

# Perceived Usefulness and Ease of Use of Artificial Intelligence on Marketing Innovation

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## ABSTRACT

Marketers may have several objectives including the increase in market share, profitability, sustainability, green behavior, and innovation. Many observers believe that for innovation, artificial intelligence (AI) and machine learning (ML) capabilities play a vital role in developing general-purpose technologies which impact the economy and society at large. The present study examines the influence of perceived usefulness and ease of use of artificial intelligence on marketing innovation. The base model underlying this research is technology acceptance model. Partial least squares (PLS) has been used to establish the relationship among variables. A cross-sectional empirical evidence has been collected. The results indicate that there is a significant positive relationship between perceived usefulness of artificial intelligence and marketing innovation. Therefore, the authors recommend marketers and producers give due attention to overall marketing innovation and artificial intelligence-generated information for sustainability.

## KEYWORDS

Ease of Use, Marketing, Perceived Usefulness, PLS, Technology Acceptance Model

## INTRODUCTION

The relationship between Perceived Usefulness and Perceived Ease of Use of Artificial Intelligence (AI) on Marketing innovation is recent requirement for the marketers. It is also a phenomenon that has not been studied much in the past. Many observers believe that marketing is a key driver of consumption (Sempredon, Mantovani, Demczuk, Souto Maior & Vilasanti, 2019). While artificial intelligence has been used in many fields, marketing innovation is a field where it has not been explored by researchers. Although many companies have already adopted technologies related to artificial intelligence in their working, the effect of use of artificial intelligence in different industries and the perception of users remains unexplored. It is common knowledge that artificial intelligence is not new in practice and has grown exponentially in the past few decades. This research topic gains importance because artificial intelligence technologies are changing every aspect of our lives and transforming our industries.

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Industries need to change with the rising new trend of AI to stay relevant in the business (Lee, Suh, Roy & Baucus, 2019). Some of the many new innovations awaited in the field of artificial intelligence include voice recognition; it is projected to develop to the point where it will be able to detect emotions. For example, Google home and Alexa will be able to tell the emotional state of the person through evolved machine learning, this in turn will lead to novel innovations in many industries where smart devices will be able to detect mental health of users through speech detection and studying trends in emotional state. In this approach artificial intelligence can be defined as a form and purpose that makes a net positive contribution to society and marketing innovation in terms of social and economic development.

In the future, artificial intelligence is likely to sustainably change both marketing strategies and customer behavior. This paper addresses two of the factors of the Technology Adoption Model (Davis, 1989) which is *Perceived Usefulness* along with *Ease of Use* of artificial intelligence technologies that might affect marketing innovation. The perceived usefulness of artificial intelligence technologies depends on how the marketers see the result of adoption of artificial intelligence as well as the trends that prevail in the industry.

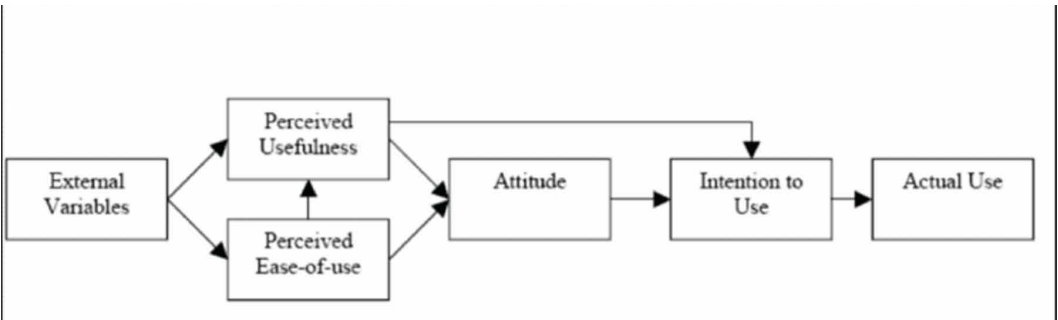
### Technology Acceptance Model (TAM)

TAM is one of the first few models on technology acceptance behavior proposed by Davis in 1989 that tries to predict the factors that influence the acceptance of new technology by users. Researches over the decades have proved the robustness of the model by using it in multitude of industries and demographics (Lu, Yu, Liu & Yao, 2003; Hu, Chau, Sheng & Tam, 1999; King & He, 2006; Marangunić & Granić, 2015). The theory bases itself on two primary variables that are Perceived Usefulness and Perceived Ease of Use. Figure 1 below shows the original TAM Model (Davis, 1989). What are the factors that might motivate an individual to adopt a new technology or shift to an alternative technology depends on whether the individual perceives the technology to be beneficial to them in a certain way and deems it worth spending the time to learn?

### LITERATURE REVIEW

For the purpose of literature review, the database ‘Masader’ was used, the Boolean/phrases used for searching data were *marketing innovation through the use of artificial intelligence, perceived usefulness and ease of use*. The limiters used were *Full text, references available, scholarly (peer reviewed) Journals, Published years 2015-2020*.

Figure 1. TAM Model (Davis, 1989)



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