Impact of Event Recommendation Systems in User's Decision Making

201521654
Jesse Chiula Samacuva Ulundo

Recommendation systems are part of many computer applications today. The importance of such systems are vital due to the fact that the information shared on internet is fast growing. Many of the web users today depend solidly on information shared with them. In this sense, recommendation systems facilitate such users by automatically recommending their largest preferences.

Simultaneously, user's needs and daily information seeking behavior is growing fast. So there is a huge importance of current recommendation systems adopt their algorithms to the vast user's behaviors and their influential factors to help them with their final decisions.

Well known researches have been done to improve recommendation systems. Starting with more traditional systems such as user based recommendation, content based or collaborative filtering systems have been the pioneers to solve such problem. Hybrid methods where later on introduced but also looking more on joining the two previous mentioned methods. Most of this methods have not looked on introducing into their variables user's social network activities and various influential factors that can be taken from social network from their exchange activities.

The purpose of this research is to bind the technical aspects of recommendation systems to most social aspects. So the overall purpose of this research is to evaluate the user's behavior interacting with event based recommendation systems. By evaluating their behavior, I want to clarify the possible key factors that would influence the user's decision making by the usage of the recommendation systems.

My research looks therefore to introduce such social network influential factors in the known hybrid recommendation method. I conducted a research to study and discover the influential factors to be introduced as an extra variable for the precision of recommendations based on the user's behavior on social networks. I study such influential variables and evaluate them in a utility function to compare how this variable will perform on different recommendation algorithms. I conducted this experiments using an online event based recommendation system data collected from meetup.com.

Using the meetup API, I collected information from the Japanese most popular meetup cities Tokyo and Osaka. Therefore, to minimize and work with more data accuracy I worked with three categories that have similarities in activities thus a good way to measure impact and influence among users. The three decided categories where music, sports and camping. Each of this categories in this cities have average of more than 10 groups and each group having an average of 300 members. One of the key factors of influence is the usage of RSVP which stands for "Répondez s'il vous plaît" meaning please answer. This makes it possible for us to evaluate some infiltration among users from different groups and cities.

How results proof that due to social influential factors such as location of the user, social awareness of information being shared serves as an important role to influence an individual to accept the recommendation, thus, is safe to say that based on the interaction between the different recommendation methodologies there is a high impact and utility of recommendations in user's decision making process.

Main Advisor: Masao Takaku
Sub Advisor: Taro Tezuka