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A Motivational Perspective on College Students' Intention to Adopt Mobile News Apps

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Abstract

Mobile News Apps (m-news) have emerged as a popular platform for accessing news content "anytime, anywhere," reflecting a growing trend in digital consumption among college students. Academics and industry professionals are increasingly interested in exploring the potential of m-news to support information dissemination. However, existing research has identified challenges in fostering m-news adoption. Prior studies have predominantly concentrated on technological factors influencing m-news usage, with limited attention to the motivations behind users' adoption, particularly among college students. This study leverages the Uses and Gratification Theory to explore the motivational drivers behind college students' adoption of Mobile News Apps. The findings indicate that students' intentions to use m-news are significantly influenced by their attitudes, which is shaped by their cognitive needs, social needs and affective needs. The article concludes by discussing the theoretical implications and practical applications of these insights.

Keywords: Mobile News, Uses and Gratification Theory (Ugt), College Students, Technology Adoption, Behavioral Intention

Introduction

In today's fast-paced world, the emphasis on efficiency and mobility has significantly increased the reliance on mobile technologies (Liu et al., 2009). As mobile technology becomes an integral part of both business and society, its importance continues to rise (Scornavacca et al., 2006). The swift adoption of mobile technology is evident in the explosive growth of mobile applications (apps), which are now indispensable in daily life. The rapid increase in smartphone users has significantly accelerated the usage of mobile apps, which have become an essential part of daily life by simplifying everyday activities and catering to a wide range of needs (Malaquias & Hwang, 2019). Globally, the number of app downloads surged from 178.1 billion in 2017 to an anticipated 258.2 billion by 2022, marking a 45% increase (Statista, 2018). In India, this trend is even more pronounced, with a remarkable 165% rise in app downloads from 2016 to 2018, making it the second-largest app market worldwide,

just after China (Annie, 2017). This growth reflects the central role of mobile apps in reshaping consumption habits and business practices.

Numerous prior studies in the field of mobile and digital technologies have been conducted by researchers, covering topics such as mobile payment systems, mobile learning platforms, mobile banking services, online shopping experiences, food delivery applications, and mobile television (Lee et al., 2019). Among the myriad of apps, mobile news apps have emerged as one of the most popular categories, fundamentally altering the landscape of news consumption (Constantinides, 2015). Users increasingly rely on these apps for their daily news intake, often at the expense of traditional media sources (Kazai et al., 2016;Wang, 2018). As smartphones enhance user experience, people are consuming information in fragments through personalized news apps, prompting media organizations to leverage advanced algorithms for customized content delivery (Frasincar et al., 2009). Prominent examples include Toutiao in China and Dailyhunt, Inshorts, and UC Browser in India, which utilize data mining techniques to provide tailored news experiences (Hu & Zhang, 2015).

There is a growing literature exploring mobile technologies and user behaviors, but research focusing on the significance of mobile news applications has received little attention (Schmitz Weiss, 2013). Despite the widespread use and significant impact of mobile news apps, academic research on their adoption, particularly among college students, remains limited (Ye et al., 2019). Most existing studies have focused on technological factors, employing traditional Information Systems (IS) theories like the Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT) to explore adoption behaviors (Davis, 1989; Venkatesh et al., 2003). However, such approaches often overlook the complex motivational dynamics that impact users' intentions of mobile news apps adoption. As the preferences and behaviors of college students evolve, it becomes essential to explore the psychological and social motivations that drive their adoption decisions (King, 2002).

This study aims to address this gap by examining college students' intentions to adopt mobile news apps from a motivational perspective. Utilizing UGT,a robust framework for understanding user motivations, this research seeks to uncover the underlying enablers shaping students' attitudes towards mobile news app usage (Stafford, 2005). UGT has been successfully applied to explore motivations across various digital platforms, including internet adoption for distance learning (Stafford, 2005), apps for mobile learning (Hashim et al., 2015). By focusing on motivational factors, this study not only extends the existing understanding of mobile app adoption but also provides valuable insights into the unique needs and preferences of college students, a demographic increasingly engaged with digital news platforms (Eastmond, 1998).

This paper is structured as follows: the next section reviews the existing literature on mobile news app adoption, followed by an exploration of how UGT dimensions can elucidate college students' motivations for using these apps. Subsequently, a research model is presented, and the paper concludes with a discussion of the theoretical and practical implications of the study.

Literature Review

Mobile News Apps

Mobile applications are described by Taylor et al (2011), as "small programs that operate on mobile devices, capable of performing a wide range of tasks, from banking and gaming to web browsing." These apps are specifically designed to serve both informational and entertainment functions. For instance, mobile apps can provide tailored information services, such as personalized news updates or financial management tools, as well as offer various entertainment options, including games, music, movies, and access to social media platforms. This dual functionality allows mobile apps to cater to both hedonic (pleasure-seeking) and utilitarian (practical) needs, depending on their specific design and user interaction (Wang et al., 2013).

A significant advantage of mobile apps is their ability to help users efficiently navigate and manage large volumes of information. This capability enables users to quickly access and find valuable content, enhancing their overall experience (Johnson, 2010). Furthermore, mobile apps provide a more convenient and user-friendly alternative to traditional websites by delivering rapid, easily digestible updates (Van Damme et al., 2015). The increasing reliance on mobile apps for a wide array of activities—such as ordering food, managing bank transactions, seeking entertainment, and shopping—reflects their growing importance in daily life (Alalwan, 2020; Chopdar et al., 2018). As users continue to seek seamless and engaging experiences, mobile apps play a crucial role in fulfilling these demands and shaping the way people access and consume information.

Among the various types of mobile applications, news apps are particularly notable for their emphasis on personalization. Personalized news apps utilize data from users' navigation habits, preferences, and interactions to deliver content that is specifically tailored to individual interests. In an era characterized by an overwhelming flow of information, it is critical for online news platforms to assist readers in discovering content that aligns with their specific preferences and needs.

Mobile apps that adapt their interface and user experience based on users' habitual behavior patterns offer a significant advantage by personalizing how news is accessed and consumed. This personalized approach not only increases user engagement but also ensures that the content delivered is highly relevant and appealing to each reader's unique tastes. The ability of these apps to provide a more tailored and relevant news consumption experience is a key factor in their effectiveness (Constantinides, 2015). Research by Constantinides and Dowell (2015) further underscores the importance of personalization in mobile news apps. Their study demonstrated that different users benefit from various types of app interfaces, depending on their individual preferences and behaviors. This finding supports the idea that personalization plays a critical role in influencing users' intentions to continue using news apps. The customization of content and interface design makes news apps more attractive and user-friendly, which can lead to higher user retention and satisfaction.

Ye et al (2019), also found that personalized systems, along with the quality of service provided by news apps, significantly enhance user satisfaction. Their research indicated that users who rely on news apps for information tend to favor personalized services that cater to

their specific needs and interests. This preference for personalized content highlights the growing importance of tailored experiences in the digital age, where users expect news services to not only deliver information but also to do so in a way that feels relevant and meaningful to them. Similarly, Franke et al (2009), observed that customized newspapers offer distinct advantages by delivering content that closely matches users' preferences. This customization allows users to access the news that matters most to them, streamlining the process of finding relevant information. Personalized news services aggregate content from a variety of sources, ensuring that users receive comprehensive and pertinent updates in a timely manner. This aggregation not only keeps users informed but also enhances the overall efficiency and effectiveness of news consumption.

Uses and Gratification Theory (UGT)

UGT is widely recognized as a valuable framework for examining individual motivations and behaviors in media consumption, particularly within the communications field (Stafford, 2005). This theoretical approach emphasizes that people's use of media is driven by specific needs and desires, which they actively seek to fulfill through various media channels. Under the UGT framework, students' motivations for interacting with media can be broadly classified into three primary needs: cognitive, social, and affective. These categories reflect the different ways students seek to fulfill their informational, interpersonal, and emotional requirements through media engagement. Empirical researches indicate that these motivational attributes are broadly applicable across various forms of media, including those utilized in moblie application environments (Guo et al., 2010). Each of these needs reflects different aspects of human behavior and serves distinct purposes in the context of media usage.

Cognitive needs are related to the desire for acquiring knowledge, information, and understanding (Skulmowski et al., 2022). For college students, mobile news apps serve as a vital tool for satisfying their intellectual curiosity and keeping up-to-date with current events. The accessibility of information at any time and place allows students to stay informed about various subjects, including politics, science, technology, and culture. This aligns with the increasingly dynamic and information-rich environment that college students find themselves in. Additionally, mobile news apps provide a personalized news reading experience by offering articles and content tailored to individual interests and preferences through algorithms that analyze user behavior (Frasincar et al., 2009).

Social needs refer to the desire for interaction, connection, and social engagement (Litt et al., 2020). For college students, mobile news apps are not merely platforms for consuming information but are also a means of engaging in social dialogue and community participation. Many news apps include features that allow users to share articles, comment on stories, and participate in discussions, fostering a sense of community and connection among users (Batsell, 2015). This social interaction fulfills students' need to connect with peers, engage in debates, and express opinions on current events. Furthermore, mobile news apps often incorporate social media integration, allowing students to seamlessly share news articles on platforms like Facebook, Twitter, and Instagram (Peters et al., 2022). This integration enhances the social experience by facilitating conversations beyond the confines of the app itself, encouraging students to participate in broader societal dialogues.

Affective needs relate to the desire for emotional experiences, entertainment, and relaxation (Bartsch et al., 2010). Mobile news apps cater to these needs by providing content that is not only informative but also engaging and emotionally resonant. For college students, who often experience stress and pressure from academic responsibilities, mobile news apps offer a means of escapism and relaxation through entertainment news, lifestyle articles, and human-interest stories (Zerba, 2003). Furthermore, mobile news apps often feature multimedia content such as videos, podcasts, and interactive articles, enhancing the affective experience by providing diverse and engaging formats. This multimedia approach caters to students' desire for varied content that can evoke emotional responses, entertain, and provide a break from their academic routines (Wang, 2017).

Research Model and Hypotheses

The proposed research model suggests that college students' intention to adopt mobile news (m-news) is positively influenced by their attitude toward the technology. Furthermore, this attitude is shaped by cognitive, affective, and social needs. Students' intention to adopt m-news is significantly shaped by their attitudes towards it. This positive correlation has been well-documented in earlier research, which examined online behavior and media adoption patterns (Liu et al., 2010; Hashim et al., 2015). These studies consistently show that a favorable attitude plays a crucial role in encouraging students to engage with and embrace mobile platforms. Within the context of mobile learning, attitude is recognized as a critical determinant of students' intention to adopt m-learning (Hashim et al., 2015). Based on this understanding, the following hypothesis is proposed:

Hypothesis 1: College students' attitude positively influences their intention to adopt m-news apps.

Cognitive need is defined as the motivation of students to utilize a medium to access information that fosters critical and creative thinking (Mondi et al., 2008). Mobile media and social platforms can enhance students' access to meaningful information (Hosen et al., 2022). A medium that provides a broad range of accurate and high-quality information is likely to foster a positive attitude toward its adoption. Thus, the following hypothesis is formulated:
Hypothesis 2: College students' cognitive need positively influences their attitude toward adopting m-news apps.

Affective need pertains to the personal satisfaction students gain from using media to enhance their cognition during the news reading process. This need involves the emotional fulfillment and positive experiences that students seek while engaging with media for information (Schneider et al., 2022). When a medium enhances personal fulfillment and offers a pleasurable experience during news consumption, students are more inclined to form a positive attitude toward adopting it. A medium that meets these criteria is likely to resonate with users, increasing their likelihood of embracing it as a preferred platform for news consumption. Consequently, the following hypothesis is suggested:

Hypothesis 3: College students' affective need positively influences their attitude toward adopting m-news apps.

Social need encompasses students' motivation to use a medium that facilitates interaction and collaboration with peers during the news reading process. A medium that supports communication across time and space can effectively fulfill students' social needs by enabling consensual meaning-making and co-creation of knowledge (Qureshi et al., 2020). Therefore, the following hypothesis is presented:

Hypothesis 4: College students' social need positively influences their attitude toward adopting m-news apps.

Methodology

Research Instrument

The research instrument for this study was adapted from established instrument in previous research, ensuring its reliability and validity (Mondi et al., 2008; Hashim et al., 2015). It comprised 18 items that were specifically designed to measure users' motivation to adopt mobile media. While the core components of the original instrument were preserved to maintain consistency and comparability, several minor adjustments were made to better align the items with the unique context and objectives of this research, allowing for a more accurate assessment of the targeted population's motivations and behaviors. These adjustments involved changes in wording, but no items were either added or removed. All items were evaluated using a five-point Likert scale, where responses ranged from "strongly disagree" (1) to "strongly agree" (5).

To ensure the reliability of the research instrument, a pilot survey was conducted. The pilot study was executed following the same procedures planned for the actual data collection phase. It involved 20 college students from a university in Beijing. The analysis of the measurement and structural models indicated that the instrument exhibited satisfactory levels of reliability and validity.

Data Collection

This study utilized an online survey as the main method for data collection, which remained open to respondents for almost two weeks. College students from a university in Beijing were invited as a sample to participate in this questionnaire survey. Beijing was chosen as the survey location because its comprehensive universities provide abundant resources and attract a diverse student population from all over the country. This selection was intended to ensure a more representative sample. Ultimately, 250 students took part in the survey. After thorough data screening, a total of 208 valid samples were included in the final analysis, surpassing the minimum threshold of 200 necessary for effectively testing and validating the proposed model and hypotheses through structural equation modeling (Loehlin, 2004).

To ensure the relevance of the data collected, each participant was first asked a qualifying question at the beginning of the survey to verify their status as active news app users. Only individuals who had previously downloaded and were actively using news apps were permitted to proceed with completing the survey. Respondents were informed that participation was voluntary and confidential, and they were given ample time to consider their responses before filling out the survey form.

Analytical Methods

The primary objective of this study is to identify the factors that influence college students' motivation to adopt mobile news (m-news). To achieve this, Partial Least Squares (PLS) was selected as the analytical technique due to its effectiveness in exploring complex relationships between variables. Smart PLS 2.0 software was employed to conduct the statistical analysis, enabling a thorough evaluation of both the measurement and structural models within the study. This approach aligns with the standard reporting procedures recommended by experts in the field of PLS analysis, as outlined by Chin (2009). By adhering to these established practices, the study ensures robust and credible results in understanding the motivational factors affecting the adoption of m-news among college students.

Data Analysis and Results

Measurement Model

To evaluate the fit of the measurement model more thoroughly, a confirmatory factor analysis (CFA) was performed. This analysis aimed to assess standardized factor loadings, composite reliability (CR), and the validity of the constructs being examined.

Table1

Items loading, CR and AVE values

Consturct	Items	Questions	Loading	T-Statictic	CR	AVE
Cognitive need	CN1	I use m-news app to stay informed about various topics	0.680	-	0.801	0.501
	CN2	I use m-news app to look for updated information	0.703	8.388		
	CN3	I use m-news app to discuss topics that come up with people around me	0.688	8.25		
	CN4	I use m-news app to delve into topics of interest beyond my regular routine	0.758	8.829		
Affective need	AN1	I enjoy discussing mobile technologies with others	0.717	-	0.810	0.517
	AN2	I enjoy demonstrating various ways to use m-news app to my friends	0.757	9.337		
	AN3	The layout, animations, and illustrations of m-news app are visually appealing	0.681	8.587		
	AN4	I enjoy reading news through m-news app	0.719	8.98		
Social need	SN1	Using m-news app give me the feedback I need from others	0.783	-	0.857	0.600
	SN2	I use m-news app to interact with my friends	0.726	10.496		

	SN3	M-news app equips me to connect with the broader community beyond the campus	0.759	11.035		
	SN4	Using m-news app enhances my ability to communicate with others	0.828	12.05		
Attitude to adopt m-news	ATT1	I like the idea of using m-news app for news	0.807	-	0.809	0.586
	ATT2	Using m-news app for news is a smart choice	0.764	10.361		
	ATT3	Using m-news app provides me with a satisfying experience	0.722	9.894		
Intention to adopt m-news	INT1	I intend to use m-news app for news in the future	0.680	-	0.819	0.603
	INT2	I will use m-news app for news in the future	0.823	9.841		
	INT3	I will regularly use m-news app for news in the future	0.819	9.818		

The reliability of the constructs was confirmed, with all CR values exceeding the threshold of 0.7, indicating acceptable internal consistency (Hair et al., 2021). Additionally, according to Fornell and Larcker's criteria (1981), the loading values of items should exceed 0.7 and the average variance extracted (AVE) by each construct should surpass the variance due to measurement error, with an AVE value greater than 0.50. As demonstrated in Table 1, AVE values ranging from 0.501 to 0.603. This confirms that the criteria for convergent validity are met, items and variables are well correlated (Hair et al., 2021).

Table2
Discriminant Validity Test

Variable	**CN**	**AN**	**SN**	**ATT**	**INT**
CN	**0.708**				
AN	0.371	**0.719**			
SN	0.497	0.505	**0.775**		
ATT	0.525	0.463	0.517	**0.765**	
INT	0.56	0.54	0.592	0.607	**0.777**

Furthermore, discriminant validity was assessed using the widely accepted criterion in PLS analysis. To ensure discriminant validity, the AVE values of the latent variables were compared with the squares of their inter-correlation values (Fornell & Larcker, 1981). The bolded values in Table 2 show that the square root of the AVE for each construct exceeds the intercorrelations, thus confirming that the model satisfies the discriminant validity criterion.

Structural Model

T-values and p-values are commonly used to assess the significance of path coefficients. In two-tailed tests, a critical t-value of 1.96 (significance level=0.05) is typically used, where a t-

value greater than 1.96 indicates a significant path coefficient. The p-value represents the probability of incorrectly rejecting the null hypothesis. A p-value below 0.05 is generally considered to indicate a statistically significant path coefficient (Hair et al., 2021).

Table 3
Hypothesis Testing with Direct Effect

PATH			Beta	t-Value	P	Decision
ATT	<---	CN	0.348	3.831	***	Supported
ATT	<---	AN	0.248	2.837	0.005	Supported
ATT	<---	SN	0.278	3.003	0.003	Supported
INT	<---	ATT	0.688	7.115	***	Supported

Figure 1 illustrates the results from the structural model analysis. The findings indicate that college students' intention to adopt m-news app is significantly influenced by their attitude towards it, with a strong effect size (β=0.688, t=7.115, p < 0.001). This suggests that a positive attitude plays a crucial role in driving the adoption of m-news among college students.

Furthermore, the analysis reveals that students' attitudes are notably affected by several factors: social need (β=0.278, t=3.003, p=0.003), cognitive need (β=0.348, t=3.831, p<0.001), and affective need (β=0.248, t=2.837, p=0.005). These results demonstrate that individual needs, including cognitive, social and emotional aspects, significantly shape students' attitudes towards m-news.

As detailed in Table 3, all the hypotheses proposed in the study are supported by statistically significant results. This comprehensive analysis underscores the various factors contributing to college students' motivation to adopt m-news and highlights the importance of addressing these factors to enhance adoption rates.

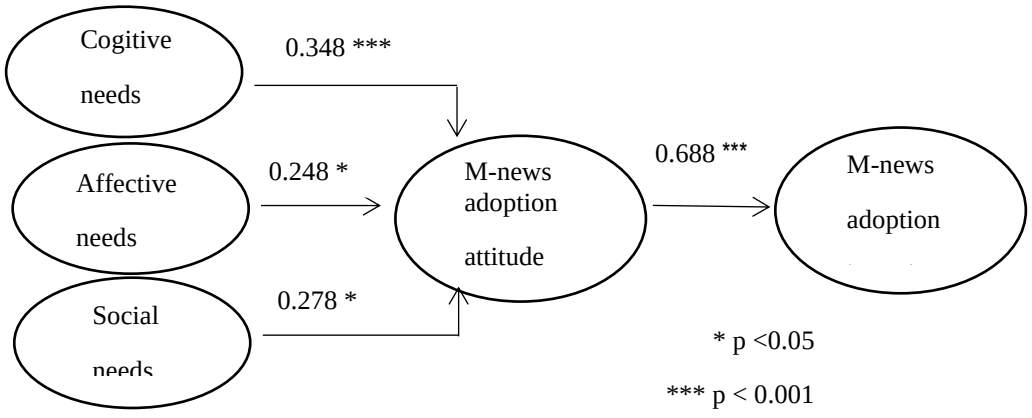

Figure 1: Result of Structural Model

Discussions

This study aimed to delve into the factors influencing college students' motivation to adopt mobile news (m-news) apps. Drawing from a comprehensive review of existing literature, this

study proposed that college students' attitudes towards m-news adoption are influenced by cognitive, affective, and social needs, and that these attitudes, in turn, impact their intention to adopt such technologies.

The findings of this study indicate a strong inclination among college students towards adopting mobile apps for news consumption. This preference underscores the importance of addressing the three primary motivational dimensions identified in UGT: social, affective, and cognitive needs. To effectively enhance students' motivation to adopt m-news, it is imperative that these dimensions are adequately addressed. Specifically, the study reveals that college students are more likely to adopt m-news apps if these platforms cater to their interaction needs. These needs include the ability to connect and collaborate with peers, which is crucial for students who are juggling academic responsibilities with their personal lives. The requirement for expanded connectivity highlights the role of m-news apps in facilitating meaningful interactions and collaborations among students (Guo et al., 2010). Moreover, the decision to adopt m-news is significantly influenced by the app's ability to provide a sense of personal fulfillment, emotional satisfaction, and an overall positive user experience. It is essential that the technology underlying these news apps is user-friendly and designed to facilitate information construction in an engaging and satisfying manner. The study emphasizes that a well-designed user interface and experience are crucial for maximizing the personal and emotional benefits associated with news consumption (Mondi et al., 2008). Additionally, m-news apps should ensure the accessibility of accurate and high-quality information, which aligns with the need for reliable and comprehensive news sources. These findings are consistent with previous research, reinforcing the conclusions drawn in earlier studies. Guo et al. (2010) and Hashim et al. (2015) both highlighted the importance of these factors in influencing users' adoption of mobile technologies, and this study corroborates their results by demonstrating the same motivational drivers in the context of m-news adoption.

Implications

Theoretically, this study offers a substantial contribution to the understanding of the motivational factors influencing college students' adoption of m-news apps. By examining how cognitive, affective, and social needs impact students' attitudes towards m-news, the research enriches the existing literature on technology adoption and user behavior. It provides a nuanced perspective on how these motivational dimensions drive technology acceptance, thus advancing the theoretical framework within the field of media and communication studies.

From a practical standpoint, the study delivers actionable insights for practitioners seeking to promote the adoption of m-news apps among college students. The inherent advantages of mobile news apps—such as their ubiquity, mobility, and accessibility—are significant, as they streamline the process of news consumption by saving time and effort while enhancing overall performance. To leverage these benefits effectively, it is crucial for news apps to provide timely updates, a broad spectrum of current information, and features that enable personalization and customization. Such functionalities are essential for addressing the varied preferences of users and boosting their overall satisfaction.

For app developers, it is important to focus on enhancing the performance of their news apps and clearly articulating the advantages over traditional news sources like newspapers and television. Emphasizing aspects such as superior convenience, real-time updates, and tailored content can effectively demonstrate the value of m-news apps. By aligning app features with the needs and preferences of college students, developers can improve user engagement, foster higher adoption rates, and encourage sustained use of mobile news technologies. This targeted approach enables m-news apps to more effectively meet the evolving demands of their users, thereby maintaining a competitive edge in the dynamic landscape of digital media. Moreover, this comprehensive strategy not only ensures that mobile news apps stay relevant and valuable to students but also significantly contribute to students' intellectual, social, and emotional development.

Limitations and Recommendations

Despite its contributions, this study has some limitations that need to be acknowledged. First, the findings may not be generalizable, as the data was collected from a single higher education institution. Second, the students involved in this study are from Beijing, a major city known for its advanced mobile technologies and high level of technological exposure. As a result, the findings might differ if the study were conducted in smaller cities.

Furthermore, conducting comparative analysis across college students and other different demographic groups is needful. Exploring differences in motivation between students from different cities or educational backgrounds could also provide a more comprehensive understanding of m-news adoption. Exploring these variations is valuable, as it offers deeper insights into how various factors influence user behavior across different contexts and help refine strategies for encouraging m-news usage.

Conclusions

In conclusion, mobile news apps play a critical role in meeting the cognitive, social, and affective needs of college students by delivering personalized, engaging, and interactive content. This study provides a deeper understanding of how these platforms enhance students' cognitive development, social interactions, and emotional well-being, thereby enriching their news consumption experience. By offering a user-centric approach that adapts to individual preferences, mobile news apps foster stronger connections between students and the broader world. Practical recommendations for developers and media organizations include focusing on features that enhance cognitive engagement, social interaction, and emotional satisfaction to improve adoption and sustained use of mobile news platforms.

Contributions

This study contributes to the growing body of knowledge by expanding the application of UGT in the context of mobile news app adoption among college students. While previous research has predominantly focused on technological factors, this study provides a deeper understanding of the motivational drivers—cognitive, social, and affective—that influence students' attitudes toward these platforms. By identifying the specific needs that mobile news apps fulfill, this research not only fills a gap in the literature but also offers a relevant framework for analyzing user behavior in a rapidly evolving digital media landscape. Contextually, these findings are significant for developers and media organizations, as they

inform strategies for creating more engaging and need-satisfying platforms. These insights will help media organizations tailor their offerings to better meet the needs of college students, which are essential for driving their higher adoption and sustained usage.

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