

Discussion of Ryan and Tucker's "Heterogeneity and the Dynamics of Technology Adoption"

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Summarizing

- Model of diffusion of a product with local network effects
- Takes “usage sequence”, fixed costs of adoption, expected future benefit into account
- Estimates of
 - Heterogeneity in network benefits within group, across group
 - How these benefits vary with repeated interaction
 - Fixed costs of adoption
- Experiment on alternative network seeding policies

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- Network benefits are higher
 - Within region (time zone)
 - Within functional group
 - Within layer of hierarchy
- Focused seeding is better than diverse seeding

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- Focused seeding is better than diverse seeding
 - Expanding the experiment to include (pre-existing) network measures like position, the extent of clustering, mixing across groups
 - Sensitivity to scale, “intermediate” policies
 - Related recent theory: Galeotti and Goyal (2007), Sundararajan (2007)

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 - Related recent theory: Galeotti and Goyal (2007), Sundararajan (2007)
- Other related papers that might inform future work
 - Aral, Brynjolfsson and Van Alstyne (2007), “Productivity Effects of Information Diffusion in Networks”
 - Bramoulle, Djebbari and Fortin (2007), “Identification of Peer Effects through Social Networks”
 - Hill, Provost and Volinsky (2006)

Further Discussion

(speaker's slides)