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TwitterSimulator. Plan your marketing strategies

Framework for simulation of the social network to evaluate the behaviour of the users under given conditions.

Researchers of the research Group on Intelligent Systems (GSI) of the Technical University of Madrid have developed the TwitterSimulator framework. This simulation framework allows to evaluate the behavior of different types of users, and potential clients of a company, analysing how they react when different external stimulus come to them through the social network.

TwitterSimulator allows developers to (1) define user behaviors; (2) use real user networks obtained from the social network; (3) plan marketing strategies emulating the events that users receive through the social network; (4) simulate how that users react; and (5) evaluate the different strategies to get the more reliable one.

Technology solution supported by the Technical University of Madrid

Technology solution

The social networking services has become one of the most direct communication channel with the final client of almost any company.
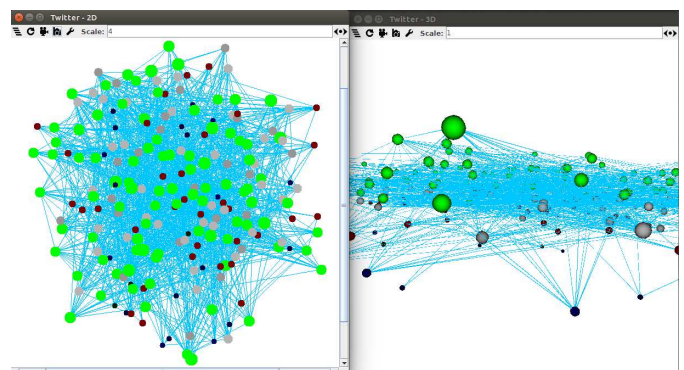
This behaviour has changed the traditional marketing strategies since the client is more reachable figure that is always online through its smartphone and/or computer.

TwitterSimulator offers an approach to evaluate different marketing strategies with different types of clients with different behaviours, providing a way to analyse and compare them.
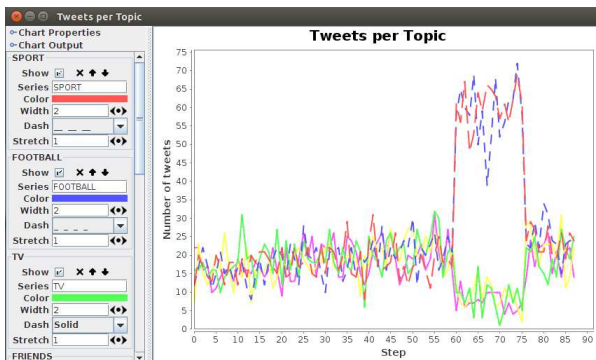
Areas of application

▪ IT and Communications applied to Digital Contents.

"This simulation framework allows to evaluate the behavior of different types of users, and potential clients of a company"

Market demands

• A 89% of Social Media marketers want to answered the following question: "What are the best ways to engage my audience with social media?" and a 83% of them want to know "how they can create a social strategy" [2014 Social Media Marketing Industry Report, Michael A. Stelzner, Social Media Examiner].

• A majority of marketers (67%) will increase their activities on Twitter, up from 64% in 2013 [2014 Social Media Marketing Industry Report, Michael A. Stelzner, Social Media Examiner].

"Social networking services has become one of the most direct communication channel with the final client"

Market potential

• Social Media-based Marketing is increasing in the last years.

• A significant 92% of marketers indicate that social media is important for their business [2014 Social Media Marketing Industry Report, Michael A. Stelzner, Social Media Examiner].

• Furthermore, Twitter has been ranked the fastest growing social platform in the world [Forbes & GlobalWebIndex, 2013].

• The 80% of marketers use Twitter as social media platform for advertisement [Statista.com]

• The 72% of Twitter followers of a brand that are more likely to purchase a product from that brand [ExpandeDramblings.com].

• Globally, we are talking about $405,500,000 of revenue for Twitter Company only from advertising in 2013 [StatisticBrain.com, 2014].

Competitive advantages

• The growth of social media services has led to the apparition of many companies that simulate situations of interest to third parties, but these companies do not offer the source code of their simulators.

• TwitterSimulator offers an open source framework based on a multi-agent approach to simulate each user independently of the others.

• While other social simulators are focused only on the social network itself, TwitterSimulator allows to generate external events, such as a football match, during a given period of time in the simulation, providing a rich way to add realistic conditions to the simulation environment.

References

■ Source code of the framework is available in the next Github repository:
https://github.com/gsi-upm/TwitterSimulator

IPR

■ Code under GNU General Public License v2.0
■ Software in registration process [M-002600/2014]

Development stage

○ Concept   ○ Industrial Prototype
○ R & D   ○ Production
⊕ Lab Prototype

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