Managerial Issues for Telecommuting
Anthony R. Hendrickson, Iowa State University
Troy J. Strader, Iowa State University

Anthony R. Hendrickson is an Assistant Professor of Management Information Systems (MIS) in the Department of Logistics, Operations and MIS, Iowa State University. He received the Ph.D. degree in Business Administration (Computer Information Systems and Quantitative Analysis) from the University of Arkansas in 1994. His research interests include virtual organizations, psychometric measurement, and object-orientation.

Troy J. Strader is an Assistant Professor of Management Information Systems (MIS) in the Department of Logistics, Operations and MIS, Iowa State University. He received the Ph.D. degree in Business Administration (Information Systems) from the University of Illinois at Urbana-Champaign in 1997. His research interests include electronic commerce, strategic impacts of information systems, and information economics.

EXECUTIVE SUMMARY

In this paper the issues faced by firms in today’s telecommunications environment are compared and contrasted with an actual telecommuting case study of Trade Reporting and Data Exchange, Inc. (T.R.A.D.E.), a software engineering company located in San Mateo, CA. Initial results indicate that telecommuting was successful for T.R.A.D.E because the required technology was widely available (the candidate initiated the idea and had the necessary industry and company experience) the organization could provide the flexible work arrangement while retaining a valuable employee, the employees were able to live in a geographic area of their choice, overall costs could be shared by the company and employees, the job category was an ideal fit, and existing procedures were in place for communicating and managing the geographically detached worker. As telecommunications technology evolves this arrangement will continue to challenge the firm and their employees.

BACKGROUND

Company Background

Trade Reporting and Data Exchange, Inc. (T.R.A.D.E.) is a software engineering company located in San Mateo, CA. The firm was created in 1992 to provide international corporations access to a wide variety of international trade information stored on the T.R.A.D.E.’s massive databases. T.R.A.D.E. gathers data from a variety of sources including U.S. Customs documents, Chinese Customs Administration, Dun and Bradstreet, and numerous other government trade documents. They provide general information and specific trading activities on hundreds of thousands of international buyers, distributors, and suppliers.

This data is consolidated and organized for optimal access by T.R.A.D.E. The company disseminates this information via monthly and quarterly updated CD-ROMs sent directly to the firm’s subscribers. Hardcopy reports are also available. In addition, the firm offers customized reporting and monitoring services available on an ad-hoc or event triggered notification basis. The CD-ROM includes sophisticated software querying tools and wizards designed to provide subscribers a user-friendly interface to the information.

Although relatively young, the firm has grown significantly and now employs a professional staff of 50. T.R.A.D.E., Inc. is truly an international organization with offices located in Hong Kong, Taiwan, the United Kingdom, and the corporate headquarters in San Mateo. Additionally, T.R.A.D.E.
utilizes a number of licensed distributors in a number of other countries. T.R.A.D.E., Inc. was recognized as one of the ten fastest growing, private companies, in Silicon Valley in 1996. While the firm is hesitant to reveal exact figures, revenues were in the multi-million dollar range in 1996 and represents T.R.A.D.E.’s significant share in the business intelligence market.

**Telecommuter Background**

The specific employee we will chronicle is Dave Tucker. Tucker has worked for T.R.A.D.E. for nearly five years as a software engineer, after working for a major hardware manufacturer in Silicon Valley for nearly seven years. His responsibilities at T.R.A.D.E. include developing advanced database queries, creating programs to interface source databases into T.R.A.D.E.’s massive database system, and creating software applications for the CD-ROMs which subscribers receive.

Tucker relocated to Silicon Valley nearly eleven years ago, after he graduated with a computer science degree from a large mid-western university. Tucker and his wife both grew up in central Iowa. Now with two young children (ages 3 and 5), Tucker and his wife desired to return to central Iowa to be closer to family and friends and to provide their young children with childhood experiences similar to their own. In the spring of 1996, Tucker proposed a telecommuting arrangement to T.R.A.D.E.

T.R.A.D.E. decided to pilot test the arrangement. Tucker identified a college professor in Ames, Iowa who was interested in exchanging homes, for the summer, with someone near Silicon Valley. T.R.A.D.E. agreed to allow Tucker to telecommute for the summer and both agreed to evaluate the arrangement at the end of the summer trial. After the summer trial Tucker and T.R.A.D.E. agreed that the telecommuting alternative had substantial merit and decided to enter the arrangement on a permanent basis. What follows is an enumeration of the issues related to telecommuting and a chronicle of how Tucker and T.R.A.D.E. addressed each issue. These issues include telecommuter selection, organizational issues, social aspects, costs, and productivity measurement.

**SETTING THE STAGE**

Telecommuting presents organizations and their employees with a number of opportunities and a number of potential problems. Generally speaking, the benefits of telecommuting include more hours worked per day, more work accomplished per hour, and less employee stress due to commuting and/or work/personal conflicts (such as a sick child) (Curran and Williams, 1997; Race, 1993; Schellenburger, 1993; Townsend, DeMarie, and Hendrickson, 1998). The organization must cope with employee work schedules being more flexible, in that many telecommuters may or may not keep traditional work hours. Additionally, immediate access to employee skills and services is somewhat diminished.

As shown in Figure 1, successful telecommuting requires special attention be given to: enabling technology, selecting the right job category and the right individual for the arrangement, organiza-