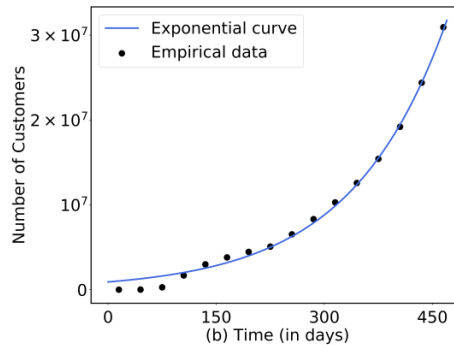# Understanding the Invitation Acceptance in Agent-initiated Social E-commerce

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What is Agent-initiated Social E-commerce

These platforms provide monetary reward to motivate users to become selling agents that recommend items to their friends and recruit new agents.

Research Problems

➢ What are the underlying mechanisms behind the effective agent invitations in social e-commerce?

➢ Can we develop a predictive model?

Developed Hypotheses

Social Conformity
Observing more friends become agents increases a user's likelihood of accepting the invitations.

Social Enrichment
User's propensity of accepting invitations increases with her social tie strength with the inviters.

Refusal Avoidance
Users with less ability to make appropriate refusal are more likely to accept invitations.

Benefit-cost Trade-off
User's propensity to accept the invitations increases with their expected utility of becoming agents.

These hypotheses are tested and validated through user survey and large-scale behavioral data analysis.

Predictive Analysis

Feature Set		AUC	F1-score
Demographics	Age, Gender, Region	0.569	0.701
Social Conformity	The percentage of agent within a community	0.750	0.744
Social Enrichment	The number of interactions (within 7, 15, 30 days)	0.717	0.683
Refusal Avoidance	The number of inviters The number of invitations (within 7, 15, 30 days)	0.600	0.645
Benefit-cost Trade-off	The number of purchase Total expenses of purchase (within 7, 15, 30 days)	0.618	0.679
Combined	All Features	0.869	0.790