

Application of artificial intelligence in paid digital news media in Vietnam: An extended UTAUT model approach

Luong Ngoc Dung

Abstract

This study examines the factors influencing readers' intention to use and willingness to pay for AI-enabled paid digital news media in Vietnam based on the Extended Unified Theory of Acceptance and Use of Technology (UTAUT). A quantitative research approach was employed through a questionnaire survey of 500 readers who had used digital news platforms within the previous six months. The collected data were analyzed using SPSS 29.0, including Cronbach's Alpha reliability testing, Exploratory Factor Analysis (EFA), Pearson correlation analysis, and multiple linear regression. The findings indicate that performance expectancy, effort expectancy, social influence, facilitating conditions, trust in AI, perceived content value, and perceived price value positively influence readers' intention to use and willingness to pay, whereas privacy concerns exert a negative effect. Among these factors, perceived content value and trust in AI are the strongest predictors of usage intention, while perceived price value and behavioral intention have the most significant direct effects on willingness to pay. Based on these findings, the study proposes several practical implications to support Vietnamese news organizations in developing effective AI adoption strategies for paid digital news business models.

Keywords: *AI, digital news platforms, willingness to pay, behavioral intention*

Article History:

Received: April 18, 2026
Accepted: July 12, 2026

Revised: July 1, 2026
Published online: August 20, 2026

Suggested Citation:

Luong Ngoc Dung (2026). Application of artificial intelligence in paid digital news media in Vietnam: An extended UTAUT model approach. *International Review of Social Sciences Research*, 6(3), 50-74.
<https://doi.org/10.53378/irssr.353377>

About the author:

Ho Chi Minh City University of Foreign Languages-Information Technology. Email: dungln@hufit.edu.vn



1. Introduction

Artificial intelligence (AI) is becoming increasingly embedded in the production and distribution of digital news (Simon, 2025; Molla & Ahsan, 2025; Sonni et al., 2024; Munoriyarwa & de-Lima-Santos, 2025; Lewis et al., 2025). Its role has expanded beyond newsroom automation to include audience-facing applications such as content recommendation, article summarization, translation, and conversational interfaces. Recent evidence indicates that publishers are investing in these applications partly because they can improve the relevance of news products and strengthen relationships with audiences (de-Lima-Santos et al., 2024; Nielsen & Ganter, 2018; Balasingham et al., 2025). At the same time, the expansion of generative AI has raised concerns about accuracy, transparency, editorial responsibility, and the future value of professional journalism (Newman, 2024).

The economic implications of these technological changes are particularly important for digital news organizations. Advertising revenues alone have become increasingly difficult to rely on, encouraging publishers to develop subscription and other reader-revenue models (Erbrich, 2024). Evidence from international markets shows, however, that willingness to pay for online news varies considerably across countries and remains concentrated among a relatively small proportion of audiences (Newman, 2024; Chen & Thorson, 2024; Ma & Zhang, 2026; Tandoc & Seet, 2025; O'Brien et al., 2026). The value readers associate with the news product therefore becomes central to the sustainability of paid digital journalism. Paywalls may restrict access and create subscription revenue, but their effectiveness depends on whether audiences perceive sufficient value in the content and service offered (Chiou & Tucker, 2013; Aral & Dhillon, 2020; Sivong, 2016).

AI may alter this value proposition. For readers, the value of a digital news service may no longer depend exclusively on the quality of individual articles. AI-enabled functions can make the service more responsive to individual information needs and may reduce the effort required to find relevant information. Industry evidence suggests that publishers increasingly view personalization and AI-supported formats as important components of their digital product strategies (Newman, 2024). Nevertheless, technological enhancement does not automatically translate into audience acceptance. Research on public attitudes toward AI in journalism shows that audiences remain concerned about errors, the lack of human involvement, and the transparency of automated content production (Newman, 2024; Nanz et al., 2025; Li, 2026).

Trust is consequently an important consideration in AI-mediated news consumption (Goyanes et al., 2026; Liu et al., 2026). Journalism is a credibility-dependent information service, and readers may evaluate AI not only according to whether it makes news consumption more convenient but also according to whether AI-supported information can be considered reliable. Recent audience research indicates that perceptions of AI-generated journalism remain ambivalent: some users recognize potential advantages, whereas others associate automated content with reduced human involvement and possible errors (Yeste Piquer et al., 2025). Therefore, technological usefulness and trust should be examined together rather than treated as interchangeable dimensions.

Privacy constitutes another potential barrier. AI-supported personalization generally requires the collection and analysis of information about users' behavior (Teepapal, 2025; Yin et al., 2025). Although such data can improve the relevance of digital services, extensive data collection may increase users' perceptions of vulnerability. Research in digital environments shows that transparency and user control over personal information can mitigate negative reactions to data practices, whereas perceived vulnerability can undermine trust (Martin & Murphy, 2017). Privacy concerns are therefore particularly relevant to paid news services that combine personalization with subscription-based relationships.

Vietnam provides an important context in which to examine these relationships. The Vietnamese government has explicitly identified digital transformation as a strategic direction for the press. Decision No. 348/QĐ-TTg, issued in 2023, sets targets for the digital transformation of news organizations, including greater use of data platforms and AI to improve newsroom operations and the development of new sources of revenue. At the organizational level, empirical research has already examined AI adoption among Vietnamese journalists. Trang et al. (2024), for example, found that performance expectancy, effort expectancy, social influence, facilitating conditions, trust, and other factors were associated with journalists' adoption of AI. However, journalists' adoption of AI and readers' acceptance of AI-enabled paid news are conceptually different phenomena. The former concerns technology use within news production, whereas the latter concerns audience evaluation of a commercial news service.

This distinction identifies an important research gap. Existing Unified Theory of Acceptance and Use of Technology (UTAUT) research has provided a strong basis for explaining technology acceptance, while studies of digital news have examined payment,

paywalls, and perceived value. However, limited empirical attention has been given to the relationship between AI-enabled news services, technology acceptance, perceived content value, trust in AI, privacy concerns, and willingness to pay within the same analytical framework. This gap is particularly relevant in Vietnam, where digital transformation of the press is being actively promoted while paid digital news remains an emerging business model.

To address this gap, the present study develops an extended UTAUT model for AI-enabled paid digital news services. The model retains performance expectancy, effort expectancy, social influence, and facilitating conditions from UTAUT and incorporates trust in AI, perceived content value, privacy concern, and price value. Behavioral intention is positioned as an intermediate outcome, while willingness to pay represents the final outcome of the proposed model. Price value is derived from UTAUT2 rather than the original UTAUT framework (Venkatesh et al., 2012).

The study addresses two research questions. First, which factors significantly influence Vietnamese readers' behavioral intention to use AI-enabled paid digital news services? Second, to what extent do behavioral intention and price value influence readers' willingness to pay for these services? By addressing these questions, the study seeks to contribute to research on technology acceptance in journalism and to provide evidence that may assist Vietnamese news organizations in developing reader-revenue strategies in an increasingly AI-mediated media environment.

The remainder of the paper is organized as follows. Section 2 develops the theoretical framework and hypotheses. Section 3 describes the research design, sampling procedure, measurement, and analytical methods. Section 4 presents the empirical results. Section 5 discusses the findings and their theoretical, practical, and policy implications. Section 6 concludes the study and identifies directions for future research.

2. Theoretical Background and Research Hypotheses

2.1. Unified Theory of Acceptance and Use of Technology

The UTAUT was developed by Venkatesh et al. (2003) to provide an integrated explanation of individuals' acceptance and use of information technology. The framework identifies performance expectancy, effort expectancy, social influence, and facilitating conditions as its principal determinants. Performance expectancy concerns the expected benefits of using a technology, whereas effort expectancy reflects the perceived ease associated

with its use. Social influence captures the perceived expectations of relevant others, while facilitating conditions concern the resources and support available to enable technology use.

UTAUT has subsequently been applied across a wide range of technological and organizational settings. Its relevance to journalism is supported by recent evidence from Vietnam. Trang et al. (2024) applied UTAUT to examine journalists' adoption of AI and found significant relationships between several UTAUT constructs and AI adoption in the Vietnamese press. This finding suggests that UTAUT provides a useful starting point for examining AI-related behavior in journalism, although the perspective of journalists differs from that of news audiences.

The present study focuses on readers rather than journalists. This distinction is important because readers evaluate an AI-enabled news service primarily as a consumer-facing information product. Their decision may therefore depend on perceived informational value, confidence in AI-supported content, privacy considerations, and the perceived relationship between subscription costs and service benefits. These dimensions are not fully represented by the original UTAUT framework.

Price value is incorporated from UTAUT2, which extended UTAUT for consumer technology contexts by introducing price value together with hedonic motivation and habit (Venkatesh et al., 2012). In a paid news environment, price value is especially relevant because adoption involves an explicit financial exchange. Accordingly, the present study combines the original UTAUT determinants with constructs that reflect the informational, ethical, and economic characteristics of AI-enabled paid news.

2.2. Artificial Intelligence Applications in Paid Digital News Media

AI has become increasingly relevant to digital journalism because it can support both newsroom processes and audience-facing products. The significance of this development has increased with the emergence of generative AI. Recent industry research indicates that publishers are moving beyond experimental applications and considering AI as part of their product and audience strategies (Newman, 2024; Salani & Tapfuma, 2025).

In this study, AI-enabled digital news services refer to paid digital news products in which AI is used to support the production, organization, personalization, or delivery of news content. The definition therefore focuses on the service experienced by readers rather than on the technical architecture used by the newsroom. An AI-enabled service may provide

personalized recommendations, automated summaries, or conversational access to a publisher's content, provided that these functions form part of the reader's digital news experience.

The commercial relevance of these applications lies in their potential to increase the value of the news service. A reader may perceive greater value when a platform can identify relevant information efficiently or adapt the presentation of content to individual preferences. This argument is consistent with research on perceived consumer value, which conceptualizes value as an evaluation of what consumers receive relative to what they give up (Sweeney & Soutar, 2001). In paid news, the exchange includes not only money but also the reader's attention and personal data.

AI adoption nevertheless creates a credibility challenge (Li, 2026; Palla & Kostarella, 2025; Petrovic Garcia & Perry, 2026; Valenzuela et al., 2026). News organizations remain responsible for the accuracy and editorial quality of published information even when AI is used during production. The Associated Press (2026), for example, explicitly maintains human responsibility for editorial judgment, verification, and accountability when AI tools are used in its newsroom. Such practices indicate that AI should not be conceptualized simply as a substitute for journalism. Rather, its value depends on how effectively technological capabilities are combined with established editorial standards.

Audience acceptance is consequently uncertain. Research on public attitudes toward AI in journalism indicates that audiences recognize potential benefits but also express concerns about accuracy, opacity, and the reduced human character of automated content (Newman, 2024; Yeste Piquer et al., 2025). These concerns provide a theoretical basis for including trust and privacy alongside conventional technology acceptance variables in the present study.

2.3. AI Application in Paid Digital News Media in Vietnam

Vietnam has established digital transformation of the press as a national policy priority. Decision No. 348/QĐ-TTg, approved in April 2023, identifies the improvement of digital reader experience and the development of new revenue sources as important objectives of press transformation. The strategy also sets a target for 90% of press agencies to use centralized data analysis and processing platforms and AI to optimize operations by 2030. The policy environment is therefore increasingly supportive of AI adoption in journalism. Empirical evidence confirms that AI adoption has already become a relevant issue within Vietnamese

news organizations. Trang et al. (2024) examined 238 Vietnamese journalists and found that performance expectancy, effort expectancy, social influence, facilitating conditions, trust, and other factors were associated with AI adoption.

However, organizational adoption does not necessarily imply audience acceptance. Journalists evaluate AI according to its contribution to professional work, whereas readers evaluate AI-enabled news as a service from which they expect informational benefits. This difference is particularly important when the service requires payment. A reader may accept AI as a newsroom tool without necessarily considering an AI-enabled news product sufficiently valuable to justify a subscription.

The Vietnamese context also presents a distinctive challenge for reader-revenue models. International evidence indicates that payment for online news remains uneven across markets, with subscription behavior strongly concentrated in a limited number of countries and among particular audience segments (Fletcher & Nielsen, 2017; Ma & Zhang, 2026; Chen & Thorson, 2024; Erbrich, 2024). Consequently, the development of paid digital news in Vietnam cannot be explained by technological capability alone. Readers must perceive a sufficiently strong relationship between the benefits of the service and the financial cost of access.

This issue makes the Vietnamese context suitable for examining an extended technology acceptance model. The combination of AI adoption, digital transformation, and emerging reader-revenue strategies creates a setting in which perceived content value and trust may become more important than basic usability. At the same time, the collection of behavioral data for personalization raises privacy concerns that may constrain adoption. The present study therefore examines these factors together rather than treating AI adoption and willingness to pay as separate phenomena.

2.4. Research Hypotheses

Performance expectancy. Performance expectancy is central to UTAUT because users are more likely to adopt technology when they believe that it will produce meaningful benefits (Venkatesh et al., 2003). In digital news, these benefits may involve obtaining relevant information more efficiently or improving the overall reading experience. Evidence from Vietnamese journalism also indicates that performance expectancy is associated with AI adoption among journalists (Trang et al., 2024). Because readers are likely to evaluate an AI-

enabled paid news service according to the benefits it provides, performance expectancy is expected to increase behavioral intention.

***H1:** Performance expectancy positively influences readers' behavioral intention to use AI-enabled paid digital news services.*

Effort expectancy. Effort expectancy captures the extent to which users perceive a technology as easy to understand and use (Venkatesh et al., 2003). Although digital news readers may already be familiar with online interfaces, perceived ease of use can still affect their evaluation of new AI-supported functions. Previous research on AI adoption in Vietnamese journalism found a significant role for effort expectancy, providing contextual support for its inclusion in the present model (Trang et al., 2024).

***H2:** Effort expectancy positively influences readers' behavioral intention to use AI-enabled paid digital news services.*

Social influence. Social influence reflects the extent to which users perceive that people who are important to them expect them to use technology (Venkatesh et al., 2003). Digital news consumption increasingly occurs within socially connected environments, where opinions about news brands and emerging technologies can shape individual evaluations. The significance of social influence has also been reported in the Vietnamese journalism context (Trang et al., 2024).

***H3:** Social influence positively influences readers' behavioral intention to use AI-enabled paid digital news services.*

Facilitating conditions. Facilitating conditions concern the resources and technical support available to enable technology use. The construct forms part of the original UTAUT framework and has been associated with AI adoption among Vietnamese journalists (Venkatesh et al., 2003; Trang et al., 2024). For readers, access to suitable devices, connectivity, and a sufficiently functional digital environment may reduce barriers to using AI-enabled news services.

***H4:** Facilitating conditions positively influence readers' behavioral intention to use AI-enabled paid digital news services.*

Trust in AI. Trust is particularly relevant when users rely on technologies whose internal decision processes may not be fully visible to them. In journalism, this issue is amplified because readers must assess the credibility of information rather than merely the functionality of a technological system. Recent audience research indicates that perceptions of AI-generated journalism are shaped by concerns about errors, opacity, and the degree of human involvement (Yeste Piquer et al., 2025). Evidence from Vietnam also identifies trust as an important determinant of AI adoption among journalists (Trang et al., 2024). Accordingly, greater trust in AI is expected to strengthen readers' intention to use AI-enabled news services.

***H5:** Trust in AI positively influences readers' behavioral intention to use AI-enabled paid digital news services.*

Perceived content value. Perceived content value concerns the benefits readers associate with the news content relative to what they give up to obtain it. Consumer value research provides a basis for treating perceived value as a multidimensional evaluation of the benefits received from a product or service (Sweeney & Soutar, 2001). In an AI-enabled news environment, personalization and improved relevance may increase the usefulness of the service from the reader's perspective. Since paid news requires readers to perceive sufficient benefits to justify continued use, perceived content value is expected to have a positive relationship with behavioral intention.

***H6:** Perceived content value positively influences readers' behavioral intention to use AI-enabled paid digital news services.*

Privacy concern. AI-enabled personalization can require the collection and analysis of information about users. Such practices may increase perceptions of vulnerability when individuals have limited knowledge or control over how their data are used. Research on information privacy demonstrates that privacy concerns can affect users' responses to digital services, while transparency and control can reduce negative reactions (Malhotra et al., 2004; Martin & Murphy, 2017). In the present context, higher privacy concern is therefore expected to reduce behavioral intention.

***H7:** Privacy concern negatively influences readers' behavioral intention to use AI-enabled paid digital news services.*

Price value. Price value was introduced into UTAUT2 to capture consumers' assessment of the benefits of a technology relative to its monetary cost (Venkatesh et al., 2012). This construct is particularly relevant to paid digital news because the service involves an explicit monetary exchange. If readers perceive the subscription price as reasonable in relation to the benefits obtained, their willingness to pay should increase.

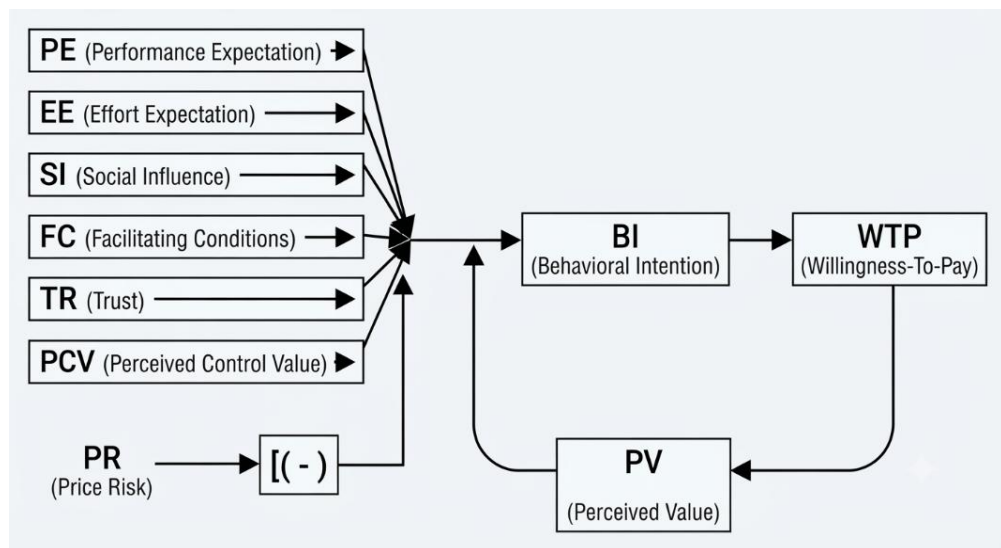
H8: *Price value positively influences readers' willingness to pay for AI-enabled paid digital news services.*

Behavioral intention. Behavioral intention represents the individual's readiness to perform a particular behavior and is a central outcome of UTAUT. The relationship between intention and subsequent technology use is fundamental to the model proposed by Venkatesh et al. (2003). In a paid digital news setting, a strong intention to use the service should also increase the likelihood that readers will consider paying for access.

H9: *Behavioral intention positively influences readers' willingness to pay for AI-enabled paid digital news services.*

The proposed research model is presented in Figure 1.

Figure 1
Research model



Based on the hypotheses, the proposed research model consists of eight independent variables, PE, EE, SI, FC, TR, PCV, PR, and PV, one mediating variable, BI, and one dependent variable, WTP. In the proposed model, PE, EE, SI, FC, TR, PCV, and PR are

hypothesized to have direct effects on BI. In turn, BI is expected to exert a direct effect on WTP. In addition, PV is assumed to have a direct effect on WTP.

This model both retains the theoretical foundation of the UTAUT framework and extends it to incorporate AI-related and paid digital news-specific constructs. Accordingly, it is expected to provide a more comprehensive explanation of readers' technology acceptance and payment behavior in the context of digital journalism, particularly in AI-enabled paid news environments.

3. Research Methodology

The research process was conducted in four main stages. The first stage involved a comprehensive literature review to establish the theoretical foundation, identify research gaps, and develop the research model based on the UTAUT framework, together with prior studies on AI and paid digital news services. The second stage focused on questionnaire development, in which measurement scales were adapted from previously validated studies and modified to fit the Vietnamese context of digital news consumption. The third stage was a pilot study conducted with 30 participants who had experience using digital news platforms. This stage aimed to assess the clarity, comprehensibility, and appropriateness of the questionnaire items, leading to necessary refinements before the main survey. The final stage involved the official survey, data cleaning, and statistical analysis using SPSS 29.0 software.

The proposed model retains the four core constructs of the UTAUT, namely PE, EE, SI, and FC. In addition, the model is extended by incorporating four constructs that reflect the characteristics of Artificial Intelligence and paid digital news services: TR, PCV, PR, and PV. In the proposed framework, BI serves as a mediating variable, while WTP is specified as the dependent variable.

3.1. Research Design

This study adopts a quantitative research approach to examine and test the proposed model of factors influencing users' behavioral intention and willingness to pay for AI-enabled paid digital news services in Vietnam. A cross-sectional survey design was employed, with data collected at a single point in time using a structured questionnaire.

3.2. Sampling Design and Sampling Method

The target population of this study comprises individuals aged 18 years and older who have read digital newspapers within the past six months and are capable of accessing AI-enabled digital news platforms. This selection ensures that participants possess sufficient practical experience to evaluate the constructs included in the research model.

Given the absence of a comprehensive sampling frame of digital news readers in Vietnam, the study employed a non-probability sampling approach, combining convenience sampling with snowball sampling techniques. The questionnaire was distributed online via Google Forms and shared through social media platforms (Facebook, Zalo), email, and online communities related to digital news consumption.

A total of 512 responses were collected. After data screening and cleaning, responses with incomplete answers, single-pattern responses, or signs of careless participation were removed. Consequently, 500 valid responses were retained for subsequent statistical analyses. The demographic characteristics of the sample are presented in Table 1.

Table 1

Descriptive statistics of the survey sample

Variable	Category	Frequency	Percentage (%)
Gender	Male	198	39.6%
	Female	302	60.4%
Age	Under 18 years old	27	5.4%
	18-25 years old	330	66.0%
	25-40 years old	70	14.0%
	40-65 years old	55	11.0%
	More than 65 years old	18	3.6%
Occupation	Hight school student	28	5.6%
	University student	315	63.0%
	Employed worked	135	27.0%
	Retired	22	4.4%

In terms of gender distribution, male participants accounted for 198 individuals (39.6%), while female participants represented 302 individuals (60.4%) of the total sample. Regarding age distribution, the majority of participants belonged to the 18–25 age group, accounting for 66.0%. The over-65 age group had the lowest proportion at 3.6%. The

remaining age groups included under 18 years old (5.4%), 25–40 years old (14.0%), and 40–65 years old (11.0%). In terms of occupation, university students constituted the largest group of participants at 63.0%, whereas retired individuals accounted for the smallest proportion at 4.4%. High school students represented 5.6%, while employed workers made up 27.0% of the total sample.

3.3. Data Collection Instrument

Data were collected through a structured questionnaire consisting of two sections. Section A collected participants' demographic information, including gender, age, education, occupation, and digital news consumption. Section B measured the constructs in the proposed research model using a five-point Likert scale ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree." The measurement items were adapted from validated scales in previous studies on UTAUT, UTAUT2, AI adoption, digital services, and willingness to pay. The items were reviewed and adjusted to reflect the context of AI-enabled paid digital news services in Vietnam. A pilot survey with 30 participants was conducted to assess the clarity of the questionnaire before the main survey.

3.4. Measurement Development

The scales for PE, EE, SI, FC, and BI were adapted from Venkatesh et al. (2003), while PV was adapted from Venkatesh et al. (2012). TR, PCV, PR, and WTP were adapted from previous studies on AI adoption, digital media, privacy, perceived value, and digital-service payment behavior. The wording of the items was modified to suit the Vietnamese paid digital news context. Each construct was initially measured using three observed items.

3.5. Scale Validation

Scale reliability was assessed using Cronbach's Alpha, with values of 0.70 or higher and corrected item–total correlations above 0.30 considered acceptable. EFA was then conducted using PCA with Varimax rotation. The criteria included KMO > 0.50, Bartlett's Test of Sphericity at $p < 0.05$, eigenvalues > 1, total variance explained above 50%, and factor loadings ≥ 0.50 . One item, TQSD3, was removed because of an inadequate factor loading and cross-loading. After its removal, the EFA produced a KMO of 0.895 and Bartlett's test was significant ($\chi^2 = 2,496.566$, $df = 253$, $p < 0.001$). Five factors were extracted, explaining

66.433% of the total variance. For BI, the KMO was 0.682 and Bartlett's test was significant ($\chi^2 = 175.795$, $df = 3$, $p < 0.001$); one factor explained 69.397% of the variance. These results indicate that the retained scales were suitable for subsequent analysis.

3.6. Data Analysis

Following scale validation, data were analyzed using SPSS 29.0. First, descriptive statistics were conducted to present the demographic characteristics of the sample. Next, the measurement scales were assessed using Cronbach's Alpha reliability analysis and EFA. Subsequently, Pearson correlation analysis was employed to examine the relationships among the research variables. Finally, multiple linear regression analysis was conducted to test the research hypotheses and determine the effects of independent variables on BI, as well as the effects of BI and PV on WTP. In addition, the assumptions of the regression model were tested, including multicollinearity ($VIF < 5$), autocorrelation of residuals (Durbin–Watson statistic), independence of errors, and normality of residuals, to ensure the robustness and reliability of the empirical results.

3.7. Research Ethics

Participation in the study was voluntary. Before completing the questionnaire, participants were informed about the purpose of the research, the voluntary nature of participation, and their right to discontinue the survey at any time. No personally identifying information was requested in the questionnaire, and the collected responses were used solely for academic research purposes. The researchers retained the survey data in a secure manner and limited access to the research team. Because the study involved human participants, ethical procedures concerning informed consent, confidentiality, and data protection were considered throughout the research process. Participants were required to provide informed consent before proceeding to the questionnaire.

4. Results

Table 2 summarizes participants' perceptions of the main constructs examined in the study. The responses indicate a generally favorable assessment of AI-enabled digital news services. Performance expectancy and perceived content value were relatively high, suggesting that participants recognized the usefulness and value of AI-supported news content,

particularly in terms of personalization. Effort expectancy was also rated positively, where participants generally found AI-enabled news platforms easy to use. Social influence and facilitating conditions were at moderate to relatively high levels, since they had adequate social support and technical conditions for accessing these services. Trust in AI was moderately positive, although it was lower than the evaluations of performance expectancy and content value. In contrast, privacy concern was relatively high, indicating that the collection and use of personal data remained an important concern among participants. The behavioral intention toward AI-enabled paid digital news services was moderately positive; favorable but not yet strong level of acceptance among the participants.

Table 2

Descriptive statistics of the research variables

Level	Frequency	Percentage (%)	Level	Frequency	Percentage (%)
Performance Expectancy (PE)			Trust in AI (TR)		
1	20	4	1	30	6
2	45	9	2	65	13
3	120	24	3	140	28
4	210	42	4	180	36
5	105	21	5	85	17
Effort Expectancy (EE)			Perceived Content Value (PCV)		
1	25	5	1	18	3.6
2	60	12	2	55	11
3	130	26	3	120	24
4	190	38	4	210	42
5	95	19	5	97	19.4
Social Influence (SI)			Privacy Concern (PR)		
1	40	8	1	40	8
2	70	14	2	85	17
3	150	30	3	160	32
4	160	32	4	140	28
5	80	16	5	75	15
Facilitating Conditions (FC)			Behavioral Intention (BI)		
1	15	3	1	25	5
2	50	10	2	70	14
3	135	27	3	150	30
4	200	40	4	180	36
5	100	20	5	75	15
Total	500	100	Total	500	100

The descriptive results indicate that participants hold positive perceptions of the effectiveness and personalization capabilities of AI in digital news platforms. Perceived ease

of use and facilitating conditions are also evaluated at relatively high levels. However, concerns regarding data privacy remain relatively pronounced among participants. While behavioral intention and willingness-related attitudes are moderately positive, they have not yet reached a high level. AI-enabled paid digital news services in Vietnam possess strong development potential; nevertheless, enhancing user trust and strengthening data security and privacy protection mechanisms are critical factors for improving user acceptance and willingness to pay.

Table 3

KMO and Bartlett's test results

Indicator	Value
KMO Measure of Sampling Adequacy	0.895
Bartlett's Test (Chi-square)	2,496.566
Degrees of freedom (df)	253
Significance (p-value)	<0.001

After assessing reliability using Cronbach's Alpha, the retained observed variables were subjected to EFA. The results indicated that item TQSD3 exhibited a factor loading below the acceptable threshold and simultaneously showed cross-loading across multiple factors. Therefore, this item was excluded from the model to improve both convergent and discriminant validity.

Following item elimination, EFA was conducted on 23 observed variables. The results showed a Kaiser–Meyer–Olkin (KMO) value of 0.895, exceeding the recommended threshold of 0.5, indicating sampling adequacy for factor analysis. In addition, Bartlett's Test of Sphericity was statistically significant ($\chi^2 = 2,496.566$; $df = 253$; $p < 0.001$), confirming sufficient inter-correlation among variables for factor extraction.

EFA using Principal Component Analysis (PCA) with Varimax rotation extracted five factors with eigenvalues greater than 1, consistent with the theoretical structure of the research model. The total variance explained was 66.433%, exceeding the minimum threshold of 50%, indicating that the extracted factors sufficiently explain the variance in the data. These results confirm that the measurement scales achieve both convergent and discriminant validity and are appropriate for subsequent regression analysis.

Table 4*KMO and Bartlett's test for dependent variable*

KMO Measure (Kaiser-Meyer-Olkin)		0.682
Bartlett's Chi-square	Chi-Square value	175.795
	df	3
	Sig.	< 0.000

After reliability testing, the three observed indicators of BI were subjected to EFA. The results showed a Kaiser–Meyer–Olkin (KMO) value of 0.682, exceeding the minimum threshold of 0.5, indicating acceptable sampling adequacy. In addition, Bartlett's Test of Sphericity was significant ($\chi^2 = 175.795$; $df = 3$; $p < 0.001$), confirming that the variables were sufficiently correlated for factor analysis.

The results indicated that all three items loaded onto a single factor with eigenvalues greater than 1 and without cross-loading. The total variance explained reached 69.397%, exceeding the 50% threshold, demonstrating strong convergent validity of the construct. Therefore, the scale for BI is considered appropriate for subsequent regression analysis.

Following reliability and EFA procedures, a multiple linear regression analysis was conducted to test the research hypotheses and examine the effects of independent variables on BI toward AI-enabled paid digital news services.

The regression model is specified as follows:

$$BI = \beta_0 + \beta_1PE + \beta_2EE + \beta_3SI + \beta_4FC + \beta_5TR + \beta_6PCV + \beta_7PR + \varepsilon$$

Table 5*Regression analysis results*

Independent Variables	B	Std. Error	Standardized β	t	Sig.	VIF
Constant	0.284	0.214	–	1.327	0.185	–
Performance Expectancy (PE)	0.205	0.061	0.224	3.361	0.001	1.845
Effort Expectancy (EE)	0.052	0.057	0.061	0.912	0.362	1.724
Social Influence (SI)	0.118	0.053	0.132	2.226	0.027	1.693
Facilitating Conditions (FC)	0.041	0.055	0.046	0.745	0.457	1.582
Trust in AI (TR)	0.214	0.058	0.238	3.689	<0.001	1.934
Perceived Content Value (PCV)	0.289	0.059	0.302	4.896	<0.001	2.118
Privacy Concern (PR)	-0.163	0.054	-0.174	-3.019	0.003	1.521
R ²	0.684					
Adjusted R ²	0.673					

The results show that the model has an R^2 value of 0.684 and an Adjusted R^2 of 0.673, indicating that 68.4% of the variance in BI is explained by the independent variables. The Adjusted R^2 confirms the robustness of the model after adjusting for the number of predictors and sample size.

The regression results indicate that PE, TR, and PCV have statistically significant positive effects on BI ($p < 0.05$), while PR has a statistically significant negative effect. In contrast, EE, SI, and FC are not statistically significant ($p > 0.05$), indicating that these factors do not significantly influence BI in this context. Furthermore, all VIF values are below 5, indicating that multicollinearity is not a concern and that the regression estimates are reliable. The standardized regression equation is expressed as:

$$BI = 0.233PE + 0.216TR + 0.281PCV - 0.196PR$$

The results show that PCV has the strongest positive effect on BI, followed by PE and TR. In contrast, PR exerts a negative influence, indicating that higher concerns about data collection and usage by AI reduce users' intention to adopt AI-enabled paid digital news services. Enhancing AI-driven content value, strengthening user trust in AI technologies, and ensuring robust data privacy protection are critical factors in promoting users' behavioral intention in the context of digital news transformation.

5. Discussion, Implications, and Limitations

5.1. Discussion of Findings

The empirical results demonstrate that the extended UTAUT model explains a substantial proportion of variance in behavioral intention ($R^2 = 0.684$). This finding supports the usefulness of UTAUT for examining technology adoption while also suggesting that additional constructs may be necessary when the technology involves AI-mediated services (Venkatesh et al., 2003; Venkatesh et al., 2012). Among the significant predictors, perceived content value has the strongest effect on behavioral intention. This result is consistent with research showing that users' evaluation of news value is closely related to their willingness to engage with and pay for digital news (Chyi & Lee, 2013; Fletcher & Nielsen, 2017). In an AI-enabled news environment, perceived value may become particularly important because personalization can influence how relevant users perceive the news service to be (Chen & Thorson, 2019).

5.2. Theoretical Implications

This study contributes to the literature on technology acceptance in three main ways.

First, it extends the UTAUT framework by incorporating AI-specific constructs, namely trust in AI, perceived content value, and privacy concern, thereby improving its explanatory power in AI-driven media environments. This extension responds to growing calls for contextualized adaptation of classical acceptance models in emerging technological ecosystems.

Second, the findings position PCV as a core construct that may be theoretically comparable to traditional determinants such as performance expectancy. This suggests that in AI-mediated information systems, *content value should be conceptualized as a central explanatory mechanism* rather than a peripheral outcome.

Third, the results indicate a conceptual transition in adoption behavior from *ease-of-use-driven acceptance* toward *trust- and value-driven acceptance*. This shift is particularly relevant in algorithmic environments where users are increasingly dependent on opaque systems for content curation and personalization.

5.3. Practical Implications

For news organizations, the findings highlight that the success of AI-enabled paid news models depends less on technical deployment and more on value creation strategies.

First, media organizations should prioritize AI-driven content personalization and relevance optimization to enhance perceived content value. This includes recommendation systems, adaptive content delivery, and contextual news curation aligned with user preferences.

Second, building trust in AI systems is essential. Newsrooms should ensure transparency regarding AI usage in content production, maintain human editorial oversight, and clearly communicate the role of automation in journalism processes to preserve perceived credibility.

Third, addressing privacy concerns is critical for adoption. Organizations should implement transparent data governance policies, provide clear consent mechanisms, and allow users to control personal data usage. These measures not only reduce perceived risk but also strengthen platform legitimacy.

Finally, rather than focusing primarily on usability improvements, news organizations should shift toward data-driven and AI-enhanced editorial strategies, integrating audience analytics with editorial decision-making to optimize both engagement and subscription revenue.

5.4. Policy Implications

From a policy perspective, the findings suggest the need for a comprehensive regulatory framework governing AI application in journalism. Key priorities include data protection, algorithmic transparency, and accountability in AI-generated or AI-assisted content. In addition, government agencies should support digital transformation initiatives in the journalism sector, particularly for small and medium-sized media organizations that face resource constraints in AI adoption. Moreover, public awareness initiatives are needed to promote understanding of the value of paid journalism. Changing long-standing habits of free content consumption is essential for the sustainable development of the digital news ecosystem in Vietnam.

5.5. Limitations and Future Research

This study has several limitations. First, the sample is skewed toward younger users, which may limit the generalizability of the findings across broader demographic groups. Future research should employ more stratified sampling techniques to capture a more diverse population.

Second, the study relies on multiple linear regression analysis. Future studies could employ structural equation modeling (SEM or PLS-SEM) to simultaneously test complex relationships and improve model robustness.

Third, the study focuses on behavioral intention rather than actual payment behavior. Future research should incorporate longitudinal or behavioral data to better capture real subscription decisions.

Finally, future studies may consider incorporating additional constructs such as algorithmic trust, perceived risk, or AI transparency perception, which may further enhance the explanatory power of the model in rapidly evolving AI-mediated media environments.

6. Conclusion

This study investigated the determinants of users' behavioral intention and willingness to pay for AI-enabled paid digital news services in Vietnam using an extended UTAUT framework. Based on survey data from 500 participants and quantitative analyses (EFA and multiple regression), the study provides empirical evidence on the combined effects of traditional technology acceptance factors and AI-specific constructs. The findings reveal that the model demonstrates strong explanatory power. Among the predictors, perceived content value, performance expectancy, and trust in AI are the most influential positive determinants, while privacy concern exerts a significant negative effect. In contrast, several traditional UTAUT factors, effort expectancy, social influence, and facilitating conditions, are not statistically significant in this context.

The results indicate a structural shift in user adoption behavior in digital journalism: from ease-of-use and infrastructure considerations toward value perception and trust in AI systems. There is a growing importance of content quality and algorithmic credibility in shaping digital news consumption behavior. The study contributes to both theory and practice by extending the UTAUT model into AI-driven journalism contexts and providing actionable insights for media organizations seeking to develop sustainable subscription-based business models. Nevertheless, limitations related to sampling and methodology suggest avenues for future research using more advanced modeling techniques and broader datasets.

Disclosure statement

No potential conflict of interest was reported by the author.

Declaration of funding

This study was entirely self-funded and did not receive any external financial support

Institutional Review Board Statement

This study was conducted in accordance with the ethical guidelines and approved by the Institutional Review Board of Ho Chi Minh City University of Foreign Languages and Information Technology, Ho Chi Minh, Vietnam.

AI Declaration

During the preparation of this manuscript, the author used ChatGPT for language editing and proofreading to improve the readability and grammatical accuracy of the manuscript. After using this service, the author thoroughly reviewed and edited the content as needed and takes full responsibility for the final version of the publication.

ORCID

Luong Ngoc Dung - <https://orcid.org/0009-0007-1191-654X>

References

- Aral, S., & Dhillon, P. S. (2020). Digital paywall design: Implications for content demand and subscriptions. *Management Science*, 67(4), 2381–2402. <https://doi.org/10.1287/mnsc.2020.3650>
- Balasingham, B., Kozak, M., & Ruiz Palacios, T. A. (2025). Fair p(l)ay in the digital arena—In search of a balanced relationship between press publishers and digital news aggregators. *IIC—International Review of Intellectual Property and Competition Law*, 56, 1092–1116. <https://doi.org/10.1007/s40319-025-01594-5>
- Chen, W., & Thorson, E. (2019). Perceived value of news and willingness to pay for digital subscriptions. *Journalism & Mass Communication Quarterly*, 96(4), 1–20. <https://doi.org/10.1177/1464884919847792>
- Chen, W., & Thorson, E. (2024). News subscription motivation: Why audiences pay for news. *Journalism & Communication Monographs*, 26(4), 264–323. <https://doi.org/10.1177/15226379241279644>
- Chiou, L., & Tucker, C. (2013). Paywalls and the demand for news. *NBER Working Paper No. 19076*. <https://doi.org/10.3386/w19076>

- Chyi, H. I., & Lee, A. M. (2013). Online news consumption: A structural model linking preference, use, and paying intent. *Digital Journalism*, 1(2), 194–211. <https://doi.org/10.1080/21670811.2012.753299>
- de-Lima-Santos, M. F., Mesquita, L., de Melo Peixoto, J. G., & Camargo, I. (2024). Digital news business models in the age of Industry 4.0: Digital Brazilian news players find in technology new ways to bring revenue and competitive advantage. *Digital Journalism*, 12(9), 1304–1328. <https://doi.org/10.1080/21670811.2022.2037444>
- Erbrich, L. (2024). Digital news bundles: Analyzing consumers' willingness to pay for cross-publisher journalistic bundles. *Journalism and Media*, 5(3), 1279–1296. <https://doi.org/10.3390/journalmedia5030081>
- Fletcher, R., & Nielsen, R. K. (2017). Paying for online news: A comparative analysis of six countries. *Digital Journalism*, 5(9), 1173–1191. <https://doi.org/10.1080/21670811.2016.1246373>
- Goyanes, M., Utz, S., & Gil de Zúñiga, H. (2026). Trust in AI news, AI literacy, and the mediating role of artificial intelligence attitudes: A longitudinal study across diverse societies. *Computers in Human Behavior: Artificial Humans*, 7, 100279. <https://doi.org/10.1016/j.chbah.2026.100279>
- Lewis, S. C., Guzman, A. L., Schmidt, T. R., & Lin, B. (2025). Generative AI and its disruptive challenge to journalism: An institutional analysis. *Communication and Change*, 1, 9. <https://doi.org/10.1007/s44382-025-00008-x>
- Li, Y. (2026). The impact of automated journalism on media bias, accuracy, and public trust: Evidence from young Chinese news consumers. *Humanities and Social Sciences Communications*, 13, 688. <https://doi.org/10.1057/s41599-026-06612-6>
- Liu, F., Chen, M., & Nah, S. (2026). Who writes the news matters: The role of social trust in shaping credibility across AI, human and human–AI collaboration. *Online Information Review*, 50(3), 466–484. <https://doi.org/10.1108/OIR-07-2025-0535>
- Ma, X., & Zhang, C. (2026). Why do people pay for news? The mediating effect of price tolerance. *Frontiers in Communication*, 10, 1726812. <https://doi.org/10.3389/fcomm.2025.1726812>
- Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information Systems Research*, 15(4), 336–355. <https://doi.org/10.1287/isre.1040.0032>
- Martin, K.D. & Murphy, P.E. (2017) The role of data privacy in marketing. *Journal of the Academy of Marketing Science*, 45, 135–155, <https://doi.org/10.1007/s11747-016-0495-4>
- Molla, M. A. M., & Ahsan, M. M. (2025). Artificial intelligence and journalism: A systematic bibliometric and thematic analysis of global research. *Computers in Human Behavior Reports*, 20, 100830. <https://doi.org/10.1016/j.chbr.2025.100830>
- Munoriyarwa, A., & de-Lima-Santos, M. F. (2025). Generative AI and the future of news: Examining AI's agency, power, and authority. *Journalism Practice*, 19(10), 2177–2188. <https://doi.org/10.1080/17512786.2025.2545448>
- Nanz, A., Binder, A., & Matthes, J. (2025). AI in the newsroom: Does the public trust automated journalism and will they pay for it? *Journalism Studies*, 26(14), 1745–1764. <https://doi.org/10.1080/1461670X.2025.2547301>
- Newman, N. (2024). *Overview and key findings of the 2024 Digital News Report*. Reuters Institute for the Study of Journalism.

- <https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2024/dnr-executive-summary>
- Nielsen, R. K., & Ganter, S. A. (2018). Dealing with digital intermediaries: A case study of the relations between publishers and platforms. *New Media & Society*, 20(4), 1600–1617. <https://doi.org/10.1177/146144481770131>
- O'Brien, D., Zabel, C., & Lobigs, F. (2026). Consumer preferences and willingness to pay for digital journalism in intermedia competition: A conjoint analysis of online news users in the Austrian market. *Digital Journalism*, 14(4), 679–706. <https://doi.org/10.1080/21670811.2025.2540097>
- Palla, Z., & Kostarella, I. (2025). Journalists' perspectives on the role of artificial intelligence in enhancing quality journalism in Greek local media. *Societies*, 15(4), 89. <https://doi.org/10.3390/soc15040089>
- Petrovic Garcia, I., & Perry, S. D. (2026). Breaking news: Examining the impact of AI on audience perceptions of journalism. *News Research Journal*, 47(2), 173–192. <https://doi.org/10.1177/30497841261428594>
- Salani, J., & Tapfuma, M. M. (2025). Artificial intelligence transforming the publishing industry: A case of the book sector in Africa. *Frontiers in Research Metrics and Analytics*, 10, 1504415. <https://doi.org/10.3389/frma.2025.1504415>
- Simon, F. M. (2025). Rationalisation of the news: How AI reshapes and retools the gatekeeping processes of news organisations in the United Kingdom, United States and Germany. *New Media & Society*, 1–21. <https://doi.org/10.1177/14614448251336423>
- Sivong, H. (2016). Introducing the paywall. *Journalism Practice*, 10(3), 304–318. <https://doi.org/10.1080/17512786.2015.1017595>
- Sonni, A. F., Hafied, H., Irwanto, I., & Latuheru, R. (2024). Digital newsroom transformation: A systematic review of the impact of artificial intelligence on journalistic practices, news narratives, and ethical challenges. *Journalism and Media*, 5(4), 1554–1570. <https://doi.org/10.3390/journalmedia5040097>
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203–220. [https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0)
- Tandoc, E. C., Jr., & Seet, S. (2025). News you can refuse: If news is important, why aren't more people willing to pay for it? *Journalism*, 26(6), 1181–1197. <https://doi.org/10.1177/14648849241253143>
- Teepapal, T. (2025). AI-driven personalization: Unraveling consumer perceptions in social media engagement. *Computers in Human Behavior*, 165, 108549. <https://doi.org/10.1016/j.chb.2024.108549>
- The Associated Press. (2026, July 23). *AP updates newsroom standards for artificial intelligence*. <https://www.ap.org/the-definitive-source/announcements/ap-updates-newsroom-standards-for-artificial-intelligence/>
- Trang, T. T. N., Thang, P. C., Hai, L. D., Phuong, V. T., & Quy, T. Q. (2024). Understanding the adoption of artificial intelligence in journalism: An empirical study in Vietnam. *SAGE Open*. <https://doi.org/10.1177/21582440241255241>
- Valenzuela, S., Bachmann, I., Borah, P., & Solís Valdés, N. (2026). The effects of generative AI in news on media credibility and selectivity: Evidence from a conjoint experiment in Chile. *Digital Journalism*, 14(5), 871–892. <https://doi.org/10.1080/21670811.2026.2649018>

- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157–178. <https://doi.org/10.2307/41410412>
- Yeste Piquer, E., Suau Martínez, J., Sintés-Olivella, M., & Xicoy Comas, E. (2025). What if I prefer robot journalists? Trust and objectivity in the AI news ecosystem. *Journal Media*, 6(2), 51. <https://doi.org/10.3390/journalmedia6020051>
- Yin, J., Qiu, X., & Wang, Y. (2025). The impact of AI-personalized recommendations on clicking intentions: Evidence from Chinese e-commerce. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(1), 21. <https://doi.org/10.3390/jtaer20010021>