EXAMINATION OF THE ISSUE OF ELECTRONIC MONITORING OF EMPLOYEES

Prepared for

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April 1, 2007

Content:
- Provides specific title to give reader overview of topic covered in report. Arranges title in inverted pyramid format; will use same format on page 1 of report.
- States the name and title of reader—person who authorized report.
- Includes the name and title of person and/or organization that prepared report. Including address is a matter of preference and company requirements.
- Includes date report was submitted for later reference.

Format:
- Omits page number but counts the page.

Graphic Design to Enhance Appearance and Effectiveness:
- Uses all capital letters and boldface, large font size to emphasize title.
- Uses different font for remaining items to add interest and to distinguish them from title.
- Uses double border to add professional flair.
TO: Courtney Hardin-Burns, Chief Information Officer
FROM: Justine Houston, Research Assistant
       James Barnes, Research Assistant
       Amanda Keene, Research Assistant
DATE: April 1, 2007
SUBJECT: Report on Electronic Monitoring of Employee Activity

Here is the report on electronic monitoring of employees that you authorized on February 15.

The report presents the case both for and against electronic monitoring and makes recommendations about its use to the company. Current business literature was examined to form a conceptual basis for the study. A survey was conducted of 98 business managers representing various segments of the business community; results revealed how and why firms are using electronic monitoring.

Electronic monitoring offers advantages for objective performance appraisal but must be used with caution. Issues related to employee privacy, staff morale, and information access and dissemination must be addressed.

Thank you for allowing us the opportunity to participate in this worthwhile study. We are confident that this report will aid you in making appropriate decisions about the use of electronic monitoring, and we will be happy to discuss its findings with you.

asl

Attachment
Content:

• Omits the outline numbering system (I, II, A, B) but arranges the outline to indicate the importance of the headings (main heads placed at left margin; minor ones indented).

• Presents each heading exactly as it appears in the report.

• Prepares the contents after completing the report; allows word processing software to generate contents so it can be updated quickly with each draft of the report.

• Omits the word “table” or “list,” an obvious fact.

Format:

• Combines contents and figures on same page to save space.

• Adds leaders (spaced periods) to guide the eyes from the heading to the page number.

• Includes the page number on which each major and minor section begins.

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EXECUTIVE SUMMARY
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Federated Underwriters, a large, full-service insurance company, maintains offices throughout the 48 contiguous states. Courtney Hardin-Burns, chief information officer, oversees the management information systems mainframe functions as well as end-user computing. In her efforts to improve productivity and increase efficiency of information control and dissemination, electronic monitoring of employees has been considered. Current capabilities of the mainframe and network systems would allow electronic logging of user identification, file usage, file manipulation, on-line user time, and so on. In essence, the computer user leaves an “electronic fingerprint” that could be traced and analyzed in a number of ways. Hardin-Burns authorized a study to examine issues related to the electronic monitoring of employee computer activities.

Research was conducted in two ways: (1) Current business literature was examined, and (2) 98 business managers were surveyed concerning the use of electronic monitoring in their work settings.

The report addressed the following questions: (1) What is the frequency of electronic monitoring within organizations? (2) What are the advantages and disadvantages of monitoring? (3) What are the legal and ethical issues related to monitoring? (4) What factors are related to successful electronic monitoring? (5) Should Federated Underwriters institute an electronic monitoring procedure? Legal, ethical, and productivity issues were examined, and guidelines were developed for the effective use of electronic monitoring.

The study concluded that electronic monitoring does offer some advantages that justify its use by Federated Underwriters. Certain safeguards should be applied to its use, however, including the protection of employee privacy, development of policies for access and dissemination of information, and maintenance of staff morale.
EXAMINATION OF THE ISSUE OF ELECTRONIC MONITORING OF EMPLOYEES

Introduction
Monitoring of worker activities is not new. Nearly a century ago, Frederick Taylor used detailed worker monitoring through time and motion studies to find the most efficient methods of carrying out tasks. Today’s technology provides employers with the means to gather information about employees’ work activities in unprecedented detail (Ottensmeyer & Heroux, 1991). Mainframe and network capabilities allow electronic logging of data, such as user identification, file usage, file manipulation, and online user time. In essence, the computer user leaves an “electronic fingerprint” that can be traced and analyzed in a number of ways.

Purpose of the Study
The purpose of the study was to determine whether Federated Underwriters should implement electronic monitoring of employees. Answers were sought to the following questions:

1. What is the frequency of electronic monitoring within organizations?
2. What are the advantages and disadvantages of electronic monitoring?
3. What legal and ethical issues are raised by the use of computer monitoring?
4. What factors are related to successful electronic monitoring?
5. Should Federated Underwriters institute electronic monitoring?

Methods and Procedures Used
Secondary research was conducted through traditional and electronic searches of periodicals, books, and government documents. Interviews were conducted with 98 conveniently selected business managers from throughout Texas. The sample represented a cross section of business types (see Appendix, Figure 4). Interviewees were asked...
Background of Electronic Monitoring

While monitoring of employees is common, widespread disagreement exists over its scope and effectiveness.

Frequency of Monitoring

Determining the extent to which electronic monitoring is occurring is difficult because workers, in many cases, may not be aware of it. A study conducted by the National Association of Working Women examined data processing, word processing, and customer-service operations in 110 work sites and found that 98 percent used computers to track the movements of workers (Computer monitoring, 1988). According to an American Civil Liberties Union study of the workplace, more than 20 million workers have their e-mail computer files and/or voice mail searched by the employers (Dichter & Burkhardt, 1996). The National Institute of Occupational Safety and Health estimates that two thirds of users of visual display terminals are monitored (Bible, 1990); and in industries such telecommunications, insurance and banking, it is estimated that eighty percent of employees are subject to monitoring (Dichter & Burkhardt, 1996).

Advantages and Disadvantages of Monitoring

Electronic monitoring can count the number of keystrokes per hour and indicate how often an employee does certain activities or uses a terminal. Keeping tabs on the quality of service, enhancing productivity, and detecting dishonesty are the most common reasons employers monitor. Some workers are pleased that their work is being observed because they want to be rewarded for their efforts. When monitoring is used to evaluate work, the machine can be fairer than a person because machines are color-blind and do not recognize gender. Electronic monitoring can make data about performance available more quickly and more frequently, thereby increasing employee awareness of personal productivity (Bible, 1990).
Monitoring may, however, be counterproductive, given the animosity and stress that it prompts in employees. Judging by complaints from employees and unions, the general feeling among workers is that monitoring threatens their privacy, intrudes on their personal work in progress, and leads to their being evaluated on criteria that they do not understand. Workers tend to feel that “Big Brother” is always watching, and the fact that everyone is subject to the same scrutiny does little to relieve that sense of exposure (Ottensmeyer & Heroux, 1991). Some companies have implemented monitoring and then stopped because they discovered how counterproductive it could be (Bible, 1990).

Employees frequently find ways to counter attempts at monitoring. When keystrokes are monitored, for example, a key can be held down continuously to make the count go up (although some software programs can detect this deception). Some employees, offended by what they perceive as a sudden lack of trust, reduce their work efforts to the bare minimum needed to get by. Middle managers foil monitoring attempts by filling in their electronic schedules with meetings because employers may tend to think managers are productive if they are in meetings (Bible, 1990).

Legal and Ethical Considerations in Monitoring

Courts and legislatures have historically allowed employers broad rights of observation and record keeping when monitoring workers. These rights are based on employer ownership of the premises at which the work is done and on the basic right of management to control the work process (U.S. Congress, 1987). Currently, no federal laws ban or restrict electronic monitoring of work performance. One law that vaguely relates to the issue of electronic monitoring is the Omnibus Crime Control and Safe Streets Act of 1968, which was designed to protect the privacy of wire and oral communications. Advances in technology have rendered the wording of the act obsolete and thus
inapplicable to electronic monitoring (Cooney, 1991). Presently, in the absence of any policy to the contrary, users should assume that they have no privacy in workplace environments. Courts have upheld the right of the employer to monitor any and all employee communications over the employer’s computer system regardless of implied or explicit statements regarding employee message privacy (Computer Professionals, 1996).

Congress is considering legislation that would have considerable effect on the future of monitoring. This legislation, the Privacy for Consumers and Workers Act, would limit the use of electronic devices in monitoring employees’ activities. The act would require employers to provide employees with prior written notice of electronic monitoring and to signal them orally or visually when monitoring is being performed. Furthermore, it would require that employees be informed of the forms of electronic monitoring to be used, the personal data to be collected, the frequency of monitoring, and the use of the data (Smith, 1993). In addition to action pending at the federal level, many states, including Connecticut, Massachusetts, Minnesota, New Jersey, Oregon, Rhode Island, New Mexico, and New York, are developing their own comprehensive monitoring bills (Nussbaum, 1989).

In the absence of existing legislation related to electronic monitoring, the Department of Justice in Washington has ruled it legal. The Justice Department, however, strongly advises system administrators to inform users of monitoring. If keystroke monitoring is used—even for purposes of detecting intruders, they should “ensure that all system users, authorized and unauthorized, are notified that such monitoring may be undertaken” (Smith, 1993, p. 204).

Organizations that represent employees have expressed strong reservations about the use of electronic monitoring. The 1987 AFL-CIO Convention adopted the following resolution on the issue:

Electronic surveillance invades workers’ privacy, erodes their sense of dignity, and frustrates their efforts to do high-quality work, by placing a single-minded emphasis on speed and other purely quantitative

**Format:**
- Indents quotation from both margins for emphasis.
- Ensures the page does not end or begin with a single line of a paragraph (applies to all pages in a report).
Coherence:

- Uses centered heading to move reader from one major division to the next. Follows with a lead-in paragraph that previews the information to be presented.

Electronic monitoring of employees is, for at least some purposes, legal. A more difficult question is whether it is desirable; and if so, under what conditions? Impressive gains in productivity must be carefully weighed against potential damage to quality of work life.

Guidelines for the Use of Electronic Monitoring

Research into work environments where electronic monitoring is used reveals interesting information about worker acceptance of the procedure. The following guidelines help ensure cooperation:

- **Reasonable work.** Work standards must be perceived by employees as reasonable and attainable. This feature is essential to a perception of fairness in the process. Furthermore, time spans must be set for measurement performance (Angel, 1989).

- **Relevant tasks.** Only relevant tasks should be included in an electronic monitoring system. Overwhelming insignificant data does not usefully serve employees or employers. Further, excessive monitoring can increase the cost of employee performance appraisal while providing few additional benefits (Henriques, 1986).

Format:

- Uses bullets to emphasize the guidelines; would use numbers if the sequence were important.
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- **Timely intervals.** Evaluation intervals should be appropriate. Production of continuous reports is not only resource consuming but rarely necessary (Henriques, 1986).
- **Employee access.** Employers should have access to their computer-monitored records, which can be used for improving performance and eliminating errors (Henriques, 1986).
- **Specified standards.** Specific, well-defined standards should be set for each monitored task. Under such conditions, workers know exactly what is expected of them (Angel, 1989).
- **Measurable tasks.** Chosen tasks must be measurable and definitive (Angel, 1989).
- **Results-oriented output.** Output from the system should be results oriented. The important element is the measuring of output, not the means of achieving it (Angel, 1989).
- **Congruent pay.** The monitoring system should include a pay schedule congruent with different performance levels. This requirement ensures that those who consistently perform above predetermined standards are appropriately compensated (Angel, 1989).
- **Mutual goals.** Computerized monitoring is an effective aid only if benefits to employer and employees are explicitly stated. Procedures that appear to advance only the employer’s best interest will not be successful (Angel, 1989).
- **Effective supervision.** Grant and Christopher (1991) found that supervisors played a critical role in determining whether monitoring would be stressful and whether data feedback would undermine or promote employee satisfaction.

Thus, when safeguards are incorporated into the electronic appraisal process, the result can be better satisfied and more efficient workers. Employees will experience less work-related anxiety, will be more gratified and content, will be objectively evaluated for work performed, and will be properly compensated for output produced. Positive impact on employers will include low-cost, effective and meaningful evaluation.
tools; methods to identify unique, individual problems; procedures for providing direction and guidelines for employees; and improved training programs (Angel, 1989).

Survey of Businesses Concerning Electronic Monitoring
Of the 98 managers who participated in the current study, 66 (67%) indicated that their companies engaged in some type of electronic monitoring of employee activities. These respondents provided information related to the uses of monitoring and employee access to the data collected.

Reported Uses of Monitoring
When asked about the types of computer activities that were monitored in their respective organizations, respondents indicated log-on identification, files accessed and changed by users, user time on the system, electronic mail, and random checks of file accuracy, as shown in Figure 1.

![Figure 1](image)

How the Results of Electronic Monitoring Are Used

Format:
- Places Figure 1 immediately following its textual references.
- Labels a bar chart as figure and numbers consecutively with one numbering system.
Results of electronic monitoring were used in a variety of ways, with the setting of standards and comparative data analysis being the most common uses.

**Employee Access to Monitoring Data**

Managers in the current study were asked to what extent employees were informed of the company’s monitoring activities. In nearly one half the cases, employees were informed orally or perhaps orally as well as by one of the other means, such as in writing or with a message on the computer. In 18 percent of cases, employees were not informed of the monitoring activity, as shown in Figure 2.

**Figure 2**

Extent to Which Employees Are Informed of Monitoring

<table>
<thead>
<tr>
<th>Method of Informing</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orally, as to possibility</td>
<td>32</td>
<td>48</td>
</tr>
<tr>
<td>By the system during monitoring</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>In writing, as to possibility</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Other means</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Not informed</td>
<td>12</td>
<td>18</td>
</tr>
</tbody>
</table>

Two thirds of the companies performed continuous monitoring; one fourth used random monitoring; and the remainder reported intermittent monitoring at set intervals. Respondents were also asked to indicate the ways in which the data acquired through monitoring was reported. More than one half said that group or department data was the method of reporting; 42 percent used individual reporting, and 18 percent used company-wide data reporting. Some businesses used a combination of the reporting methods. In a related item, managers were asked who sees the results of the electronic monitoring. Upper-level management is most likely to see the results of monitoring. In only one third of the organizations surveyed do employees see their own data, as reported in Figure 3.
Content:

- Discusses major points in the table.
  Provides figure number and specific title.

- Combines “Summary, Conclusions, and Recommendations,” an appropriate heading for a report designed to solve a problem.

- Includes a logical lead-in to a sub-section to avoid stacked headings.

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Figure 3
Who Sees the Results of Electronic Monitoring

<table>
<thead>
<tr>
<th>Party Who Views Data</th>
<th>Number Responding</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper-level management</td>
<td>46</td>
<td>70</td>
</tr>
<tr>
<td>Immediate supervisor</td>
<td>38</td>
<td>58</td>
</tr>
<tr>
<td>Employee</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Peers of employee</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>21</td>
</tr>
</tbody>
</table>

While supervisors are typically the recipients of information obtained from electronic monitoring, only one third of the responding organizations indicated that employees are allowed to see information about the monitoring of their own work.

Analysis

Consideration of primary and secondary research has led to a thorough analysis of the electronic monitoring issue.

Summary

Electronic performance monitoring evokes strong and often contradictory responses among the parties concerned with its use. The potential for impressive gains in productivity must be carefully weighed against possible damage to the quality of work life. Managers who choose to use electronic monitoring must consider effective and fair system design carefully. They must demonstrate that the data generated through electronic monitoring helps them see the positive as well as the negative aspects of employee performance, and individual performance must be tied to salary incentives or performance ratings.

Issues in data reporting must be considered. The need for timely system data must be balanced against the risk that information overload will occur. Dissemination of data is an issue; low producers find the comparison of their performance to that of coworkers demoralizing, and even high performers can find the public display of their productivity to be undesirable.

Format:

- Places Figure 3 following its textual reference.
- Uses centered heading to indicate major division. Includes side headings to divide summary, conclusions, and recommendations into minor divisions.
Finally, which tasks should be monitored? Monitoring a task may confirm a belief that a task is important while failure to include a task or behavior can be interpreted as a signal that management does not consider that factor worth watching.

**Conclusions**

Based on the findings of this research, the following conclusions were drawn:

1. The most significant result of the study was the realization that companies need to address the issue of electronic monitoring and develop a policy for its use.
2. While the current legal structure permits the use of electronic monitoring, informing employees of its use seems advisable.
3. Each organization must examine issues of morale and productivity to determine whether electronic monitoring will be a worthwhile means of assessment.

**Recommendations**

Federated Underwriters should institute an electronic monitoring program that includes the following features:

1. A study should be undertaken to identify the activities that should be monitored.
2. All computer users should be notified in writing that their computer activities are subject to monitoring.
3. Individual data derived from monitoring should be available to employees.
4. Data derived from monitoring should be used as only one indicator of employee performance.

**Format:**

- Enumerates conclusions and recommendations for emphasis and clarity.
- Ensures that page begins with at least two lines of text.
Electronic monitoring is a controversial and complicated issue with implications for performance appraisal, worker productivity, and employee privacy. A promising tool in the managerial process, it is not without its dangers. The challenge to Federated Underwriters is to develop acceptable procedures and guidelines for managing this electronic capability successfully.
REFERENCES


APPENDIX

DEMOGRAPHIC DATA

Figure 4
Types of Businesses Surveyed

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Number Responding</th>
<th>Percent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking/Finance</td>
<td>20</td>
<td>20.4</td>
</tr>
<tr>
<td>Manufacturing/Construction</td>
<td>16</td>
<td>16.3</td>
</tr>
<tr>
<td>Wholesale/Retail Sales</td>
<td>14</td>
<td>14.3</td>
</tr>
<tr>
<td>Miscellaneous Services</td>
<td>14</td>
<td>14.3</td>
</tr>
<tr>
<td>Agriculture/Drilling/Mining</td>
<td>10</td>
<td>10.2</td>
</tr>
<tr>
<td>Communication/Transportation/Utility</td>
<td>10</td>
<td>10.2</td>
</tr>
<tr>
<td>Insurance</td>
<td>8</td>
<td>8.2</td>
</tr>
<tr>
<td>Education/Government</td>
<td>4</td>
<td>4.1</td>
</tr>
<tr>
<td>Legal</td>
<td>2</td>
<td>2.0</td>
</tr>
</tbody>
</table>