Data Science Research Project

Agent-based Modelling for Market Diffusion Research

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ABSTRACT

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Table of Contents

1 Introduction and Literature Review	1
1.1 Introduction	1
1.2 Literature Review	1
1.2.1 Agent-based Modelling Simulation	1
1.2.2 Diffusion of Innovation and Bass Model	1
1.2.3 Influencers and Opinion Leaders in Diffusion	1
1.2.4 Network Structure and Diffusion	2
1.2.5 Conclusion of Literature Review	2
2 Methodology	2
3 Simulation and Results Analysis	2
3.1 Design of the Experiment	
References	2
List of Tables	
Table 1: The Parameters of the Experiment for Each Simulation	2
List of Figures	

1 Introduction and Literature Review

- 1.1 Introduction
- 1.2 Literature Review
- 1.2.1 Agent-based Modelling Simulation
- 1.2.2 Diffusion of Innovation and Bass Model
- 1.2.3 Influencers and Opinion Leaders in Diffusion

1.2.4 Network Structure and Diffusion

1.2.5 Conclusion of Literature Review

2 Methodology

3 Simulation and Results Analysis

3.1 Design of the Experiment

Index	N	p	q	Agent Proportion	Iter
Sim 1	1000	0.01, 0.02, 0.03	0.3	[0.001, 0.099, 0.009, 0.891]	25
Sim 2	1000	0.02	0.3, 0.4, 0.5	[0.001, 0.099, 0.009, 0.891]	25
Sim 3	1000	0.01	0.3	[0, 0.099, 0.01, 0.891] [0.003, 0.099, 0.007, 0.891] [0.005, 0.099, 0.005, 0.891] [0.007, 0.099, 0.003, 0.891] [0.01, 0.099, 0, 0.891]	25
Sim 4	1000	0.01	0.3	[0, 0.1,0.009, 0.891] [0.003, 0.097, 0.009, 0.891] [0.005, 0.095, 0.009, 0.891] [0.007, 0.093, 0.009, 0.891] [0.01, 0.09, 0.009, 0.891]	25
Sim 5	1000	0.01, 0.015, 0.02 0.025, 0.03	0.3	Prop innovator: 0.1, 0.2, 0.3, 0.4, 0.5 Prop Influencer: 0.01	5
Sim 6	1000	0.01	0.3	Prop innovator: 0.1, 0.2, 0.3, 0.4, 0.5 Prop Influencer: 0.01, 0.02, 0.03, 0.04, 0.05	5

Table 1: The Parameters of the Experiment for Each Simulation

test of references (Helfmann et al., 2023)

References

Helfmann, L., Conrad, N. D., Lorenz-Spreen, P., & Schütte, C. (2023). Modelling opinion dynamics under the impact of influencer and media strategies. *Scientific Reports*, *13*(1), 19375–19376. https://doi.org/10.1038/s41598-023-46187-9