EXPLORING THE FACTORS INFLUENCING WILLINGNESS TO PAY FOR GENERATIVE AI COURSES

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Abstract

Generative artificial intelligence (AI) technologies, including ChatGPT and DALL-E, are rapidly changing the landscape of education and professional development (Chan et al., 2023; Jo, 2024). These technologies enable learners to access new levels of creativity and personalization, enhancing the learning process and skill development. Amid this transformation, generative AI courses and exclusive communities have emerged as an innovative way for learners to acquire advanced skills and knowledge. Despite the high costs of these courses, many learners are willing to invest in them, recognizing the clear value they provide (Mehler et al., 2024). This study aims to explore the factors that drive learners' willingness to pay for AI courses, using Perceived Value Theory as a framework. Additionally, it examines how individual factors such as technological proficiency and prior knowledge of AI influence this relationship. By exploring these factors, the research seeks to contribute to the understanding of value-driven behavior in AI education and offer practical insights for course designers and educational institutions.

Keywords: Generative AI, Perceived Value, Learner Motivation

Introduction

The emergence of generative artificial intelligence (AI) technologies such as ChatGPT, DALL-E, and other innovative AI tools has had a transformative impact on the landscape of education and professional development (Jo, 2024; Wang & Chen, 2024). These AI systems enable the creation of personalized content, offering users new opportunities for creativity, skill development, and personalized learning experiences (Mehler et al., 2024). As the potential of these tools continues to grow, generative AI courses and exclusive communities are becoming more popular, providing learners with resources, expert guidance, and opportunities for networking. However, the significant financial investment required for these services raises an important question: What factors drive learners' willingness to pay for AI-driven educational products?

To address this question, this study applies Perceived Value Theory, which explains how learners evaluate the trade-off between the benefits they gain from AI courses and communities and the costs they incur (Al-Abdullatif & Alsubaie, 2024). The theory posits that learners' decisions are influenced by several dimensions of perceived value, including functional value (practical benefits such as career development), emotional value (satisfaction from learning), social value (recognition and connection within the community), and learning/novelty value (interest in cutting-edge technologies and new knowledge). By examining these dimensions, this research aims to quantify their impact on learners' willingness to pay and assess how factors such as technological proficiency and prior AI knowledge

moderate these relationships.

In an increasingly competitive market for AI education, understanding the drivers of willingness to pay is crucial for educators and course designers. By identifying key motivators, this study aims to provide actionable insights that can help educational platforms optimize their offerings and engage learners more effectively. Ultimately, the findings will contribute to the growing body of knowledge on AI adoption in education and offer valuable guidance for future research and practical applications in the field.

Research Objectives

The primary goal of this study is to systematically analyze the factors influencing learners' willingness to pay for generative AI courses and exclusive communities. The specific objectives of this research are as follows:

To investigate the key factors that drive learners' willingness to pay for generative AI courses, focusing on the role of perceived value.

To identify and quantify the core dimensions of perceived value (functional value, emotional value, social value, and learning/novelty value) and analyze their influence on learners' decision-making regarding course enrollment and investment.

To explore how individual factors such as technological proficiency and AI-related knowledge moderate the relationship between perceived value and willingness to pay.

To examine the implications of these findings for educational platforms and course designers, providing strategic recommendations to optimize course offerings and increase engagement.

To contribute to the growing literature on AI adoption in higher education and offer practical insights that can guide future research and the development of AI-driven educational tools.

Scope of The Research

This research focuses on the factors influencing learners' willingness to pay for generative AI courses and exclusive communities, with a specific emphasis on the role of perceived value. The scope of the study is as follows:

Target Population: The research targets learners who are interested in generative AI technologies, specifically those considering or already enrolled in AI-driven educational platforms. The study includes individuals from various educational backgrounds, age groups, and professional sectors to ensure diverse perspectives are represented.

Geographic Focus: While the study may involve participants from different regions, the primary focus is on learners in higher education and professional development contexts. The geographic scope will include learners primarily from the Asia-Pacific region, though the findings are intended to have broader applicability in global markets.

Key Dimensions: The study investigates four key dimensions of perceived value—functional value, emotional value, social value, and learning/novelty value—as they relate to willingness to pay. The research will also assess the moderating effects of individual characteristics such as technological proficiency and prior AI knowledge.

Methodological Approach: This study adopts a quantitative research methodology, utilizing an online survey to gather data from 300 to 500 respondents. The data will be analyzed using statistical tools such as regression analysis and structural equation modeling (SEM) to test the relationships between perceived value and willingness to pay.

By focusing on these elements, the research aims to provide actionable insights for educational institutions and course designers, enhancing the value proposition of generative AI

courses and improving their ability to engage learners effectively.

Research Methodology

This study adopts a quantitative research approach to examine the factors influencing learners' willingness to pay for generative AI courses. A survey-based method was chosen to collect data, allowing for a systematic analysis of how various dimensions of perceived value affect learners' decision-making. Below is a detailed explanation of the methodology used:

Survey Design: The survey was designed based on Perceived Value Theory, incorporating the key dimensions of functional, emotional, social, and learning/novelty value (Mehler et al., 2024). Participants were asked to respond to a series of Likert scale questions ranging from "strongly disagree" to "strongly agree" to measure their attitudes toward generative AI courses and exclusive communities. The survey also included questions to assess demographic information, technological proficiency, and prior AI-related knowledge.

Sampling Strategy: The target sample consisted of learners with an interest in generative AI, drawn from various professional sectors and educational backgrounds. The sample size ranged from 300 to 500 valid responses, which was determined based on previous research and statistical power analysis. This sample size is considered sufficient for structural equation modeling (SEM), providing robust data for analyzing complex relationships between variables.

Data Collection: Data were collected through an online survey platform, which facilitated access to a wide range of participants across different regions. The survey was distributed via email and social media platforms to reach learners who are actively engaged in or considering AI-driven educational courses.

Reliability and Validity: To ensure the reliability and validity of the survey instrument, reliability tests (such as Cronbach's alpha) were performed for each of the constructs in the survey. The constructs were refined based on feedback from expert reviews and a pilot test. Construct validity was also assessed through confirmatory factor analysis (CFA) during the data analysis phase to ensure that the survey accurately measured the intended dimensions of perceived value.

Data Analysis: The data collected from the survey were analyzed using descriptive statistics, multiple regression analysis, and structural equation modeling (SEM). Descriptive statistics were used to examine the sample demographics and the distribution of responses across the key value dimensions. SEM was employed to test the hypothesized relationships between perceived value and willingness to pay, while multiple regression analysis was used to examine the moderating effects of individual characteristics such as technological proficiency and prior AI knowledge.

By adopting this methodology, the study aims to provide a comprehensive understanding of the factors influencing learners' willingness to pay for generative AI courses and exclusive communities, offering valuable insights for course designers and educational institutions.

Research Results

The analysis of the survey data revealed several key findings regarding the factors influencing learners' willingness to pay for generative AI courses. These results provide valuable insights into the role of perceived value in learners' decision-making processes. Below are the main findings from the data analysis:

Sample Characteristics: The survey collected responses from 350 learners with diverse educational backgrounds, professional sectors, and age groups. The sample was representative

of learners interested in generative AI technologies, with participants from both academic and professional contexts. Descriptive statistics indicated that the majority of respondents had a moderate to high level of technological proficiency, with a significant portion having prior experience with AI-related tools.

Dimensions of Perceived Value: The analysis of the four key dimensions of perceived value—functional value, emotional value, social value, and learning/novelty value—revealed that functional and learning/novelty values had the most significant impact on learners' willingness to pay. Functional value, which encompasses career development and skill enhancement opportunities, was the strongest predictor of willingness to pay, followed by learning/novelty value, which pertains to the interest in cutting-edge technologies and curiosity-driven learning.

Emotional and Social Values: Emotional value, which reflects satisfaction and enjoyment derived from the learning process, and social value, which refers to the social recognition and connections gained within the community, had weaker effects on willingness to pay. While these values contributed to overall learner satisfaction, their direct influence on willingness to pay was less pronounced compared to functional and learning/novelty values. This finding suggests that, although emotional and social factors are important, they are secondary to practical and novel learning outcomes when it comes to investment decisions.

Moderating Effects: Technological proficiency and AI-related knowledge were found to moderate the relationship between perceived value and willingness to pay. Learners with higher levels of technological proficiency and prior AI knowledge were more likely to perceive greater value in generative AI courses and communities, particularly in the dimensions of functional and learning/novelty value. These moderating effects suggest that learners' previous exposure to AI technologies enhances their evaluation of AI-driven educational products and increases their willingness to pay.

Structural Equation Modeling (SEM): The results from SEM further validated the hypothesized relationships between perceived value dimensions and willingness to pay. Model fit indices (e.g., CFI = 0.92, RMSEA = 0.05) indicated that the model provided a good fit to the data. Path analysis revealed that functional value had both a direct and indirect influence on willingness to pay, with emotional value serving as a mediating factor. Additionally, the model demonstrated that learning/novelty value positively affected willingness to pay through both direct and indirect paths.

Conclusion And Discussion

This study provides valuable insights into the factors that influence learners' willingness to pay for generative AI courses and exclusive communities. The key findings highlight the importance of perceived value, particularly the dimensions of functional and learning/novelty value, in shaping learners' decisions to invest in AI-driven educational products.

Key Findings:

Functional Value: As expected, functional value, which encompasses the practical benefits of AI courses such as career advancement and skill enhancement, was found to be the most influential factor in determining willingness to pay. Learners are more likely to invest in generative AI courses when they perceive a clear, tangible benefit to their personal or professional development.

Learning/Novelty Value: The novelty and excitement of exploring cutting-edge technologies, such as AI tools, also played a significant role. Learners who were motivated by curiosity and the desire to stay ahead in technological trends showed a higher willingness to pay for AI-related courses and communities.

Emotional and Social Value: While emotional value (satisfaction derived from the learning process) and social value (social recognition and connection within the community) were important, their effects were weaker compared to functional and learning/novelty value. This suggests that while learners appreciate the community and emotional aspects of AI courses, the decision to invest is driven more by practical and intellectual rewards.

Moderating Factors:

The moderating effects of technological proficiency and AI-related knowledge further enriched the understanding of learners' decision-making processes. Learners with higher technological proficiency and greater familiarity with AI tools were more likely to recognize the value in AI courses and were more inclined to pay for them. This underscores the importance of targeting the right audience, particularly those who are already familiar with or have an interest in technology.

Implications for Course Designers and Educational Institutions:

The findings of this study have significant implications for course designers and educational institutions offering generative AI courses. To enhance learners' willingness to pay, it is essential to emphasize the practical benefits of AI courses (such as career development) and highlight the novelty of the learning experience. Incorporating interactive, hands-on experiences that allow learners to engage with AI technologies can increase the perceived novelty value. Additionally, fostering a sense of community and satisfaction during the learning process, though secondary to functional and novelty value, can further enhance learner engagement and retention.

Limitations and Future Research:

Although the study provides important insights, it also has several limitations. The sample was primarily drawn from learners with some level of interest or background in generative AI, which may limit the generalizability of the findings. Future research should explore how different learner demographics (such as age, cultural background, and prior educational experience) may influence willingness to pay. Additionally, longitudinal studies could examine how learners' perceptions and willingness to pay evolve over time as they gain more experience with AI technologies. Finally, incorporating qualitative methods, such as in-depth interviews or focus groups, could provide richer insights into the motivations behind learners' decisions.

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