

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2001 Proceedings

Americas Conference on Information Systems (AMCIS)

December 2001

Rightsizing Telework: More Is Not Always Better

Timothy Golden University of Connecticut

Follow this and additional works at: http://aisel.aisnet.org/amcis2001

Recommended Citation

Golden, Timothy, "Rightsizing Telework: More Is Not Always Better" (2001). AMCIS 2001 Proceedings. 365. http://aisel.aisnet.org/amcis2001/365

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2001 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

RIGHTSIZING TELEWORK: MORE IS NOT ALWAYS BETTER

Timothy Golden University of Connecticut golden@sba.uconn.edu

Abstract

Telework is commonplace in today's corporate landscape and is widely accepted as a performance enhancing practice. This view is supported primarily by anecdotal evidence and the popular press. However, to date, scholars have been slow to investigate this practice in part because of the paucity of a solid theoretical understanding. Moreover, the extant research has primarily focused on performance enhancing outcomes and has failed to address the potential dysfunctional effects of teleworking. In order to fill this conceptual gap, I draw upon insights generated from the literatures on work adjustment, job characteristics, information richness, and social presence. This is viewed as a first step towards a more complete theoretical understanding of telework and other technology-enabled interactions.

Keywords: Telework, telecommuting, technology-enabled interactions, computer-mediated communications

Telework represents one form of virtual interaction whereby technology enables work activities to be carried out among widely dispersed organizational members. As teleworkers, these members spend a consistent portion of their work week at a location other than the traditional, centrally located workplace, typically working out of their home, and rely upon computer and telecommunications technology to do so. Furthering our understanding of teleworking is therefore of crucial importance to deepening our awareness of technology's role in the success of today's organizations.

Although the popular press is replete with poignant characterizations, antidotes, and future prospects for teleworkers and their job performance (e.g. Apgar, 1998), scholars have been slow to investigate this new and growing work arrangement. Even within academic journals, with few exceptions (e.g. Igbaria, 1998), only limited conceptual and empirical discussions have appeared. Furthermore, while existing evidence suggests that work outcomes are generally positive, this contention is countered by concerns about social isolation, deteriorating relationships, and decreased productivity (Ruppel & Harrington, 1995). The limited existing research compares teleworkers to non-teleworkers. This simple comparison, however, may not accurately inform our understanding of technology-enabled interactions between distributed organizational members. This is due to the work practices of many of today's organizational members, which are comprised of a combination of face-to-face time in the central office and time when they telework (Apgar, 1998). Hence it is crucial to understand how teleworking impacts work outcomes as a function of the extent of teleworking which is conducted. By investigating how the extent of teleworking impacts job performance, we can begin to understand how to maximize its benefits for both the individual and organization.

As a first step towards a more complete understanding of teleworking and the optimization of technology-enabled interactions, this paper suggests a theoretically derived relationship based on two areas of research. The first area of research drawn from literature on work adjustment (Dawis, England, & Lofquist, 1968; Pierce & Newstrom, 1980; Pierce, Newstrom, Dunham, & Barber, 1989) and the job characteristics model (Hackman & Oldham, 1976), suggests that as the extent of teleworking increases, job performance will increase. This suggestion stems from the increased autonomy and flexibility associated with teleworking, and the positive outcomes associated with such characteristics. The second area of research draws from literature on information richness (Daft & Lengel, 1984, 1986; Daft, Lengel, & Trevino, 1987), and social presence (Short, Williams, & Christie, 1976). This literature suggests that as the extent of teleworking increases, the positive work outcomes may be tempered by the characteristics of the communication media through which teleworkers conduct their work activities. The relationship proposed herein integrates these perspectives to suggest a curvilinear relationship between the extent of teleworking, and job performance.

Linking Telework to Performance

When teleworking is limited to only one or two days per week, employees may be able to easily manage (e.g. adjust) work activities to fit the limitations of the interaction mediums, thereby enabling increased performance (Daft & Lengel, 1986; Daft, Lengel, & Trevino, 1987; Dawis, England, & Lofquist, 1968; Pierce & Newstrom, 1980; Pierce, Newstrom, Dunham, & Barber, 1989). Although knowledge workers require frequent intense interactions with coworkers in order to establish and 'indwell' shared frames of reference (Polanyi, 1966) – and these may be somewhat limited by the information richness and social presence constraints of the interaction mediums available when teleworking – the limitations may be mitigated or eliminated by carrying out such interactions during times when not teleworking.

As the extent of teleworking increases, however, the worker will be increasingly forced to rely upon IT enabled communication mediums to conduct a larger proportion of work activities involving interactions with others. The worker may no longer be able to defer most interactive tasks to when he or she is in the office. Whereas teleworking 1 or 2 days per week facilitated a large amount of flexibility to adjust work activities to meet both individual abilities and needs as well as the ability requirements of the job (Pierce et al., 1989), increased amounts of teleworking reduces this flexibility.

Additionally, as suggested by information richness (Daft & Lengel, 1984, 1986; Daft, Lengel, & Trevino, 1987), and social presence theory (Short, Williams, & Christie, 1976), the comparatively impoverished communication mediums available during teleworking as compared to face-to-face interactions are likely to negatively impact work outcomes. These suggestions stem from the limited interactivity of the communication mediums and the lack of back channel cues available for experiencing the full meaning of the messages exchanged (Straus, 1997). Even the telephone, which involves near simultaneous interaction and the ability to convey and interpret voice tone, pacing, and intonation, much visual information is lost compared to face-to-face interactions. Similar limitations are inherent to varying degrees within other IT enabled communication media.

These limitations of IT enabled interactions are likely to increasingly constrain organizational members as they telework a larger proportion of their time. Members teleworking a large extent may therefore not be able to adequately interpret messages from others with whom they work, since these messages are apt to be comparatively lacking in informational cues. When using IT-enabled communication media such as email, teleworkers will have only limited feedback about their work and the reactions of others. Furthermore, the reactions from others may be more limited in scope in so far as the number of cues and length of reactions, and therefore more easily misinterpreted. Moreover, the feedback that is received from others is more prone to be scripted and filtered, since interactions are more likely to be planned rather than occurring spontaneously by the water fountain or in a common hallway. Even with scheduled meetings, the teleworker may not be able to fully discern the contextual cues, such as what happens immediately before or after a meeting. Consequently, the teleworker is apt to be operating within a comparative vacuum of informational cues. In comparison to teleworking a smaller amount, the informational cues when teleworking a large extent are apt to be relatively lacking.

The above discussion suggests that there is likely to be an optimal extent of teleworking that maximizes its benefits while minimizing its drawbacks. At either extreme of the teleworking continuum, the advantages of teleworking are not likely to be as substantial as when a mid-level of teleworking is practiced. Teleworking research which suggests linear relationships between teleworking and job performance do not preclude nonlinearity, but rather fail to examine this likelihood. Based on the research discussed above, this nonlinear relationship seems highly probable.

Hence, when comparing among teleworkers, the relationship between the extent of teleworking and job performance is likely to be curvilinear in shape. Teleworking is likely to be associated with increased job performance up to a mid-point as the extent of teleworking increases, and then decreased performance as teleworking reaches full-time. At a mid-point, the benefits in terms of autonomy and flexibility are apt to be highest, while minimizing the effects of decreased communication richness and social presence resulting from the predominant reliance upon IT enabled communications. The result is likely to be an inverted 'U-shaped' curve plotting job performance against the extent of teleworking.

Recommendations

This paper proposes an enriched theoretical perspective for understanding how technology enabled interactions that occur during teleworking affect work performance. This is done using insights suggested by literatures on work adjustment (Dawis, England, & Lofquist, 1968; Pierce & Newstrom, 1980; Pierce, Newstrom, Dunham, & Barber, 1989) and the job characteristics model (Hackman & Oldham, 1976), and from literature on information richness (Daft & Lengel, 1984, 1986; Daft, Lengel, & Trevino, 1987), social presence (Short, Williams, & Christie, 1976). Moreover, in departure from earlier research, I propose that the relationship between teleworking and job performance is not positive, per se, but rather curvilinear in nature.

Of course, a considerable amount of work still needs to be done. For example, although job performance is a vital organizational construct, understanding the impact of teleworking on other variables such as job satisfaction and organizational commitment will further enrich our understanding of this phenomenon. Furthermore, while the current theoretically-derived relationship model covers important relational variables, job performance may also be affected by the nature of work performed by the teleworker. For instance, the degree of task interdependence which teleworkers have with others in their work unit may influence the performance of teleworkers, and this may also vary as the extent of teleworking changes. As these examples demonstrate, there are may potentially fruitful areas of research.

The theoretically derived model of teleworking proposed within this paper has important implications for managers and other IS practitioners. Increasingly, technology-enabled interactions are playing a more prominent role in organizations and the expanding 'new' economy. As a result, perhaps the most important implication for managers and practitioners is that the manager's success and that of his or her organization may depend upon how well technology-enabled interactions are understood. The failure to adequately account for differences during technology-enabled interactions and how the extent of teleworking impacts performance is likely to greatly increase the probability of failure. Given the highly competitive nature of today's organizations and competition between organizations, these considerations are not ones which the manger can afford to overlook. Moreover, as business becomes increasingly technology-based and organizational members interact 'virtually' from temporally and geographically dispersed locations, the need to fully understand teleworking and other technology-enabled interactions is likely to grow in importance.

References

- Apgar, IV, M. "The alternative workplace: Changing where and how people work," *Harvard Business Review*, May-June 1998, pp121-136.
- Daft, R. L., & Lengel, R. H. "Information richness: A new approach to managerial behavior and organizational design" *Research in Organizational Behavior* (6), 1984, pp. 191-233.
- Daft, R. L., & Lengel, R. H. "Organizational information requirements, media richness and structural design," *Management Science* (32), 1986, pp. 554-571.
- Daft, R. L., Lengel, R. H., & Trevino, L. K. "Message equivocality, media selection, and managerial performance: Implications for information systems," *MIS Quarterly* (11), 1987, pp. 355-366.
- Dawis, R. V., England, G. W., & Lofquist, L. H. "A theory of work adjustment" (Rev. ed.), *University of Minnesota Studies in Vocational Rehabilitation*, (XXIII: Bulletin 47), 1968.
- Hackman, J. R., & Oldham, G. R. "Motivation through the design of work: Test of a theory," *Organizational Behavior and Human Performance* (16), 1976, pp. 250-279.
- Hackman, J. R., & Oldham, G. R. Work Redesign, Addison Wesley, Reading, MA, 1980.
- Igbaria, M. "Special section: Managing virtual workplaces and teleworking with information technology," *Journal of Management Information Systems*, (14:4), Spring 1998, pp. 5-86.
- Pierce, J. L., & Newstrom, J. W. "Toward a conceptual clarification of employee responses to flexible working hours: A work adjustment approach," *Journal of Management* (6), 1980, pp. 117-134.
- Pierce, J. L., Newstrom, J. W., Dunham, R. B., & Barber, A. E. *Alternative work schedules*, Allyn and Bacon, Inc, Boston, 1989. Polanyi, M. *The tacit dimension*, Routledge and Kegan Paul, London, 1966.
- Ruppel, C. P., & Harrington, S. J. "Telework: An innovation where nobody is getting on the bandwagon?," *The DATABASE for Advances in Information Systems* 26(2 & 3), 1995, pp. 87-104.
- Short, J., Williams, E., & Christie, B. The social psychology of telecommunications, John Wiley & Sons, London, 1976.
- Trevino, L. K., Lengel, R. H., & Daft, R. L. "Media symbolism, media richness, and media choice in organizations," *Communication Research* 14(5), 1987, pp.553-574.