International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056
Volume: 07 Issue: 04 | Apr 2020 www.irjet.net p-ISSN: 2395-0072

Social Network Message Credibility: An Agent-Based Approach.

Amar Kankatti[1], Jayesh Raut[2], Gajanan Biradar[3], Adinath Dhopate[4]

[1]*Amar Kankatti, BE IT, D Y Patil College of Engineering, Pune, Maharashtra*
[2]*Jayesh Raut, BE IT, D Y Patil College of Engineering, Pune, Maharashtra*
[3]*Jayesh Raut, BE IT, D Y Patil College of Engineering, Pune, Maharashtra*
[4]*Jayesh Raut, BE IT, D Y Patil College of Engineering, Pune, Maharashtra*
[5] *Dr. Preeti Patil Assistant Professor, Dept. of IT, D Y Patil College of Engineering, Pune, Maharashtra, India*

Abstract – Todays world the use of Social network increased a lot and hence, its influence of modelling and maximization seems to appear significant in various domains, such as e-business, marketing, and social computing. In current trends the most existing studies focus on how to increase positive social influence to promote product adoptions based on static network snapshots. This kind of approaches can only increase influence in a social network for shorter period of time, but cannot generate sustainable or long-term effects. In our project, we study on how to maintain long-term influence in a social network and propose an agent-based influence maintenance model, which can select influential nodes based on in current trends the status of dynamic social networks in multiple time throughout our project the overall context through our investigation, the experimental results indicate that multiple-time seed selection is very much of achievable and having more constant impact than that of one-shot selection. We claim that influence maintenance is very important and beneficial application, which made ever so, enhancing and assisting long-term goals in business development. Our newly implemented approach can automatically maintain long-lasting impact and achieve influence maintenance.

Key Words: Influence maintenance, influence diffusion, long-lasting influence, agent-based modelling

1. INTRODUCTION

Now a day's providing security over worldwide data is not an easy task. Basically on online storing and accessing data customer are very concern to share their data online while using online web applications and all? But through using cloud concept and tools on the web application we can fix it very well. In the current trends all the computer resources and all including data storage facility and data management tools which is handled by the user is running or using Cloud services for better services and also for better communication over the server. Here it is used to describe data centers available to many users over the Internet. Influence based means development under consideration of making automated cluster of social network those are responsible for reviewing and rating the products. In the current market, this approach is very crucial among researchers, there is a growing interest in conceptualizing complex problems. Hence, it requires using a system framework and using systems modelling tools to explore how components of a complex problem interact. Towards many, these system simulation approaches are useful tools for understanding the processes and structures involved in complex problems. Including, the verifying and identifying high-leverage points in the system and evaluating hypothetical interventions becomes easier.

One tool that has extensive usage among researchers is agent-based modelling (ABM). Henceforth, we define traits and initial behavior rules of an agent that organize their actions and interactions. Stochasticity part plays an important part in determining which agents interact and how agents make decisions. Before going more deeply into that we first look at two basic modelling approaches. After that, we can further delve into the world of agent-based modelling.

2. Existing System

According to a business perspective, influence maximization corresponds to short-term marketing effects, which tend to cause sudden profit spikes that rarely last. As we know from long-term marketing is typically more beneficial since it emphasizes long-term and sustainable business goals. While we talking about long-term influence can establish brand awareness and continually produce results even years down the road; thus, without having long-term marketing strategies, short-term success may be short-lived. Motivated by this background, in this research, we aim to achieve a constant impact on long-term marketing by investigating the preservation of a particular type of influential situation or status, called influence maintenance.

2.1 Disadvantages

First, it focuses on how to maximize the influence of one-shot investment. Based on the risk management theory and best practice, with the same budget, the multiple-time investment could enable a better business strategy. Second, a great many business owners intend to expand the lifespan of influence, so that the brand awareness can be enhanced and increased in the long run. Influence maintenance not only cares about the quantity of users being affected but also considers constant influence impact.

3. PROPOSED SYSTEM

Systematically elaborate and formulate the influence maintenance problem, which tends to maximize the constant

impact of a particular influence by considering time-series. Also, we proposed a decentralized method of influence propagation model, i.e., the Agent-based Timeliness Influence Diffusion (ATID) model. In the ATID, the diffusion process is considered as a networked evolutionary phenomenon, users are modelled as autonomous agents, and each maintains its local information incorporating friendship affiliation list, message repository and posting histories. Furthermore, we introduce the Timeliness Increase Heuristic (TIH) algorithm for solving the influence maintenance problem.

3.1 Advantages

i. Multiple-time selection can maintain influence better than one-shot selection.

ii. The TIH algorithm outperforms the other traditional seed selection algorithms regarding maintaining influence in social networks.

iii. Seed-set variation is associated with both selection approaches and network properties.

4. ARCHITECTURE

1. Agent-based modelling and complexity

It can be traced to investigations into complex systems, and it is one of the most complex adaptive systems, and by using artificial life, known as A Life for a review of the influences of investigations into artificial life on the development of agent-based modelling. And we know that very well the complex systems consist of interacting, autonomous components; complex adaptive systems have the additional capability for agents to adapt at the individual or population levels. These collective investigations into complex systems sought to identify universal principles of such systems, such as the basis for self-organization, emergent phenomenon, and the origins of adaptation in nature.

2. Structure of an agent-based model

This model is itself an initiative to make using automation simpler using this one a developer must identify, model, and program these elements to create an agent-based model. Hence, this figure is shown below. This process often does but is not necessarily modelled to, operate over a timeline, as in time-stepped, activity-based, or discrete-event simulation structures.

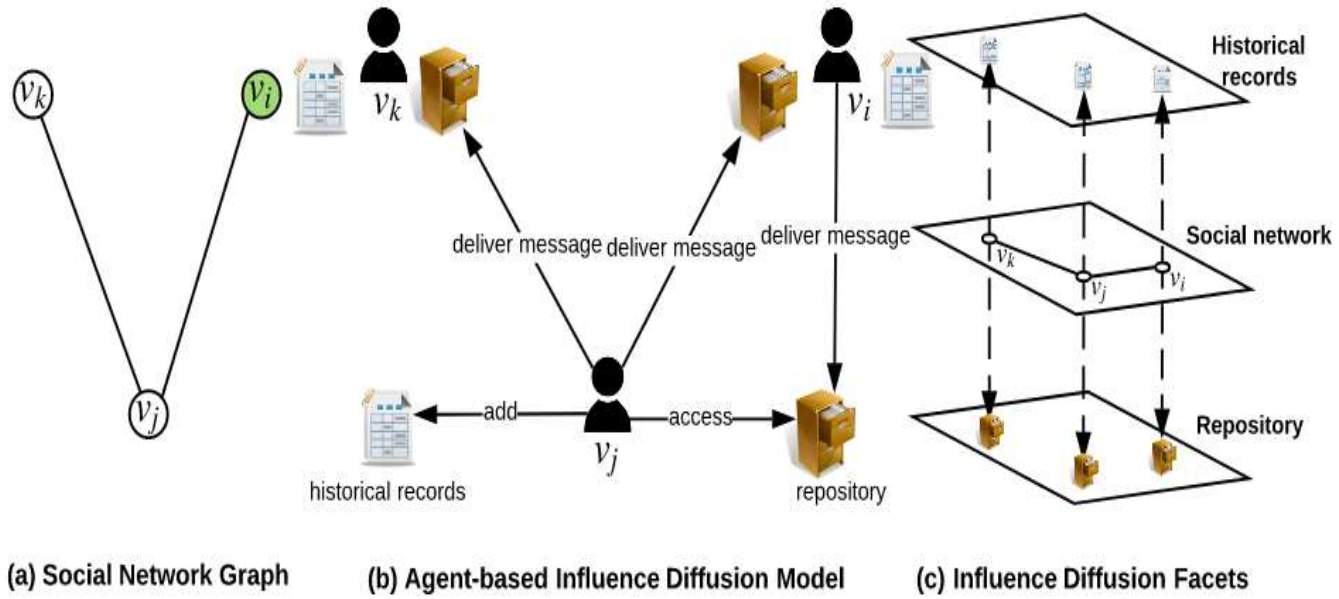

Figure 1

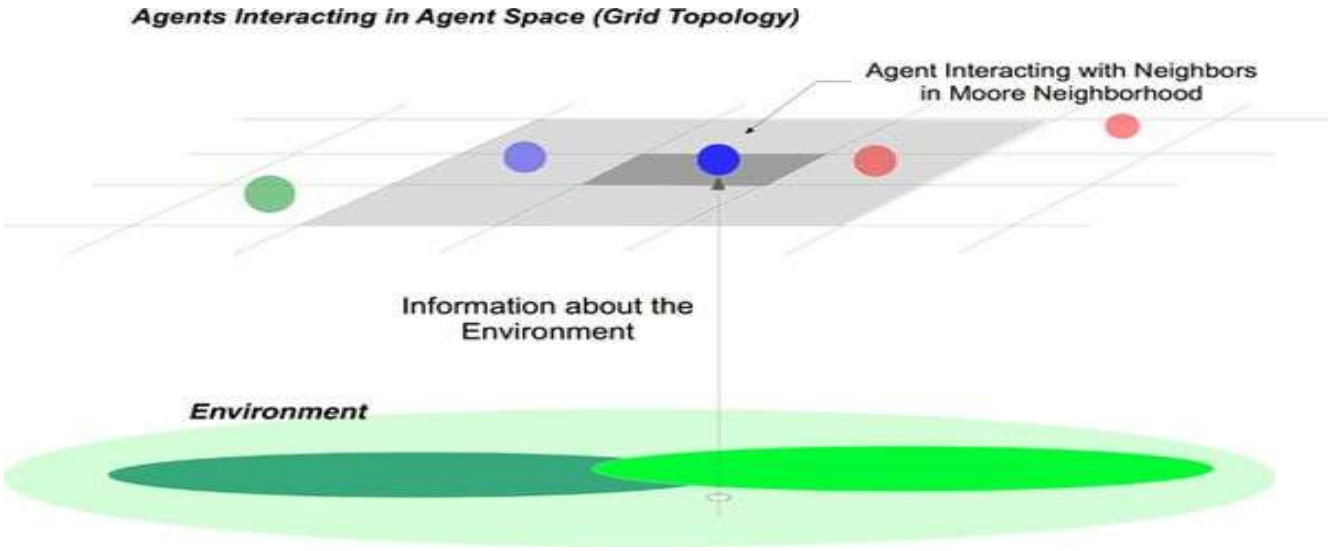

Figure 2

3. Influence diffusion model

It means us, needs to read the capacity of the existing data over social networks from previous 50 year back and collect it for reviewing and taking some knowledge from these data and re-implement it again to develop new influence model from diffused data over the year.

5. System Requirement

Operating System : Windows XP/2003 or Linux (Any OS)

User Interface : HTML, CSS

Client-side Scripting : JavaScript

Programming Language : C#.net

Web Applications : ASP.NET

IDE/Workbench : Microsoft visual studio.net

Database : SQL server

Server Deployment : IIS

6. Hardware Requirements (Minimum)

Processor : Intel core i3 or above

Hard Disk : 40GB or more

RAM : 2GB or more

7. CONCLUSION

We systematically studied the influence maintenance problem, which targets the long-term and sustainable business goals. To the best of our knowledge, this paper is the first full research work that characterizes the influence maintenance in social networks. The distributed influence diffusion model, i.e., the ATID, presented in this article can also pave the way in exploring influence propagation social pheromone, since it concentrates on modelling the agent's personalized traits and behaviours, tracking the temporal feature of a social network, as well as the status of influence messages.

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