

On the impact of technology-based monitoring on workers' behaviors: Experimental investigation

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Abstract

The technology-based monitoring (*IT monitoring*) allows firms to continuously and instantaneously record indicators of employees' effort and performance. Although more than 80% of organizations inform workforce that they monitor keystrokes, time spent on keyboard and review computer files, at least 28% of managers have fired workers for e-mail and internet misuses (AMA, 2007). The purpose of this paper is to investigate in lab how technologies monitoring affect workers' behaviors and performance. Depending on the treatment, the manager is able to monitor agents' production only (Traditional monitoring) or all agents' activities on top of their production (*IT monitoring*). According to previous experimental studies, we find that the *IT monitoring* also implies a disciplining effect as agents on *IT monitoring* treatments are more productive and spend less time on unproductive activity compared to agents on treatments without this monitoring system. However, the disciplining effect of the technology-based monitoring is evanescent. Indeed, agents on *IT monitoring* treatment cheat less during the first three periods and more for the last two periods compared to agents on treatment without *IT monitoring* when the sanction is available. Unexpectedly, we also find that the average time spent by agents on browsing the web was 97.67% higher in treatment with *IT monitoring* compared to treatment without technology monitoring when the sanction is unavailable.

Keywords: Technology-based monitoring, incentive theory, theory of the firm and organizational economics.

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