

Data Science Research Project

Agent-based Modelling for Market Diffusion Research

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ABSTRACT

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1 Introduction and Literature Review

1.1 Introduction

1.2 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	25
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	25

Table 1: The Parameters of the Experiment for Each Simulation

References