

Abstract:

We propose a tractable model of social learning on directed networks. Before adopting a new innovation (e.g. electric cars), agents see the adoption decisions of their neighbors, and then choose whether to inspect the innovation to assess its quality. We characterize the learning dynamics of the unique equilibrium via a system of ODEs, shedding light on how learning depends on the network structure. In tree networks, all direct and indirect links contribute to an agent's learning; we show that one direct link is more valuable than an infinite chain of indirect links. But not all links are beneficial: An agent learning decreases when her neighbors are also learning from her, and when her neighbors are linked to each other.