Technology-Enabled Control: Effectiveness, Socio-Emotional Consequences, and Ethical Dilemmas

TREO Talk Paper

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Abstract

In the IS literature, as well as in related literature in contributing disciplines, control is broadly defined as any attempt to align individual behaviors with organizational objectives (e.g., Kirsch 1997). A frequent argument for the importance of control activities is that such activities are needed to regulate or adjust the behaviors of employees and other stakeholders, to motivate them, and to ensure that their capabilities are fully applied to achieve the desired objectives (ibid).

Past research on IS control has commonly investigated the characteristics and the effectiveness of control approaches adopted by the controller (e.g., IS manager), including concepts such as control modes (i.e., input, behavior, outcome, clan, and self-control) and control styles (e.g., authoritative vs. enabling style) (Wiener et al. 2016). While this rich body of research has produced many important insights, particularly in the context of IS projects, it has almost exclusively focused on the "human" interaction between controller and controllee(s) (e.g., subordinates). In contrast, prior studies have largely neglected the role of technology in managerial control processes. However, as employees have become more geographically disbursed and mobile, organizations are increasingly relying on technology to control employee behavior. In effect, such technology acts as a proxy for a human controller by monitoring, incenting, and guiding controllee behaviors. For example, a variety of prominent companies such as UPS and Uber are leveraging technology to monitor the behavior and productivity of their employees (e.g., UPS uses sensor technology to track the movement of delivery trucks) as well as to incent their workforce to work longer hours (e.g., Uber uses "gamification strategies" to encourage drivers to meet particular revenue thresholds).

Against this backdrop, we intend to conduct a research study that explores the use of technology in managerial control processes, referred to as technology-enabled control (TEC). Specifically, in a first step, our study will draw on prior IS control research to characterize TEC approaches and develop a typology. We then aim to examine different TEC approaches in terms of their effectiveness (controller perspective), their socio-emotional consequences on employee motivation, satisfaction, etc. (controllee perspective), as well as in terms of ethical dilemmas created by these approaches. By considering both the controller and controllee perspective, we recognize the motivation for managers to adopt TEC to drive organizational performance, but also account for the potentially negative side effects of using such controls.

Our study will draw on a series of case studies with organizations where TEC activities are currently being employed. Results from this study are expected to contribute to the existing body of knowledge by shedding light, and providing a critical viewpoint, on the increasing use of technology for control purposes—a topic that has not yet been addressed within the growing IS control research literature.

References

Kirsch, L. J. 1997. "Portfolios of Control Modes and IS Project Management," *Information Systems Research* (8:3), pp. 215-239.

Wiener, M., Mähring, M., Remus, U., and Saunders, C. 2016. "Control Configuration and Control Enactment in Information Systems Projects: Review and Expanded Theoretical Framework," *MIS Quarterly* (40:3), pp. 741-774.