

INTISARI

Terlepas dari semakin banyaknya penelitian terkait simulasi, belum banyak penelitian yang meneliti peran simulasi dalam menghasilkan *insight*. Pada konteks simulasi, *insight* diartikan sebagai pemahaman baru yang diperoleh dari iterasi penggunaan simulasi. Selain itu, *risk attitude* yang juga merupakan salah satu topik pada BOR dianalisis keterkaitannya dengan *insight* yang diperoleh melalui simulasi karena diketahui mampu mempengaruhi perilaku dan keputusan seseorang. Hal ini dikarenakan *risk attitude* yang berbeda mampu memberikan perlakuan dalam hal pemilihan nilai parameter yang berbeda dalam penggunaan model yang interaktif sehingga memberikan proses *insight generation* yang berbeda. Penelitian ditujukan untuk melihat perbedaan *insight* dan proses *insight generation* antara kelompok *risk averse* dan *risk seeking*, serta hubungan *risk attitude* dan perbedaan durasi sosial media terhadap perilaku pengguna dalam memilih model ABMS.

Pada penelitian ini, peneliti menggunakan *Domain-Specific Risk Taking* (DOSPRT) untuk mengukur *risk attitude* pada domain sosial secara eksklusif. Simulasi yang digunakan sebagai metode penghasil *insight* pada penelitian ini adalah *Agent-Based Modeling and Simulation* (ABMS) melalui software NetLogo. Model simulasi berjudul “*Information Diffusion Process*” dipilih untuk menggambarkan proses penyebaran informasi melalui interaksi agen, melihat semakin meningkatnya persebaran berita palsu mengikuti perkembangan Covid-19 di beberapa tahun belakangan ini. Sebanyak 20 partisipan pengguna sosial media dilibatkan dalam eksperimen. Partisipan diminta untuk menyelesaikan studi kasus yang diberikan dan mengisi kuesioner terkait *insight*. Secara umum, eksperimen yang dilakukan meliputi pengukuran *risk attitude*, penggunaan model simulasi pada sesi studi kasus, dan pengisian kuesioner *insight* berupa kuesioner *pre-test* dan *post-test*.

Hasil penelitian menunjukkan bahwa tidak ada perbedaan yang signifikan pada *insight* yang diperoleh pada dua kelompok *risk attitude* pada domain sosial. Selain itu, tidak pula ditemukan perbedaan signifikan pada proses *insight generation* antara kedua kelompok *risk attitude*, baik dari proses pembuatan skenario maupun pola pemecahan masalah pada saat sesi penggunaan simulasi. Proses *insight generation* yang tidak berbeda antara kelompok *risk attitude* mampu menjelaskan alasan tidak adanya perbedaan *insight occurrence* pada kedua kelompok *risk attitude*. Penelitian ini juga menemukan bahwa baik *risk attitude* maupun durasi pemakaian sosial media tidak berkorelasi dengan perilaku pemilihan skenario simulasi.

Kata kunci: *behavioural operational research* (BOR), model simulasi berbasis agen (ABMS), *risk attitude*, *generating insight*, domain sosial, hoaks/fake news

ABSTRACT

Apart from the increasing number of studies related to simulation, not many studies have examined the role of simulation in generating insight. In the context of simulation, insight is defined as a new understanding obtained from iterations of using the simulation. In addition, risk attitude, which is also one of the topics in BOR, is analyzed in relation to the insights obtained through simulation because it is known to be able to influence a person's behavior and decisions. This is because different risk attitudes can cause different treatment in terms of choosing different parameter values in the use of interactive models so as to provide a different insight generation process. The research is aimed at looking at the differences in insight and insight generation processes between the risk averse and risk seeking groups, as well as the relationship between risk attitude and the difference in the duration of social media on user behavior in choosing the parameters of the ABMS model.

In this study, researchers used Domain-Specific Risk Taking (DOSPERT) to measure risk attitude in the social domain exclusively. The simulation used as an insight-generating method in this research is Agent-Based Modeling and Simulation (ABMS) through NetLogo software. The simulation model entitled "Information Diffusion Process" was chosen to describe the process of spreading information through agent interactions, seeing the increasing spread of fake news following the development of Covid-19 in recent years. A total of 20 participants using social media were involved in the experiment. Participants were asked to complete the given case study and fill out a questionnaire related to insight. In general, the experiments carried out include measuring risk attitude, using simulation models in case study sessions, and filling out insight questionnaires in the form of pre-test and post-test questionnaires.

The results showed that there was no significant difference in the insight obtained in the two risk attitude groups in the social domain. In addition, no significant difference was found in the insight generation process between the two risk attitude groups, both from the scenario creation process and problem-solving patterns during the simulation session. The process of insight generation that did not differ between the risk attitude groups was able to explain the reason for the absence of differences in insight occurrence in the two risk attitude groups. This study also found that neither risk attitude nor duration of social media use was correlated with the behavior of selecting the simulation scenario.

Keywords: *behavioral operational research (BOR), agent-based modeling and simulation (ABMS), risk attitude, generating insight, social domain, hoax/fake news*