

Does Continuous Usage Intention Leads to Word-of-Mouth: An Artificial Intelligence Tool Perspective

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ABSTRACT:

Artificial intelligence (AI) powered devices are proliferating in the modern economy. However, marketers are unsure of users' artificially intelligent tool usage intention and their post-adoption consequences. So, the current study is an attempt to examine how users' word-of-mouth was impacted by their continued use intentions in the context of artificial intelligence tools. Data was collected from 276 AI tool users. This study uses a survey design to verify the hypothesized relationship. Regression analysis was applied to analyze the data using SPSS version 22. Findings suggest that continuous usage intention has a positive impact on the word-of-mouth of the AI tools users. Marketing implications aligned with the study are discussed in this paper.

Keywords: Artificial Intelligence Tools, Word-of-Mouth, Continuous Usage Intention, Intelligent Personal Assistants, Chatbots.

I. INTRODUCTION:

Artificial Intelligence (AI) is at the top of the buzzword list and currently dominating the discourse. AI's importance has grown among customers and businesses. Artificial intelligence has changed the lifestyle of mankind. Traditionally, various tasks that people used to do earlier on their own are now being done seamlessly by AI.

The concept of artificial intelligence gained popularity when John McCarthy gave the notion of "thinking machines." He provided a definition of artificial intelligence "Artificial Intelligence is the science and engineering of making intelligent machines especially intelligent computer programmes" (Tech Nation, 2019). These AI tools are the software agents which carry out activities or provide services for a person in response to orders or queries. Users give textual or voice commands to these tools. Consumers can do

everything from purchasing to getting news and customer service with the help of these AI tools.

Undoubtedly, there are many AI tools present in the market, but we have taken only chatbots and voice assistants for this study because of their growing importance among individuals. Both are AI-based digital assistants with which consumers can interact. Users can interact with voice assistants through voice and with chatbots through text or messaging.

Earlier studies have tried to explore various dimensions of AI, and as a result of that numerous factors have been identified in the context of AI adoption and usage (Sohn & Kwon, 2020; Yang & Lee, 2019). Out of these two significant factors named word-of-mouth (WOM) and Continuous Usage Intention (CUI) are still under-explored. The relationship between these two factors is the subject matter of this study. CUI is a recent phenomenon in the context of AI and has become a point of focus for marketers, as it leads to various significant/beneficial outcomes for them. Most of the studies have explored the pre-adoption factors of AI tools (Gursoy et al., 2019; Moussawi et al., 2020) and little research has been done regarding the consequences of their continuous usage. WOM has been considered an important outcome for the users as it is the oral or written communication made by the existing consumers about their experience with that product or service to others. This information influences the decision-making of potential users. Therefore, it is crucial to identify the factors that lead to users' positive word-of-mouth intention. Hence, the present study investigates the influence of continuous usage on WOM intention in the context of AI tools.

II. REVIEW OF LITERATURE:

2.1. Continuous Usage Intention:

Earlier studies have focused a lot on the concept of continuous usage intention (CUI) of any

technology (Hsu et al., 2021; Lee & Lee, 2020; Nikhashemi et al., 2021). It is one of the major outcome factors of marketing efforts. Continuous usage intention refers to “one’s intention to continue using or long-term usage intention of a technology” (Bhattacharjee, 2001, p. 353). Researchers have also studied the CUI of users in the context of AI and explored the factors that lead to continuous usage intention of AI tools (Jain et al., 2022; Li et al., 2021). Satisfaction, social presence, U&G benefits, and utility features are some of the factors that lead to repeated use of AI (Han & Yang, 2018; Jain et al., 2022; Li et al., 2021; McLean & Osei-Frimpong, 2019). However, the consequences or outcomes of continuous usage intention are underexplored. There are only a few studies that show the post-adoption consequences of any technology (Shaikh & Karjaluo, 2016). It is still a question whether users’ long-term usage intention of AI can lead to any beneficial outcome for marketers. This study is exploring that what potentially can CUI lead to. In that context, this study considers WOM as an outcome variable of CUI.

2.2. Word of Mouth:

Word-of-mouth (WOM) is defined as “informal, person-to-person communication between a perceived non-commercial communicator and a receiver regarding a brand, a product, an organization, or a service” (Harrison-Walker, 2001, p. 70). When the users are satisfied with their products, they spread positive information about them and recommend known ones to use that product. Whilst numerous earlier studies have given attention to the effects of word-of-mouth on its readers, rather than how can they achieve this positive word-of-mouth from existing customers (Tsai & Bui, 2021). This study aims to fill this gap and concentrates on the factors that influence the consumers’ intention to say positively about AI tools and recommend them to others. Basically, this study investigates the drivers of WOM intention. This finding is of great importance and worth, because of the increasing significance of WOM as a source of information. Hence, this information influences the opinions and decisions of other customers (East et al., 2017).

2.3. Relationship Between CUI and WOM:

Continuous usage intention as an outcome is not an end in consumers’ journey. Studies have depicted that CUI can lead to various behavioral outcomes (Belanche et al., 2020; Yun et al., 2013). However, such studies are minuscule in comparison to what CUI can potentially lead to.

One such possible outcome factor for CUI is WOM. CUI means that people intend to use that product or service again and again, which results in more interaction. These interactions may lead to building relationships with these tools, which might motivate them to spread positive words about that with their peers. Furthermore, Users interact more with a product when they are satisfied, have a good experience, and trust that product. And literature is full of evidence that when customers are loyal and satisfied, they tend to recommend that product and communicate positive information about that product. This thing is the point of the test in the current study. Shaikh and Karjaluo (2016) have specifically hypothesized that CUI leads to positive WOM with regard to mobile banking. This relationship has not been explored in the case of AI tool usage, but we expect that this association exists in the case of AI tool usage also. Therefore, it is hypothesized that continuous usage intention of AI tools may influence users’ positive word-of-mouth intention.

III. METHODOLOGY:

3.1. Sample:

To achieve the objective of the study, data was gathered through an online survey. Users of AI tools comprised the study’s targeted population. A standard questionnaire was prepared and circulated to the population. An aggregate of 276 responses was collected through interviews. For sample size determination we have considered the thumb rule of having responses at least ten times the number of items in the study. This method suggests a sample size of 160. However, to keep the findings relevant we extended this limit and kept the sample size of 276. The respondents were selected through a convenience sampling method. The data collection process took place between March to August 2022. The final sample consists of 99 women and 177 men. Majority of the participants fall between the ages of 19 and 25. Regarding educational attainment, 97 of the participants were graduate and undergraduate; 135 had postgraduation degree; 44 have a doctorate degree.

3.2. Measurement Instrument:

To gather the data, a questionnaire was created as a survey instrument. Standard scales from the earlier studies were used. Closed-ended questions on a Likert scale rating of 1 (strongly disagree) to 5 (strongly agree) were included in the questionnaire. The continuous usage scale was taken from Bhattacharjee (2001) having three items i.e., “I will frequently use my AI tool in the future,” “I intend to continue using my AI tool rather than

discontinue its use,” and “I will use my AI tool on a regular basis in the future.” The three items of word of mouth were taken from Harrigan et al. (2017).i.e., “I would say positive things about this AI tool to other people,” “I would recommend this AI tool to other people who seek my advice,”and “I would encourage my friends and relatives to use this AI tool.” In total, 16 questions were there in the questionnaire,7 questions were added related to AI tools and 9 questions were associated with demographics.

IV. ANALYSIS AND RESULTS:

As the overall objective of this study was to find out the impact of users’ continuous usage intention on their word-of-mouth intentions, regression analysis was used.Initially, reliability of the constructs items was tested with the help of Cronbach’s alpha. The Cronbach’s of WOM was0.92 and CUI was0.91 which exceeded the minimum criteria of 0.70. It demonstrates that the measurement instrument is reliable. As the scale wasreliable,factor analysis (FA) was applied in order toidentify the underlying dimensions of CUI and WOM in the context of intelligent personal assistants. FA was performed using principal component analysis and varimax rotation. It produced the results with a value of 0.75 for KMO and a Bartlett’s test significance of 0.00 for CUI. For WOM the value of KMO was 0.74 and 0.00 significance of Bartlett’s test.As per the results of factor analysis both the constructs/variables were unidimensional, and they were named as continuous usage intention and word of mouth.

To examine the impact of CUI on WOM intention regression analysis was used. The Continuous intention was taken as an independent variable and word-of-mouth was taken as a dependent variable.Regression analysis is a tool used to study the impact of independent variable on dependent variable(Kothari, 2012).SPSS 22 was used to do reliability analysis and regression on 276 responses.

DV	IV	MODEL SIG.	R ²	IV SIG.	UNSTD. BETA
WOM	CUI	0.00	0.64	0.00	0.83

Table 1: Regression Table

The value of R² was 0.64 which is considered as a moderate relationship strength. This interprets that 64% of the variance in WOM is explained by CUI. The positive value explains that this contribution is positive. This means that WOM is positively influenced by CUI. By increasing CUI

by one unit, WOM will also increase by 0.64. The results of the regression analysis are shown in **Table 1.**

The regression equation is explained below:

$$WOM = 0.62 + 0.83 (CUI)$$

In the current study, the mean value of CUI was 3.71. This shows that users agree when asked about their continuous usage intention. Further, the mean values of each question were examined. When asked about the frequent use of AI toolsin the future, respondents agreed that they would like to use their AI tool in the future (mean value = 3.72). The mean value, when asked about the continuous use of AI tools,was 3.77. This proves that respondents have a continuous intention to use these tools. Lastly, it was asked if they will use their AI tool regularly in the future, the mean value (3.65) proved that they agree with this question. The gross mean of WOM was 3.69. This shows that users speak positively about theirAI tool. The individual mean values were also evaluated for WOM. They agreed to say positive things about their AI tool to others as per the mean value of 3.75. They also agreed to recommend the AI tool they use, to other people if they seek advice from them (mean value = 3.67). At last, it was asked if they would encourage their friends and relatives to use the AI tools. The mean value of this question was 3.65. It interprets that respondents also agreed to encourage their friends and relatives to use artificial intelligence tools.

V. DISCUSSION AND IMPLICATIONS:

Marketers need to explore those factors that lead to users’ continuous usage intention. They should frame their strategies accordingly so that they can enhance the repeated use of AI tools.This continuous usage further motivates the users to say positive things about these tools and recommend the same to their acquaintances.So, marketers should ensure that the users should continuously use their AI tools.

Additionally, analysis of our study has demonstrated the crucial impact ofcontinuoususage intention on word of mouth. This result was anticipated since AI tools’ ease of use and convenience make it easier for users toaccomplish their tasks and gather information (Moriuchi, 2019). It further boosts user satisfaction, which in turn promotes positive word of mouth and user retention(Casaló et al., 2008). This finding is particularly significant to the marketers associated with the AI tool industry because a minute increase in consumer retention can result in a major increase in manufacturers’ profitability.

As per the findings of this study, users agree that they spread positive information about AI tools. However, when it comes to giving advice to others or encouraging their friends and relatives, they were not very enthusiastic about it. They might be satisfied with AI tools right now. But they are still far away from turning into a loyal customer. Marketers need to focus on providing that level of satisfaction to their customers so that it converts them into long-term customers. AI tools should have human-like interaction. So that, users relate with them as a companion and not as a machine.

VI. LIMITATIONS AND FUTURE RESEARCH DIRECTIONS:

This present study provides various useful insights to marketers, but still, it contains a few limitations. First, this study was done on Indian AI tools users only. Future studies will be required to test this relationship in different cultural settings, and with a larger number of samples to improve the generalizability of findings.

The current study has just shown the impact and significance of continuous usage in the context of AI tools. Future researchers should also examine the specific determinants of continuous usage intentions. Since, from marketers' perspective studying the factors that promote the continued use of technology can help companies to understand more about customers' needs and preferences, modify their products accordingly and enhance the viability of their product. Future studies can further analyze the moderating role of different personality traits, demographics, satisfaction, and experience with AI tools.

VII. CONCLUSION:

This study has provided empirical evidence that continuous usage intention in the case of AI tools, such as chatbots and voice assistants leads to positive word-of-mouth intention. It further means that whenever someone intends to use AI tools on a repeated basis, they might have good experience with them. Moreover, that person tends to discuss and share positive associations with AI tools among the peer members. Therefore, marketers should also use this finding to enhance the penetration of AI tools among potential customers.

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