When to Ask for an Update: Timing in Strategic Communication

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February 21, 2018

Abstract

A principal (receiver) is considering whether to accept or reject a project of uncertain value. The total value of the project depends on the values of two aspects. In each period, an agent (sender) privately learns about the value of one aspect with positive probability. We compare two reporting protocols: frequent updating and infrequent updating. Frequent updating requires the agent to report in each period; infrequent updating requires the agent to report only at the end of the second period. The sender may conceal his signal, but cannot misrepresent his information in other ways. The receiver decides whether to accept or reject the project based on the reports that she has received. The sender is biased towards acceptance.

If the prior expected value of the project is lower than the receiver's acceptance threshold, we find that under certain regularity conditions, the equilibrium outcome is the same regardless of the reporting protocol. This equivalence implies that if soliciting a report is costly, then frequent updating is inefficient, but if there is gain from early resolution, then frequent updating is optimal. In contrast, if the prior expected value of the project is sufficiently high, then the reporting protocol matters. Specifically, in this case, when the probability of the sender observing an informative signal in a later period is sufficiently low, the receiver is better off asking for an update in each period. When the probability of the sender observing an informative signal in a later period is sufficiently high, however, frequent reporting discourages the sender from revealing unfavorable information early on, and the receiver is better off asking for only one report at the end of the learning process.

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