

# [Critical success factors in developing teleworking programs](https://assignbuster.com/critical-success-factors-in-developing-teleworking-programs/)

Critical success factors in developing teleworking programs Kellyann Berube Kowalski DepartmentofManagement, CharltonCollegeofBusiness, Universityof MassachusettsDartmouth, NorthDartmouth, Massachusetts, USA, and Jennifer Ann Swanson DepartmentofBusinessAdministration, StonehillCollege, NorthEaston, Massachusetts, USA Abstract Purpose– To provide a framework of critical success factors for practioners and employers looking to develop new or enhance existing telework programs. Design/methodology/approach– This paper focuses on benchmarking the remote work arrangement of telecommuting. The issues of teleworking, including the bene? s and challenges of such arrangements, are presented and reviewed. Based on a review of the teleworking literature, the authors have developed a framework that speci? es the critical success factors that are instrumental in implementing or improving a teleworking program.

Findings– The authors put forward a framework of the critical success factors including support, communication, and trust that are instrumental in developing telework programs. In order to address both macro and micro levels of analysis, the framework outlines critical success factors at the organizational, managerial, and employee level. Practicalimplications– In the information age, with rapid advances in technology and telecommunication systems, a teleworking program is not only a possibility, but also a smart strategic business decision. This paper provides a useful framework for organizations to employ when developing new or enhancing existing telework arrangements. Originality/value– By focusing on benchmarking the teleworking process, this paper provides a new and structured approach in the development of telework programs.

KeywordsBenchmarking, Teleworking, Critical success factors, Work design PapertypeResearch paperBenchmarking has become a prevalent tool used by organizations to determine how they are doing in comparison to other organizations and how to improve operations. It started in the area of manufacturing, but has become more widespread (Doerfel and Ruben, 2002; Greengard, 1995). In fact, benchmarking has been used in small and large, public and private and pro? t and nonpro? t organizations (Spendolini etal. , 1999). In addition to its penetration into all types of organizations, it has been used to examine all functional areas within an organization, including human resources (HR). More and more companies are using benchmarking to assess their HR practices, allowing them to learn the best way to carry out the HR function (Greengard, 1995).

In fact, HR professionals are discovering that benchmarking is not only useful, but also necessary to stay competitive in today’s business world (Greengard, 1995). As noted by Greengard (1995, p. 64), “ rapidly advancing technology, new ways of tackling work and leading-edge management approaches translate into a far greater need to understand the people side of business and to align HR with company goals”. One aspect of HR that is crucial in order to stay competitive is the ability to attract the most quali? ed employees (Mahoney, 2000). As benchmarking is becoming more prevalent in the area of HR, studies are becoming available that allow companies to compare their performance to that of other companies. Mahoney argues that benchmarking compensation and bene? ts is important, but that it takes more to attract and retain the best possible talent.

He suggests that companies should be benchmarking other HR issues because other things, such as ? extime and daycare, attract employees. In the information age, in which today’s companies are competing, teleworking is an HR option that companies are ? nding is worthy of consideration. As teleworking becomes more prevalent in organizations, and more and more organizations are implementing or considering implementing programs, it is becoming an area of HR in need of benchmarking. Yet there have not been any studies done or papers written on benchmarking teleworking. This paper will provide a framework of critical success factors for practitioners and employers looking to develop new or enhance existing telework arrangements.

Speci? ally, we will discuss the issue of teleworking, including the bene? ts and challenges posed by this alternative work arrangement, and put forth a framework of the critical success factors necessary for a world-class teleworking program. Teleworking There is no commonly accepted term or de? nition for remote work arrangements. Some may use the terms telecommuting and teleworking interchangeably to describe employees that work away from the of? ce, while others may de? ne telecommuting more narrowly as only working from home. Still others describe remote work arrangements as hoteling, ? exiplace, or virtual workplaces. As there is a lack of consensus on this issue, we have chosen to use the term telework in this paper and it is used to describe all work arrangements where employees conduct some or all of their work away from the primary workplace (US Of? ce of Personnel Management, 2003).

However, the term telecommuting is used periodically to reference speci? c studies. According to a report by the International Telework Association and Council (ITAC), approximately 28 million people in the USA teleworked in 2001. This indicates that almost 21 percent of the US adult workforce was engaged in a teleworking arrangement in 2001 (Davis and Polonko, 2001). This represents an increase from 1999 when 19. 6 million Americans teleworked (Pratt, 1999). Of the 28 million teleworkers in 2001, 4.

2 percent worked at satellite of? ces, 7. 5 percent worked exclusively at telework centers, 21. 7 percent worked exclusively from home, 24. 1 percent worked solely on the road, and 42. 4 percent used a variety of telework methods (Davis and Polonko, 2001).

Telecommuting is popular outside of the USA as well. A recent survey of senior executives found that remote working is increasing worldwide (AT&T, 2003). The UK Department of Trade and Industry (2003) reported that 2. 2 million individuals worked away from the of? ce using technology in 2003.

This number is steadily growing and represents an increase of 65 percent in four years (UK Department of Trade and Industry, 2003). It is estimated that 16. 2 million or 10. 8 percent of the entire European workforce will be engaged in some type of teleworking by 2005 (InnoVisions Canada, 2003).

In 1999, the number of regular teleworkers as a percentage of the labor BIJ workforce was 10. 8 percent in Finland, 8. 3 percent in The Netherlands, and 8. percent 12, 3 in Sweden (Nilles, 2000).

The increasing number of teleworkers is due to a variety of reasons. These include the rapid advancements and decreasing costs of portable information and communication technologies (Dugal and Roy, 2002), increasing real estate costs, a shift from blue-collar production to white-collar work, changes in the family structure with an increasing number of dual career households, the need to be ? exible to remain competitive in a global world, and the belief that organizations, employees, and society can bene? t from telework arrangements. There have been numerous reports on the bene? ts of teleworking programs. Across a variety of telework arrangements, research studies have reported signi? cant cost savings from higher productivity levels (AT&T, 2002; Hesse and Grantham, 1991; Hill etal. , 1998; Lupton and Haynes, 2000), reduced real estate expenses (AT&T, 2002; Kurland and Bailey, 1999), reduced absenteeism (Pratt, 1999), ability to attract and retain employees (Lupton and Haynes, 2000; Manochehri and Pinkerton, 2003), and higher levels of employee retention (AT&T, 2002; Igbaria and Guimaraes, 1999; Lupton and Haynes, 2000).

Teleworkers have been found to have an overall higher level of job satisfaction than non-teleworkers (Igbaria and Guimaraes, 1999). Pitt-Catsouphes and Marchetta (1991) found that the increase in job satisfaction was attributed to improved morale. Other research studies reported that teleworking had a positive effect on ? exibility (Hill etal. , 1998), improved employee morale and motivation (Lupton and Haynes, 2000), increased the level of employee commitment to the organization (Igbaria and Guimaraes, 1999), and led to reduced role con? ict and ambiguity (Igbaria and Guimaraes, 1999). Furthermore, teleworking can positively impact staff recruitment opportunities as organizations have the ability to attract top candidates, including those not willing to relocate, those wishing to engage in teleworking, or those with disabilities who may be less mobile (Lupton and Haynes, 2000). According to the Equal Employment Opportunity Commission (EEOC), working from home is categorized as a reasonable accommodation for those employees considered disabled under the American with Disabilities Act (EEOC, 2003).

Finally, society as a whole bene? s from teleworking arrangements as well. Teleworking helps reduce pollution and creates a safer commuting environment with less traf? c issues (Clean Air Council, 2003; US Department of Transportation, 2000). It also diminishes the need for new roads and reduces gasoline consumption (Clean Air Council, 2003). Despite the bene? ts that can be realized from implementing teleworking programs, the number of teleworkers has not increased as dramatically as predicted (Wells, 2001). Several barriers have been found that may explain why teleworking has not taken off as exponentially as expected.

Researchers have found that resistance to telework is due to such factors as the perception that teamwork would suffer as a result (Lupton and Haynes, 2000), the diminished ability of teleworkers to socialize with coworkers (Becker etal. , 1994), security concerns (Henderson, 1995; Lupton and Haynes, 2000), and lack of high-speed technology (AT&T, 2002). In addition, the current state of the economy may be a barrier to the teleworking explosion. The abundant supply of labor due to the high unemployment rate and the decrease in pro? s many companies are experiencing may deter them from considering teleworking as an option. Nilles (1998), known as the father of telecommuting, believes that a primary barrier to remote work arrangements is management.

Ruppel and Harrington (1995) also report that managerial attitudes are a major barrier to telework growth as does Lupton and Haynes (2000) who found that the most signi? cant barrier is management trust and the traditional managerial attitude of workers needing to be seen to be considered working. Managers have been found to be resistant to change and hesitant to change managerial practices (Lupton and Haynes, 2000). In their work on virtual of? ces, Davenport and Pearlson (1998) uncovered that only a few organizations had developed the necessary management approaches needed for success in this new work arrangement. Frameworkforcriticalsuccessfactorsforteleworking Although there is some resistance to and challenges associated with this new method of work, there are many organizations that are successfully teleworking. In order to remain competitive and recruit the best employees in the information age, implementing effective teleworking programs is no longer an option, but a necessity for most organizations.

Benchmarking is a technique that can greatly improve the chances of success for organizations that are planning to implement a teleworking program or that wish to improve an existing program. As the benchmarking process can be overwhelming, a framework that organizations can utilize will simplify the process. Based on a review of the teleworking literature, we have developed a framework that speci? es the critical success factors that are instrumental in implementing or improving a teleworking program. As noted by Housley (1999) there are many categories of benchmarking all of which fall into two overall areas: performance and process benchmarking. Performance benchmarking compares outputs of different organizations, while process benchmarking compares the processes used by organizations to determine the “ best practices”. In order o receive the best results from benchmarking, companies must examine the processes, tools, and techniques used, not just outcome and output measures (Housley, 1999; Spendolini etal.

, 1999). When benchmarking teleworking it is, therefore, important to not only look at outcome measures such as productivity and cost savings, but to also examine the process of teleworking itself. As teleworking is still a new technique, not fully understood by many organizations, some may ? nd it dif? cult to know where to start when implementing a teleworking program. In terms of outcome measures, benchmarking studies in the HRM ? ld have exclusively examined organizational level outputs, at the exclusion of employee level outcomes. As noted by Browne (2000), a model is needed that enables researchers to simultaneously examine both organizational and employee-level outcomes in HR benchmarking.

As can be seen in Table I, our framework breaks the critical success factors down by level. As noted above, benchmarking processes should address both the macro and micro levels of analysis. Our framework looks at critical success factors at the organizational, managerial, and employee level. Based on previous literature cataloging successful and unsuccessful teleworking arrangements, we found that the critical success factors associated with world-class teleworking fall into three general categories.

Those categories are support, communication, and trust. Within each category there are speci? c processes that apply to each of the three levels of analysis. BIJ For each of the three critical success factors, we will discuss what the factor entails, 12, 3 why it is critical to successful telecommuting, and what experts and research say is essential for teleworking success. Support The ? rst critical factor for teleworking success is support. For a teleworking program to be successful support must come from all levels within the organization. Most importantly support must start at the top.

A study by Ford and McLaughlin (1995) found that HR managers felt that the most important factor for success in a telecommuting program is top management support. In fact teleworking programs may never get off the ground without such support, as top management support has been found to be related to the adoption and diffusion of telecommuting (Igbaria and Guimaraes, 1999). The introduction and implementation of a teleworking arrangement thus requires senior management support as they can either block or promote such arrangements. In addition to top management supporting teleworking in general, support in terms of technology and tools are critical for teleworking success.

Telecommuters who receive adequate technological support have been found to be more satis? ed with their telecommuting experience than those who do not (Haines etal. , 2002). In addition, providing the necessary equipment leads to lower turnover, even if telecommuters are offered more money elsewhere (Ilozor etal. 2001). Yet, studies (Mann etal. , 2000; Tremblay, 2002) have shown that teleworkers are often dissatis? ed with technology.

For example, lack of support (including technical support) was mentioned as a disadvantage of telecommuting by 28 percent of respondents in a survey conducted by Mann etal. (2000). For teleworking to be successful, organizations need to provide technology and technological support for teleworkers (Fritz etal. , 1998; Mann etal.

, 2000). Organizations must supply adequate funding in order for the teleworker to have the appropriate tools including effective of? e equipment (i. e. phone, fax, computer, etc. ) and to work in an environment at least as good as their of? ce-based colleagues (Ward and Shabha, 2001). For example, at In Focus Systems, Inc.

, teleworkers are provided computers, telephone lines, software, and access to the company’s network of computers (Schwartz, 1997). Merrill Lynch has created a special ? ve person IT support group just to deal with teleworker’s needs. The group is available from 7 a. m. to 7 p. m.

during the workweek and carry beepers for problems during the off hours (Bresnahan, 1998). Support Communication TrustOrganizational Top management support Formal policy Results-based performance Technology/tools management system Culture based on trust Managerial Supervisor support Formal and informal Managerial trust Managerial training communication skills TableI. Employee Family support Social interaction Employee trust Critical factors for Set work/family boundaries teleworking success Employee training At the managerial level, support is also a critical factor for teleworking success. Supervisor support has been found to be related to several positive outcomes. In a study by Hartman etal.

1991), a positive relationship was found between supervisor emotional support and telecommuting satisfaction. Telecommuters who received supervisor support also reported a higher level of work/life quality, higher job performance outcomes, and a better relationship with the organization (Haines etal. , 2002). Support in the form of training is also critical for telecommuting success. Training must be supported by top management and should be provided for both teleworkers and their managers.

As the main reason that telecommuting is not used as much as it could be is resistance from ? st-line supervisors and middle managers (Potter, 2003), it is critical that managers be supported with telework training. As noted by Holt (1994), managers will have more positive attitudes toward telework if they have knowledge of the bene? ts. In addition, training of managers about the bene? ts of telework has been found to be positively related to the adoption of telework in organizations (Igbaria and Guimaraes, 1999). According to Warner (1997), IBM found that due to middle management fear of teleworking, management was not supportive of the program and in fact was found to be an obstacle.

IBM successfully dealt with management resistance by involving them in the process and providing training, which addressed basic tools, techniques, and time and job management skills of teleworking. Results of a study on the virtual workplace involving IBM employees showed that having good training is essential for both managers and teleworkers (Hill etal. , 1998). In fact, the need for teleworker training has been discussed in many different studies (Blodgett, 1996; Cascio, 2000; Lavalle, 1993; Raths, 1990). Yet, in a study on the relationship between telecommuters and their managers, Reinsch (1997) found that only 52 percent of teleworkers interviewed had any training to prepare them for their telecommuting experience.

He notes that those who did receive training reported it to be brief, incomplete, and technical. Case studies (Tremblay, 2002) have also shown that teleworkers report some dissatisfaction with the amount of training they receive and think that they should be trained in time management, work organization, and in computer and communication systems. Haines etal. (2002) note that experts agree that it is essential to train teleworkers on the use of equipment, time management, and establishing boundaries between home and work. Teleworking training should include instruction on how to use technology as well as the necessary social and psychological changes (Hill etal. , 1998).

For example, Boeing teleworkers are required to attend a two-hour orientation session covering software use, remote security issues, and how to communicate (Telecommute Connecticut, 2003). Training should be done for teleworkers and managers together to get them on the same page (Grensing-Pophal, 1999). For example, Merrill Lynch has training at multiple levels, including teleworker training, supervisor and manager training, and team training, which involves both teleworkers and managers together (Bresnahan, 1998; Grensing-Pophal, 1999). Teleworkers and managers work together at a day long training session to encourage dialogue on such issues as how to plan an ergonomically safe home work space and how often to call into the of? ce (Bresnahan, 1998). BIJ Several studies (Duxbury etal.

, 1992; Hill etal. , 1998) have shown that teleworking 12, 3 is not the work/family solution that it is often touted to be and that telecommuters actually experience problems balancing work and family. Based on a survey of teleworkers, McCormick (1992) found that over 70 percent felt increased stress from having to deal with family responsibilities during work hours. Igbaria and Guimaraes (1999) found that teleworkers are often frequently interrupted while working at home by family, friends, and neighbors. They argue that teleworkers may, therefore, have more dif? ulty drawing the line between their work and home lives because boundaries are blurred.

Thus, establishing clear boundaries between work and family and garnering family support are critical factors for teleworking success. Family support includes family members being understanding of the unique challenges the teleworker is faced with and respecting their time when they are working from home. Family support has been found to be positively related to work/life quality, teleworking satisfaction, and relationship with the organization among teleworkers (Haines etal. 2002). In order to create boundaries between work and family, the teleworker can adopt strategies such as dedicating a speci? c space in the home for work, establishing morning rituals at home to make the transition to a workday (e.

g. dressing up as if going into the main of? ce), making dependent care arrangements for pre-school children and elderly parents, and educating family, friends, and neighbors of the telework arrangement so they know not to interrupt the teleworker during working hours. CommunicationThe second critical factor for success in teleworking is communication. When managers and employees are working together from different physical locations, communication becomes more complicated. In a study by Huws etal. (1990), over 50 percent of survey respondents listed communication as a challenge of telework.

According to Cascio (2000), new communication skills are necessary to prevent teleworkers from feeling isolated. In addition, teleworkers need to know what is expected of them and to feel like they are still part of the organization. At the organizational level, formal communication is necessary in the form of a teleworking policy. In a study conducted by Tremblay (2002), 73 percent of interviewees reported that they did not have any type of formal telecommuting agreement.

As teleworking is still a relatively new method of work, there are a lot of questions yet to be answered. These questions need to be answered and communicated to employees through a formal teleworking policy. Based on the results of a study, Mann etal. 2000) suggest a teleworking policy which covers things like expectations regarding working when sick, hours to be worked, management by distance, and responsibility for hidden costs and non-hidden costs. Manochehri and Pinkerton (2003) note that telecommuting policies need to address such issues as privacy, health and safety, security measures, reimbursable expenses and use of equipment. Many companies that have successfully implemented and executed teleworking programs have formal policies.

For example, IBM, Lotus, and Hewlet-Packard all have written guidelines, which are communicated to employees. Hewlet-Packard’s guidelines address who can participate in teleworking, family and household issues, remote of? ce setup and administrative processes (Telecommute Connecticut, 2003). Some research has been done on communication in teleworking on the managerial level. Formal and informal communication skills are necessary for managers of telecommuters (Cascio, 2000). Informal communication is important so that teleworkers develop relationships and feel they are part of the organization, while formal communication is necessary to inform teleworkers of work related issues. Findings show that managers must be able to develop relationships with and among workers who may not be in the same physical location (Potter, 2003).

Results from a study by Mann etal. (2000) suggest that managers should do what they can to reduce social isolation. They suggest regular staff meetings for all, e-mail intranet systems, news bulletins, and social events. Potter (2003) argues that managers need to creatively use communication technology and suggests several ways to provide communication that can substitute for face-to-face communication. Speci? ally, he suggests the use of telephone and conference calls, teleconferencing and meeting on the internet.

In a telecommuting study conducted by Ilozor etal. (2001), they found that several communication strategies led to greater telecommuter job satisfaction, output and loyalty. These communication strategies included communicating job expectations in a clear and concise manner, communicating job responsibilities, goals and objectives clearly, and clearly communicating deadlines. As a critical factor for teleworking success, communication must be multi-way ? wing not only from supervisors to teleworkers, but from teleworkers to supervisors and peers. Communication is especially crucial at the employee level because studies have shown that without the social interaction of a traditional work experience, employees are more likely to feel socially isolated and out of the loop (Cascio, 2000; Connelly, 1995). In fact, several studies (Cascio, 2000; Mann etal.

, 2000; Reinsch, 1997) have found social isolation (e. g. lack of physical interaction and being left out of of? e communication) to be the most commonly reported disadvantage of telecommuting. To combat this problem, IBM organizes potluck dinners and outdoor activities for teleworkers in the same geographic area, which provides opportunity for social interaction and communication (Bresnahan, 1998).

Merrill Lynch has constructed an intranet that allows teleworkers and on-site employees to post announcements and updates and they utilize e-mail for immediate communication needs (Bresnahan, 1998). Trust Probably the most critical factor for success in teleworking is trust. As with support and communication, trust is necessary at all levels of the teleworking organization. Managers must trust that the teleworking employee can and is doing the job well.

Teleworkers must trust that their supervisor will treat them equitably. Finally, if the culture of the organization is not one based on trust, trust between managers and teleworkers is unlikely. In fact, Cascio (2000) argues that trust is so important, that if there is lack of trust telecommuting will not be successful even if everything else is perfectly in place. Trust is clearly an important factor in a teleworking situation as research (Staples, 2001) has shown that in remote work situations trust is positively related to perceptions of good performance and job satisfaction and negatively related to job stress. With the advent of information technology, people can work anywhere at anytime.

Yet, most organizations still value and reward face-time and assume that being in the of? ce equals commitment and productivity (Potter, 2003). As noted above, for BIJ teleworking to be successful, the organizational culture must be one of trust. A culture 12, 3 based on trust requires a rethinking of what it means to be “ working” and how we value and reward work. A critical component of a culture based on trust is a results-based performance management system. Productivity should be measured based on performance on assignments and projects, rather than hours spent on-site at the of? ce (Grensing-Pophal, 1999). For example, at In Focus they are trying to eliminate the norm that you have to be at the work site from 8 to 5 in order to be “ working”.

One manager who supervises ? ve teleworkers feels that when her employees have more ? xibility they are willing to work even harder. Performance reviews are based on what teleworkers have accomplished and which goals they have met (Schwartz, 1997). At Boeing, the focus has changed from being concerned with the amount of time spent on the job, to results of the job in terms of productivity and quality (Telecommute Connecticut, 2003). Merrill Lynch recognizes that how the job is done is important, not where the job is done (Telecommute Connecticut, 2003).

In addition, a culture based on trust can be developed through the sharing of a common purpose, thus building commitment to and identi? ation with the shared values of the corporate culture (Coleman, 1996). Trust will be an outcome if shared values are followed and supported by leaders and leaders model their company’s beliefs and expectations (Allert, 1997). For example, at Hewlett-Packard ethical behavior is a cultural value, which is modeled by the company’s top leadership. Leaders model the values and leaders consistency discipline anyone who violates the company’s ethical principles, thus earning the employees’ trust. Many managers ? nd the change to the information age dif? ult because they may be responsible for managing employees who are in a different physical location then themselves. Managers are often fearful that employees cannot be trusted when they cannot watch over them (Perin, 1991).

Lupton and Haynes (2000) found that the major barrier to teleworking is management’s traditional view of work and lack of trust. Lack of trust can lead to managers not valuing teleworker’s positions and not empowering them to make necessary decisions on their own (Cascio, 2000). Managers need to trust teleworkers even though they can not see them, to “ trust people working outside their ? ld of vision” (Potter, 2003). They need to trust that employees will ful? ll their obligations and behave predictably; that they will have self-direction and self-control (Cascio, 2000). Trust needs to be built through employee empowerment. Part of the success of Air Touch’s successful teleworking program is that managers empower employees, which has led to a relationship of trust (Coleman, 1996).

For example, employees are empowered to deal with problems before they become too costly, employees are encouraged to ask “ why” and to ask for explanations when they do not understand, and participation, feedback, and openness are encouraged. Linkagesbetweencriticalsuccessfactors Although the critical success factors are discussed separately above, there are obvious linkages between the three factors. As can be seen in Figure 1 all three success factors are interrelated. Having a culture based on trust is very dependent on having good communication in the workplace.

As noted by Greiner and Metes (1995), communication leads to trust which in turn leads to better communication. Communication is also tied to support. For example, making the bene? ts of teleworking known to managers may in fact enhance both top and middle management support. Additionally, providing support in terms of information technology allows teleworkers to communicate with anyone, anywhere, at anytime. Trust and support also go hand in hand.

For example, if teleworkers feel that their supervisors are supportive of their teleworking arrangement, treat them fairly and equitably, and base performance on results instead of face-time, trust will be enhanced. Conclusion In the information age, with rapid advances in technology and telecommunication systems, a teleworking program is not only a possibility, but also a smart strategic business decision. To remain competitive in the global marketplace, companies are turning to teleworking programs in order to capitalize on their bene? ts. Leading companies such as AT&T, Boeing, IBM, and Merrill Lynch have recognized the power of teleworking and have reaped substantial bene? ts including productivity increases, reduced costs, heightened employee morale and career satisfaction, staf? ng ? exibility, and sustained competitiveness.

The critical success factors of support, communication, and trust are instrumental in developing or enhancing telework programs. These success factors are interrelated and should be applied at multiple levels including organizational, managerial, and employee levels. In order to move a company forward in the future, top management must build a culture of trust through creating a shared vision and lobbying for management techniques of empowerment, delegation, and results-based performance management systems. Using such techniques will foster an environment of trust where teleworkers feel valued and are assured that they are treated equitably. Furthermore, top management must be a champion of teleworking and provide the appropriate technology and tools.

Training is needed at both the managerial and employee levels and communication strategies need to be learned to facilitate good communication at all levels to ensure that teleworkers feel informed, important, and involved. References Allert, J. R. and Chatterjee, S. R.

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