease in office space needs.
- Reduced absenteeism. Teleworkers report that they take less time off to handle personal issues like childcare, medical, and other personal matters because they can work partial days at home rather than take entire days off as is often the case when working at the office location.

Other tangible benefits include, expanded service hours, improved scheduling flexibility, reduced absenteeism and tardiness, expanded labor pools, improved customer service (when locating employees at customer sites), improved response time to customer problems and

inquiries, increased focus with fewer interruptions, and enhancing peak performance by allowing employees to work at times they find most productive (AT&T, 2004b).

Benefits to the community include reduced traffic congestion, pollution, fuel consumption, and paper usage (through increased electronic communication) (Joice, 1999; AT&T, 2004b). Also, more employment opportunities to people with accessibility challenges or other handicaps can be offered (AT&T, 2004b; Somerville, 2003).

The proposal is for the ITS organization to pursue realization of several of these benefits. Increased worker productivity and reduced facility costs are important tangible benefits to the ITS organization. But the most significant benefit to ITS is the ability to attract and retain employees with technical skills that are critical to successful implementation of technologies important to achieving business objectives. These technical skills are typically in high demand in the marketplace, and a telecommuting option provides a hiring advantage often more important than salary.

### III

#### OBSTACLES OF TELECOMMUTING

Generally, the disadvantages of telecommuting are limited and can be categorized into areas of employee challenges, organizational leadership challenges, and technology challenges.

Employee challenges include a risk of working more hours, difficulty in self-motivation, and conflict between work and family (Tremblay, 2002). One of the most common employee problems is experiencing isolation from the organization (Joice, 1999) as well as an inhibited ability to interact socially with others (Somerville, 2003; Tremblay, 2002). For employees with a need to frequently interact face-to-face with others, this is a significant challenge not easily overcome. Note that most teleworkers express little dissatisfaction in their arrangements, but also express a need for additional teleworker training in time management, work organization, and computer and telecommunication systems (Tremblay, 2002).

Organizational challenges include dealing with teleworker training needs, adaptation to initial losses in productivity as teleworkers traverse a learning curve, and lost productivity as a result of employee turnover of those not well suited to telework (JALA, n.d.a; Joice, 1999). Perhaps the greatest organizational difficulty is the adjustment leaders need to make to effectively manage teleworkers particularly in the areas of developing trust, encouraging initiative, and empowering workers (Joice, 1999). Fisher and Fisher (2001, p. 5) assert that “the traditional role of supervision is desirable, [but] just isn’t practical when people are located [in different locations]” and quote an experienced manager that confirms “managing someone you can’t see is considerably different than walking around the cubicle wall to see if they’re there at eight in the morning.” The types of adjustments that managers need to make include developing an ability to feel in control even when workers are out of sight, developing trust and using it as a tool, using technology to stay in touch with teleworkers, rethinking and redesigning work,

determining and planning in advance necessary group meetings, focusing teleworkers on short term deliverable based goals, developing new measurement methods that are effective for teleworkers, and leading the work group in adopting innovative means of collaboration (AT&T, 2004c).

Technology challenges are the least significant barrier to successful implementation of telework (Joice, 1999). The most common problems are compatibility between home and office computer hardware/software, slow performance of dial up access to the internet, excessive download times for large documents, increased data storage needs, and a reliance on the internet connection to be productive (McGady, 2002). These issues are typically easily and cost effectively overcome and the requirements for doing so are described later.

The proposal is for the ITS organization to specifically address several risks that are particularly applicable to ITS telecommuting employees. Selecting an ITS employee to participate that is not well suited is addressed by adopting relevant selection criteria and appropriate self-selecting mechanism (described in the Teleworker Selection Criteria section). Problems due to poor time and work management skills as well as use of telecommuting computer and telecommunication technologies are mitigated by special training (described in the Teleworker Training Needs section). Shortcoming in manager skills and perspectives necessary for successful implementation of telecommuting are also mitigated by special training (also described in the Teleworker Training Needs section).

IV

TELEWORKER SELECTION CRITERIA

Table 1, adapted from an AT&T (2004d) self-assessment instrument, provides useful criteria necessary for evaluating the likely success of a potential teleworker. The table consists of four factor types: prerequisites, skills, work style, and attitude. Each factor type has a number of factors and an employee can be rated for each of these factors. A summary of high ratings represents a high likelihood that the employee will be a successful teleworker.

Table 1. Readiness Factors for a Successful Teleworker

<b>Factor Type</b>	<b>Factor</b>
Prerequisite	Level of job knowledge
	Amount of job experience
	Productivity
	Overall quality of work
	Adaptability of current (or potential future) job to telework
Skill	Organizational and planning skills
	Project management skills
	Time management skills and ability to structure time in an unstructured environment
	Ability to set goals for self and follow through on them
	Self-discipline/ability to manage potential friction between personal and work commitments
	Communications skills: verbal
	Communications skill: written
	Self-marketing
	Technology literacy level/ability to work with technology to achieve business goals
Work Style	Ability to work productively without needing supervision or frequent feedback

<b>Factor Type</b>	<b>Factor</b>
	Tendency to ask for advice or input when needed
	Reliability and discipline regarding work commitments
	Ability to thrive in isolated work environments with no co-workers present
	Self-motivation, self-discipline, ability to avoid procrastination
	Flexibility. Ability to work confidently in unfamiliar or constantly changing situations
	Independence/ability to self-manage
Attitude	Desire for schedule flexibility
	Willingness to try new ways of working
	Interest and enthusiasm about teleworking

The proposal is for the ITS organization to establish a self-assessment instrument for a potential telecommuting employee to use to determine how well they are suited for telecommuting. Critical to mitigating risk of an employee not well suited to telecommuting are proper education of both the worker and the manager of the success criteria. The factors in this instrument provide the basis of a self evaluation instrument for the ITS organization to use with prospective telecommuting employees. This is not a pass/fail “test” that an employee must complete successfully; rather the intention is to conduct a self evaluation to ensure that telecommuting is a situation that is a good fit for the employee so that success is highly likely. This self-assessment is delivered as a component of the training program (described in the Teleworker Training Needs section).

Additionally, an employee is required to present a written proposal that describes their personal objectives for a telecommuting arrangement and includes a written agreement that is executed by both the teleworker and their manager. This agreement sets the parameters of the

work arrangement, establishes expectations on the part of both the teleworker and the manager, establishes a trial period where either party can choose to alter the agreement based on the experience, and establishes a time period for the balance of the agreement. Ultimately, it is the employee's manager who decides whether the employee and the job they perform is suitable for telecommuting.

## TELEWORKER TRAINING NEEDS

There are two audiences for teleworker training: the teleworker and the teleworker manager. To ensure success of the workgroup, coworkers of the teleworker are also candidates to receive teleworker training (even when the coworker is not telecommuting).

For teleworkers, training is not widely offered by companies to their employees. Many teleworking arrangements are informal between a manager and a worker without direct company support. As a result, companies are not properly equipped to succeed in telework (Innovisions, n.d.). Typically, teleworker training encompasses these topics: self-assessment to determine if teleworking is suitable for an individual, preparing and presenting a telecommuting proposal, designing and setting up effective home offices, establishing work priorities, developing effective time and work management skills, planning the work to be accomplished, establishing effective performance measurements, resolving issues collaboratively, resolving boundary issues, communicating effectively with managers and coworkers, keeping office relationships intact, dealing effectively with family issues, avoiding temptations, using computer and communications technology, and ensuring information security, (Innovisions, n.d.; UCSD, 1998; Work & Family, n.d.).

For managers and leaders of teleworkers, it's important to receive the same training that teleworkers receive. Managers need understanding and perspective on the same matters as the teleworker. Additionally, managers and leaders who may be strong in traditional supervisory skills need training in alternative organizational structures often referred to as flat structures, self-directed work teams, or empowered organizations. Fisher and Fisher (2001) identify seven leadership competencies for managing teleworkers from a distance:

Visionary. Similar to executive and other organizational leaders, a teleworker manager must develop vision for the teleworkers that clarifies their purpose and compels them to pursue it. Clarity of purpose is essential to span the time and distance barriers so as to keep teleworkers on track toward achieving their goals.

Results catalyst. A teleworker manager helps the teleworker “improve performance, gets results without resorting to authoritarian methods, manages by principle rather than by policy, and uses boundaries rather than directives” (Fisher & Fisher, 2001, p. 11).

Facilitator. A teleworker manager acquires and places at the teleworker’s disposal the information, tools, and other resources necessary for success as well as acts as a facilitator for the interaction with other members of the group.

Barrier buster. A teleworker manager eliminates obstacles that impede the teleworker, insulates them from distractions in the environment as well as challenges established routine and helps to accomplish breakthroughs instead of incremental improvement.

Business analyzer. A teleworker manager understands the big picture and translates it into terms that are meaningful to the teleworker and their task at hand as well as acting as the mediator between the teleworker and other stakeholders.

Coach. A teleworker manager acts as teacher and mentor to the teleworker helping to achieve their potential as well as holding them accountable to their commitments.

Role model. A teleworker manager demonstrates the behaviors necessary on the part of the teleworker to establish trust, resolve interpersonal conflict, and adhere to operating agreements.

The proposal is for the ITS organization to establish a formal teleworker training program that positions the organization for successful implementation of telecommuting. Several third

party training programs intended to educate teleworkers and administer a self-assessment are available for evaluation and acquisition. The selected program is useful for both teleworker and manager training. Additionally, a specific teleworker manager training program is sought to address appropriate leadership issues.

## VI

### TELEWORKER PERFORMANCE EVALUATION

It is difficult to evaluate the performance of workers when they are often off site and may not even be seen by their manager for extended periods of time. Managers can't tell how much time is actually spent working, find it difficult to provide direct guidance and coaching, and struggle to establish rapport and trust without day-to-day personal interaction (Alley, 1997).

Alley (1997) provides these guidelines for evaluating the performance of teleworkers: establish clear goals, eliminate time-on-the-job performance measures, and set up a monitoring system.

Establish clear goals. Performance evaluation begins with a clear understanding between the teleworker and their manager about exactly what is expected. Since time spent working is impractical to measure, expectations must be based on deliverables, their quality, and delivery timeframes. The teleworker and their manager should schedule regular face-to-face meetings for the purpose of evaluating strengths and weaknesses, establishing mutual expectations, reviewing deliverable goals and performance as well as establishing and evaluating achievement of improvement objectives.

Eliminate time-on-the-job performance measures. Traditional time-on-the-job measures (such as hours worked, attendance, tardiness, etc.) do not work for a teleworker. Bottom line performance is what matters. However, a teleworker must be accessible during established times to managers, coworkers, and customers. Additionally, a teleworker should establish regular times of telephone or other interaction with their managers.

Set up a monitoring system. A manager and a teleworker need to establish a monitoring system they both can use to objectively establish that deliverables and other expectations are met

on a timely basis. Distance increases the risk of ambiguity as to whether a teleworker meets performance goals. Fitzer (1997) points out that good managers establish a monitoring system based on such factors as timely delivery, customer satisfaction, error rates, quality standards, and regular interaction with peers, and this approach applies equally to teleworkers.

Fisher and Fisher (2001) describe characteristics of an accountability system for teleworkers that includes clarity (who is accountable for what) and metrics (key measures of success and who is responsible for tracking). The notion of clarity includes establishing accountability categories and personal responsibilities. Once accountability categories are established, goals and metrics can be set.

As Alley (1997, ¶ 8) aptly states “The bottom line: trust. This is the glue that keeps a telecommuting relationship together. In a trusting supervisor-remote worker relationship, managers will naturally assume that an employee is committed, working at optimal effort, meeting stated goals and focused on the overall performance and productivity of the team and department.”

The proposal is for the ITS organization to establish an agreement between the teleworker and their manager to clarify goals, establish a routine process to confirm and adjust goals, explicitly define appropriate performance evaluation criteria, and a schedule for reviewing performance evaluation results. As a result of this agreement, the teleworker manager then defines and implements an appropriate performance monitoring system.

## VII

### COMMUNICATION METHODS FOR MANAGERS OF TELEWORKERS

Grenier & Metes (1995) point out that teleworking cannot succeed without communication methods and that it is necessary to build a shared context within which this communication takes place. This shared context provides the tools, expectations, language, and trust necessary for success.

Lipnack & Stamps (1997) identify four primary means of communication: voice, video, computer, and face-to-face. Voice communication includes telephone, cell phone, voicemail, and radio. Video communication includes video conferencing as well as non-real time video recording playback. Computer communication has the widest variety and includes email, instant messaging, chat room, net meetings, webinars, virtual whiteboards, faxes, pagers, bulletin boards, discussion groups, listservs, websites, information systems, and document repositories. The importance of face-to-face communications has not diminished with the advent of communication technologies. Managers at one time or another need to employ all of these communication channels in a variety of ways to effectively communicate with the teleworker.

To establish communication methods, Grenier & Metes (1995) assert that it is necessary to perform a design process that results in a communications plan. A simplified version of the Grenier & Metes (1995) process consists of these steps: establish expectations as to the design output, develop a schematic of available communication resources, list available communication support systems and technologies, specify protocols for meetings including written records, distribution, technical support requirements, training, and other details, prepare justification for any necessary investments, specify the flow of key information, establish procedures for storing and accessing information, and establish information security procedures.

The proposal is for the ITS organization to adapt the approach of Grenier & Metes (1995) to first develop a template communication plan. This takes place by forming a small team for this purpose consisting of a potential teleworker manager, a corporate communication specialist, a technical support analyst, and a telecommunication specialist. Once developed, this team can then use the communication plan template working with the telecommuting manager and employee for the first pilot telecommuting project to establish an explicit communication plan. This communication plan both establishes the shared context within which communication takes place as well as the communication methods and appropriate tools.

## VIII

### TELEWORKER EQUIPMENT REQUIREMENTS

Teleworkers require investments in high speed internet connections, computer equipment, software, technical support, and information security.

In particular, the acquisition of sufficient technology for teleworkers in the area of reliable high speed internet connections (such as DSL and broadband cable) is necessary and the most significant equipment factor for productivity of the teleworker. Current technology to meet these needs is readily available, reliable, and low cost. Increased reliance on internet connectivity also implies the necessity of contingency plans to keep teleworkers productive in the event of network failure (Long, 2002; McGady, 2002). Contingency plans could include dial up internet connections and a return to the office or use of other shared office facilities.

Compatibility of teleworker and office computer equipment and software is also necessary for productivity and requires acquisition of up-to-date computer equipment and licenses for compatible software programs. There are technical support ramifications as well because remote users require hardware installation, help desk support, troubleshooting, and software distribution and management (McGady, 2002).

Additionally, there are concerns around information and network security that require technology investment for teleworker equipment and associated training to ensure that the tools are properly understood and utilized (McGady, 2002).

The proposal is for the ITS organization establish standards for teleworker equipment and support. This takes place by forming a small team for this purpose consisting of a potential teleworker manager, a corporate desktop and LAN support specialist, a technical support analyst, and a telecommunication specialist. Standards for teleworker equipment and support include a

standard configuration for computer equipment, software, and telecommunications as well as plans for establishing processes and training for technical support including installation, troubleshooting, and help desk. Once developed, this team can then use the standards for teleworker equipment and support while working with the telecommuting manager and employee for the first pilot telecommuting project.

## IX

### PILOT PROGRAM AND EVALUATION

As indicated in the proposals for several of the previous sections, establishing a pilot project for telecommuting by employees of the ITS organization is a key strategy to ensure success. The recommendation is to form a pilot project team to plan the telecommuting program and its implementation. AT&T (2004f) provides an excellent framework for organizing such a pilot program that consists of these steps:

- Determine scope and objectives of the pilot program. Include a few employees whose jobs are conducive to telecommuting for a six month trial period.
- Establish a project manager or leader to plan and participate in all aspects of the pilot program.
- Establish proposed corporate policies on telecommuting including remote office requirements, equipment needs (purchasing and loaning computers, installing communication facilities, software, support, etc.).
- Form a project team including team members with the appropriate expertise (as described in previous sections).
- Determine teleworker selection criteria and process.
- Develop training plans including acquisition of appropriate resources.
- Establish teleworker performance evaluation mechanisms.
- Develop organizational communication plans.
- Develop teleworker equipment standards and support processes.
- Announce the pilot program and begin employee selection.

- Conduct a survey of potential teleworkers to measure expectations, concerns, and other matters.
- Train teleworker employees and their managers.
- Develop individual business cases and agreements.
- Launch telecommuting work and monitor progress over the duration of the pilot.

Upon conclusion of the pilot program, formally evaluate the results in order to determine how well telecommuting fits the ITS organization and to develop plans for the next step. Options include continuing the pilot program for additional insights, expanding it incrementally, or a roll out on a wider scale. Criteria to consider include nature of the relationship between the teleworker and their manager, quality of the work, quantity of work, affect on organizational productivity, affect on workload of managers and peers, affect on work organization and management, affect on employee appraisal, problems experienced, what worked well, and what needs to improve (AT&T, 2004g).

The pilot program provides the means to carefully and practically evaluate how well telecommuting can work in the context of the unique needs and situation of ITS and its employees. It provides the basis to incrementally adapt plans as a result of experience, or even to terminate the effort if appropriate, and minimize the sunk costs until the organization is comfortable that the return on investment is real and warrants continuation.

## X

## CONCLUSION

There are several key components to the proposal for offering a telecommuting option to employees of the ITS organization that represent critical success factors. These critical success factors are establishing a telecommuting policy statement, ensuring employee understanding of how well they fit a telecommuting situation, developing a formal agreement between the teleworker and their manager, launching a pilot program where necessary resources can be assembled and tested, implementing a trial where one or more employees can try telecommuting, and evaluating the applicability of how well the telecommuting concept fits the ITS organization.

Adopting a telecommuting policy statement expresses the ITS organization's goals for and commitment to the program and specifies the requirements for teleworking arrangements (Telework Connection, 2000).

Ensuring that employees develop their own understanding about how well they fit into a telecommuting environment is accomplished by requiring them to undergo teleworker training prior to being accepted. This includes an employee conducting their own readiness self-assessment and a developing a written business case. Such a business case document improves the quality of the employee's decision to pursue a telecommuting work arrangement, increases their likelihood of success, and enhances the commitment and buy-in of all stakeholders (AT&T, 2004e).

A written agreement between the teleworker and their manager governs the business relationship between the employee and their manager and makes explicit goals, processes, and performance expectations (Telework Connection, 2000).

Establishing a pilot program ensures that the organization can experience the learning necessary to maximize the probability of success of the telecommuting program. The pilot program puts in place all of the required resources and tests them in an actual telecommuting arrangement between an employee and their manager. At the conclusion of the pilot program, the ITS organization can determine whether or not to continue implementation of teleworking.

Telecommuting for ITS employees is feasible and provides significant benefits to the employee, the community, and the organization. Careful and proactive attention to the few potential problem areas ensures the success of this effort. “Using the flexibility [of computer technology] to work in a home office ... when it is effective to do so is clearly the wave of the future, and for many of us the future is already here” (GSA, n.d.).

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