

INTISARI

Pengambilan keputusan merupakan aspek fundamental dalam manajemen proyek yang kerap dipengaruhi oleh faktor-faktor perilaku seperti tekanan waktu dan pengungkapan sumber informasi. Dalam era teknologi yang berkembang pesat, kecerdasan buatan (AI) seperti ChatGPT seringkali digunakan untuk membantu proses pengambilan keputusan, meskipun performa dan tingkat kepercayaan pengambilan keputusan terhadap AI dibandingkan manusia masih menjadi perdebatan. Mengingat kompleksitas dan tingginya tuntutan akan keputusan yang akurat dan cepat, manajemen proyek kini semakin banyak mengintegrasikan AI ke dalam prosesnya, seperti otomatisasi tugas, analisis risiko, optimasi penjadwalan, alokasi sumber daya, hingga menyediakan data untuk mendukung keputusan strategis. Pendekatan *system dynamics* (SD) digunakan sebagai kerangka simulasi karena kemampuannya dalam memodelkan sistem kompleks dan dinamis melalui identifikasi *feedback loops*, *delays*, dan *non-linearity* antar elemen yang saling berinteraksi.

Penelitian ini bertujuan untuk menganalisis pengaruh batasan waktu dan pengungkapan sumber informasi terhadap performa serta tingkat kepercayaan dalam pengambilan keputusan oleh manusia dan AI. Dengan menggunakan simulasi manajemen proyek berbasis model SD yang dikembangkan oleh Massachusetts Institute of Technology (MIT), studi eksperimental melibatkan 52 partisipan mahasiswa sarjana yang dibagi ke dalam empat kelompok berdasarkan dua variabel bebas: batasan waktu (diberikan vs. tidak) dan pengungkapan sumber informasi (diungkapkan vs. tidak). Performa pengambilan keputusan diukur melalui tiga indikator utama yaitu *Net Present Value* (NPV), *market share*, dan *project completion time*, sedangkan tingkat kepercayaan dievaluasi menggunakan skala *Likert* berdasarkan dimensi keyakinan diri, integritas, keandalan, dan kepercayaan sehingga bersedia melakukan skenario.

Hasil penelitian menunjukkan bahwa secara individual, batasan waktu maupun pengungkapan sumber tidak secara konsisten memengaruhi performa pengambilan keputusan proyek. Namun, interaksi keduanya memiliki pengaruh signifikan terutama terhadap indikator NPV dan *project completion time*. Selain itu, batasan waktu dan pengungkapan sumber secara selektif memengaruhi tingkat kepercayaan partisipan terhadap skenario pada aspek keandalan, integritas, dan keyakinan.

Kata Kunci: *Behavioral Operational Research* (BOR), *Time Constraints*, *Source Disclosure*, Performa Keputusan, Interaksi Pengambilan Keputusan, ChatGPT

ABSTRACT

Decision-making is a fundamental aspect of project management that is often influenced by behavioral factors such as time constraints and source disclosure. In this era of rapidly advancing technology, artificial intelligence (AI) such as ChatGPT is often used to aid the decision-making process, although the performance and level of trust in AI compared to humans remains a subject of debate. Given the complexity and high demands for accurate and swift decisions, project management is increasingly integrating AI into its processes, such as task automation, risk analysis, scheduling optimization, resource allocation, and providing data to support strategic decisions. The system dynamics (SD) approach is used as a simulation framework due to its ability to model complex and dynamic systems through the identification of feedback loops, delays, and non-linearity between interacting elements.

This study aims to analyze the influence of time constraints and information source disclosure on performance and trust levels in decision-making by humans and AI. Using an SD-based project management simulation developed by the Massachusetts Institute of Technology (MIT), the experimental study involved 52 undergraduate students divided into four groups based on two independent variables: time constraints (given vs. not given) and information source disclosure (disclosed vs. not disclosed). Decision-making performance was measured through three main indicators: Net Present Value (NPV), market share, and project completion time, while confidence levels were evaluated using a Likert scale based on the dimensions of self-confidence, integrity, reliability, and trust, thereby willing to engage in the scenario.

The results showed that individually, time constraints and source disclosure did not consistently affect project decision-making performance. However, the interaction between the two had a significant effect, particularly on the NPV and project completion time indicators. Additionally, time constraints and source disclosure selectively affected participants' confidence levels in the scenario in terms of reliability, integrity, and self-confidence

Keywords: *Behavioral Operational Research (BOR), Time Constraints, Source Disclosure, Decision Performance, Decision-Making Interaction, ChatGPT*