

The Impact of Gamification on Continuance Intention Use of Gamified Digital News Platforms among Indonesian Gen Z

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ABSTRACT

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Maintaining users has become more difficult for digital news platforms, particularly among Indonesian Gen Z, who frequently choose social media for news consumption because of its speed and accessibility. This study examines how gamification affects Indonesian Gen Z's intention to continue using digital news platforms. Data were gathered from 467 respondents, mostly from this group, using a survey-based methodology. This study combines both the Expectation Confirmation Model of Information System continuation (ECM-ISC) model and Self-Determination Theory (SDT) to concentrate on comprehending how gamification affects user perceptions and experiences, along with intrinsic motivation factors influence continuance intention. Empirical research indicates that gamification components, such as polls, quizzes, and interactive elements, satisfy psychological needs like relatedness, competence, and autonomy. Users' intention to continue using the gamified digital news platforms is greatly influenced by these factors. According to the study's findings, digital news platforms may find that incorporating thoughtfully crafted gamification components improves Indonesian Gen Z's continuance intention.

Keywords: Gamification, gamified digital news platform, Gen Z, continuance intention, ECM-ISC, intrinsic motivation.

INTRODUCTION

With only 30% of Indonesian Generation Z consuming news daily (Author's Preliminary Study, 2024) and 73% preferring social media for news access [1], digital news platforms face a critical retention challenge. The digital media landscape in Indonesia reflects these challenges acutely. Prominent digital news portals like Indopos and Gatra have shuttered, highlighting the fierce competition and difficulty in maintaining user retention.

To mitigate these challenges, leading digital news platforms in Indonesia, such as Kompas, Detik. com, as well as Tribunnews, have started utilizing gamification features like crosswords, puzzles and quizzes.

As it has shown good results in other sectors, gamification—the purposeful application of game-design elements in non-game contexts [2, 3]—emerges as a feasible way of addressing these retention problems [4, 5, 6, 7]. For instance, incorporating aspects such as leaderboards, achievement badges, and interactive narratives convert passive news consumption into an active experience, appealing to a digital-first mentality of Generation Z [8, 9]; mostly on how gamification components interact with Gen Z's preferences for bite-sized, visually engaging content in countering their wobbling attention span [10, 11].

However, little is known about the impact of gamification on continuance. Earlier studies were significant steps toward understanding the connection between gamification and continuance intention [12, 13]; however, limits remain. Gamification does not guarantee sustained user continuing experience [14]. There is a lack of discussion on how different types of gamifications affect users' emotions, leading to poor explanations of its consequences, especially with Indonesian gen Z cultural context.

To address this critical gap, this study seeks to investigate the potential of gamification in enhancing user continuance intention on digital news platforms, specifically focusing on Indonesian Generation Z. The research will explore two primary research questions:

RQ1: How do user perceptions and experiences influence the continuance intention using gamified digital news platforms among Indonesian Gen Z?

RQ2: How do intrinsic motivation factors (competence, autonomy, and relatedness) induced by gamification influence continuance intention on gamified digital news platforms among Indonesian Gen Z?

The changing digital media landscape represents an immediate challenge to information systems, mostly by understanding how technology innovations can affect user interaction and performance on the platform. As digital news platforms contend with user retention and engagement, the need presents itself to look into technology interventions that can reform the user experience and system design. This research focuses on the importance of an adaptive technology design capable of eliminating the gap between platform attributes and user expectations, especially regarding the rapidly changing patterns of digital content consumption by Generation Z.

By integrating the Expectation Confirmation Model of Information System Continuance (ECM-ISC) with Self-Determination Theory (SDT), this study offers a unique contribution by focusing specifically on the Indonesian digital news ecosystem, exploring gamification through the lens of Generation Z's media consumption, and providing empirical insights into the psychological mechanisms driving digital news engagement. This approach differs from previous studies by providing a nuanced understanding of how gamification elements can transform news consumption experiences in a specific cultural context.

Furthermore, while past studies stretch across the West or a very broad range of users, the research uniquely looks into how culturally customized gamification strategies, such as quizzes, crosswords, and polls, speak to Indonesian Gen Z, an area that has not been widely explored in the gamification literature.

The research has significant implications for digital news platforms. By uncovering how gamification mechanics drive continuance intention in Indonesia's unique media landscape, this study offers actionable strategies for news platforms to retain Gen Z users—a demographic pivotal to the survival of digital journalism in emerging markets.

LITERATURE REVIEW

Gamification Features in Digital News Platform

Gamification is the process of mapping out systems, services, organizations, and activities intended to influence user behavior by fostering the experience derived from playing games [2, 15]. For digital news platforms, gamification manifests through two primary conduits: newsgames and gamified news [8]. While newsgames are interactive experiences meant to engage users with current affairs, gamified news takes journalism in traditional terms and adds game mechanics to bolster involvement and retention [8].

Though newsgames aren't that well-recognized in Indonesia, there are specific examples such as Visual Interaktif Kompas (VIK), Tirto, Tempo.co, BBC Indonesia, and Katadata. Nonetheless, due to the abundance and simplicity of gamified news, this study will discuss this approach.

Western media outlets have successfully gamified audience engagement and retention by deploying many advanced gamification elements, including leaderboards, achievement badges, and interactive storytelling [8]. The *New York Times* and *The Guardian* encourage their audience to engage more deeply via interactive quizzes and a point-based reward system [8, 9]. However, Indonesian digital news platforms still tend to employ more basic gamification elements, such as quizzes and polls.

Table 1 shows common gamification mechanics in both Indonesian & international digital news platform:

Gamification Mechanics	Common benefit	Applied in	Source
Points, Badges, and Leaderboards (PBL)	Users earn points or badges for reading articles, commenting, or sharing news, fostering a sense of achievement and competition	Bleacher Reports, Times of India	[8, 9]
Polls & Quizzes	Encourage users to engage with news content while testing their knowledge, reinforcing learning and retention	Most Indonesian News Platform	[16]
Streaks and Rewards	Incentivize habitual use by tracking reading streaks or offering perks for consistent engagement	The Guardian	[8, 9]

Table 1. Gamification Features in Digital News Platforms

As indicated by research literature, gamification encourages broad engagement and, at the same time, may drag people into a shallow type of engagement, where they take action just for the sake of obtaining rewards as opposed to seeking actual information [17]. Even more troubling is the concept of gamifying serious issues which results in lack of important critical thinking as well as entertainment-based consumption [17].

Yet, there is evidence from studies that basic gamified features such as quizzes and polls are presently employed by news platforms, such as Kompas, Detik, and BBC Indonesia. However, how effectively these game mechanics influence continuance intention remains to be seen. Psychological mechanisms in how gamification impacts user motivation will be discussed in the next part.

Continuance Intention & Expectation-Confirmation Model

Continuance intention (CI) refers to user's intention to keep using a platform or service following initial adoption [18, 19, 20]. While initial adoption is crucial, long-term success depends on sustaining user engagement and preventing churn [18, 19]. In digital news platforms, a high CI indicates a loyal readership, reducing churn rates and contributing to audience growth [21], brand recognition [22, 23], and income [24].

To explain CI, this study adopts the Expectation Confirmation Model of Information System Continuance (ECM-ISC) [25]. It states that users' intention to continue using a system depends upon a combination of three things: confirmation, perceived usefulness, and satisfaction, as depicted in Table 2.

Components	Description	Source
Confirmation	Users' perception of the congruence between expected use and its actual performance; a cognitive belief derived from prior use of news platform	[25, 26]
Perceived Usefulness	Users' perception of the expected benefits of the system's use; a cognitive belief formed from potentially second-hand information.	
Satisfaction	Users' affect (feelings about) regarding prior system's use	

Table 2. Components of ECM-ISC

Research studies have long proven that gamified online platforms influence these 3 determinants by affirming positive expectations, improving information retention, and enhancing user enjoyment all of which indirectly affect CI [26, 27].

Intrinsic Motivation as defined by Self-Determinant Theory

Self-Determination Theory (SDT) explains intrinsic motivation as the drive to engage in activities for inherent satisfaction rather than external rewards [28]. According to SDT, intrinsic motivation is fueled by three fundamental psychological needs: competence, autonomy, and relatedness [29]. When these needs are met, self-motivation, engagement, and long-term commitment to a platform increase in an individual.

The application of gamification on online platforms is a direct influence on these psychological needs that shape user experience and engagement. The SDT components as articulated in Table 3, against gamification mechanics:

Components	Definition	Related Gamifications
Competence	A person's desire for self-direction and the ability to choose their own activities when performing tasks [28, 30, 31]	- Quizzes & Knowledge-Based Challenges; - Badges & Progress Indicators; - Leaderboards
Autonomy	Ability to successfully engage with one's self-mastery and display one's capabilities [32, 33]	- Personalized Feeds;
Relatedness	Experience of connection with others [34, 35, 36]	- Social Polls & Commenting Systems; - Collaborative Challenges

Table 3. Components of Intrinsic Motivation & Their Related Gamification Features

PAST LITERATURES

Gamification studies have experienced tremendous expansion, at 26.89% annually [37], and become widely utilized in different industries. Three major themes are the improvement of educational progress, motivational drivers, and industry specific applications that become evident through the literature synthesis. In education, there has been extensive research into how gamification can enhance user engagement and learning outcomes [38, 39], and motivation research has proven its worth in maintaining user engagement both within the workplace apps [40, 41]. Additionally, gamification techniques have also found their way into fields like HR management, where they enhance employee training [4, 7], and sports media, which enable greater audience engagement [42]. Notably, continuance intention—a critical metric for long-term platform viability—has been examined in contexts like AI painting apps [13] and female Gen Z users [12]. However, these studies collectively underscore a fragmented focus, leaving critical gaps in understanding how gamification operates within digital news platforms and among Indonesian Gen Z populations.

A glaring omission in the literature is the intersection of gamification and news consumption. As much as there has been experimentation in language learning [43] and ageing online groups [44], this has been limited, particularly on news sites. This gap is problematic given the unique behavioral patterns associated with news engagement—such as fleeting attention spans and the need for daily interaction [45]—which differ markedly from contexts like education or entertainment apps. Furthermore, existing research disproportionately prioritizes Western demographics or generalized user groups, neglecting Gen Z—a generation synonymous with digital-native behaviors. In Indonesia, where Gen Z constitutes a dominant force in digital media consumption [46], this oversight carries significant implications. Without targeted insights, gamification strategies risk misalignment with cultural preferences and usage habits, potentially undermining continuance intention. For instance, studies on Indonesian media ecology [47] focus on broader social media trends but omit how gamification mechanics—such as badges or leaderboards—might foster loyalty in news apps.

The consequences of these gaps are twofold. First, the lack of culturally nuanced data hampers the design of gamified systems tailored to Indonesian Gen Z, whose media consumption patterns may diverge from Western counterparts due to socioeconomic and technological access disparities. Second, the absence of platform-specific evidence leaves practitioners reliant on extrapolations from dissimilar contexts, such as HR or e-learning, where motivators like career advancement or academic achievement differ fundamentally from news consumption drivers (e.g., informational urgency or social sharing). By failing to address these gaps, the literature limits the potential for gamification to address declining engagement in digital news platforms—a critical issue in an era of information overload and platform competition.

METHODS

Research Model

Previous research has extensively employed the Expectation Confirmation Model of Information System continuation (ECM-ISC) to predict continuation intention across a variety of scenarios, including mobile applications and AI-based technologies [20, 13]. However, while ECM-ISC effectively captures cognitive factors such as satisfaction, perceived usefulness, and confirmation, it does not fully address the motivational aspects that drive long-term usage. These aspects, such as autonomy, competence, and relatedness, are central to Self-Determination Theory (SDT), which has been shown in multiple studies to support sustained user engagement [48, 41, 49, 50, 51].

To address this limitation, this study integrates the Expectation Confirmation Model of Information System Continuance (ECM-ISC) with Self-Determinant Theory (SDT), as presented by [52, 26]. This combined model is used to explore how users' perceptions of gamification impact their continued use of digital news platforms.

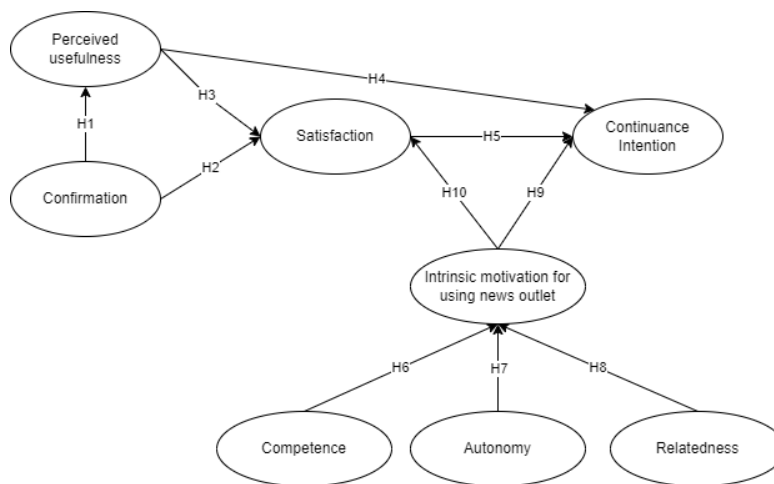


Figure 1. This Study's Research Model

This model's main result of interest is continuation intention, which is the users' intention to continue using the gamified news platforms in the long run. This result is in line with the fundamental objective of user retention, which is crucial for news organizations in the digital age aiming to establish and preserve a loyal user base.

As shown in the model (fig 1), there are 10 hypotheses in this research:

H1: Confirmation positively influences perceived usefulness.

H2: Confirmation positively influences satisfaction.

H3: Perceived usefulness influences satisfaction.

H4: Perceived usefulness influences continuance intention.

H5: Satisfaction influences continuance intention.

H6: Competence induced by gamification positively influences intrinsic motivation for using the gamified digital news platform.

H7: Autonomy induced by gamification positively influences intrinsic motivation for using the gamified digital news platform.

H8: Relatedness induced by gamification positively influences intrinsic motivation for using the gamified digital news platform.

H9: Intrinsic motivation for using the gamified digital news platform positively influences continuance intention.

H10: Intrinsic motivation for using the gamified digital news platform positively influences satisfaction.

Population & Sample

This study examines factors influencing continuance intention of gamification elements in digital news platforms, focusing specifically on Indonesian Generation Z users (born between 1997 and 2012) [53, 54, 55]. The research targets three leading digital news platforms [56]—Detik.com, Tribunnews.com, and Kompas.com—which have distinguished themselves through successful digital transformation and innovative gamification implementations.

Using SEO analytics tools (see Appendix 2), we obtained unique user data for the period from March to August 2024: Detik.com reported 27.5 million unique users, Kompas recorded 46.7 million, and Tribunnews garnered 33.9 million unique users. By applying platform-specific age demographic percentages, we estimated the Generation Z user population: 6.07 million for Detik.com (22.08%), 7.68 million for Tribunnews.com (22.67%), and 10.99 million for Kompas.com (23.53%). This analysis yielded a total estimated Generation Z user population of 24.74 million across these platforms.

Sample size determination employed the Small Sample Techniques computational method [57], which requires consideration of population variance, maximum desirable error, and acceptable Type I error risk. Given the estimated Gen Z population of 24.74 million, and utilizing a 95% confidence level with a 5% margin of error, the calculated sample size was 384 respondents.

Sampling Procedure

The author then decided to use the purposive sampling approach, also known as judgmental sampling, which is a non-probability selecting strategy where the author picks participants based on their assessment of who best fulfills the study's requirements [58, 59]. This technique was chosen to ensure that studies cover a wide geographic range, have rich data, and closely approximate the synthesis target [60]. In addition, this technique was suitable for this research which were backed up by existing bodies of social theory [61, 59].

To mitigate selection bias and ensure informative sample, here are the respondent criteria:

- Respondents must be Indonesian Gen Z and within the age range of 1997-2012;
- Respondents must have actively used either Kompas, Detik.com, or Tribunnews in the last 3 months;
- Respondents must have actively used the gamification feature within the gamified news platform.

Data Collection Method

Primary data will be collected using quantitative approaches, namely a questionnaire (see appendix 3) with 22 items to measure the 4 components of ECM-ISC and 4 components of intrinsic motivation based on past literatures [25, 52, 62]. This questionnaire will be using closed questions that are written in English and be translated into Indonesian for easier understanding.

These questions have been refined to guarantee that they accurately reflect user behavior in response to gamification elements like as polls, quizzes, and crossword puzzles. Subjectivity was eliminated by avoiding general phrases like "good" and "interesting" and crafting questions that directly tie gamification mechanics to user motivation, satisfaction, and engagement.

The questionnaire questions are entered into Google Forms and spread to the community via social media, from the beginning of July to the end of October. This extended collection period allowed for comprehensive data gathering across diverse geographical and demographic segments of the Indonesian Gen Z population.

Data Analysis Method

The data collected during the data gathering procedure will be examined using the Structured Equation Model - Partial Least Square (SEM-PLS). SmartPLS version 4 is the software used to test the data. To extract valuable insights from the questionnaire data and gain a comprehensive understanding of the interplay between gamification elements, media needs fulfillment, and intrinsic motivation within your target population of Indonesian Gen Z, reliability and validity checks, as well as descriptive analysis, are required.

RESULTS & DISCUSSION

The final sample comprised 388 valid responses from Indonesian Gen Z users (aged 19–27 years; 68%) of gamified digital news platforms (see appendix 4 for details). Kompas emerged as the most frequently used platform (57.7%), followed by Detik.com (29.6%) and Tribunnews (12.6%). Over 83% of respondents reported prior engagement with gamification features (e.g., quizzes, polls), indicating familiarity with interactive news consumption.

Reliability and validity tests confirmed the robustness of the measurement model. All constructs demonstrated Cronbach's alpha (0.876–0.930) and composite reliability (0.826–0.950) above thresholds (≥ 0.7), indicating strong internal consistency (see appendix 5). Convergent validity was established with average variance extracted (AVE $\geq$

0.5) and outer loadings (>0.7). Discriminant validity met Fornell-Larcker criteria, with square roots of AVE exceeding inter-construct correlations (Table 4).

	AN	CF	CI	CN	IM	PU	RN	SAT
AN	0.915							
CF	0.865	0.923						
CI	0.733	0.794	0.909					
CN	0.864	0.805	0.643	0.954				
IM	0.822	0.845	0.778	0.795	0.855			
PU	0.717	0.762	0.798	0.628	0.768	0.927		
RN	0.774	0.815	0.720	0.749	0.819	0.712	0.908	
SAT	0.821	0.861	0.843	0.792	0.822	0.772	0.799	0.901

Table 4. Discriminant Validity

The integrated ECM-ISC and SDT model exhibited strong predictive power, explaining 76.9% of variance in continuance intention (CI), 78.7% in satisfaction (SAT), and 76.8% in intrinsic motivation (IM) (Table 3). Bootstrapping analysis (5,000 subsamples) supported all hypotheses (Table 5), revealing distinct pathways for RQ1 and RQ2.

	R-Square	R-Square Adjusted
CI	0.769	0.767
IM	0.768	0.767
PU	0.581	0.580
SAT	0.787	0.786

Table 5. Model Fit Assessment

The findings demonstrate that user perceptions and experiences play a pivotal role in shaping continuance intention (CI) among Indonesian Gen Z users of gamified digital news platforms. The research model explains 76.9% of the variance in CI, a value that surpasses predictive power reported in similar gamification studies, such as those focusing on e-learning platforms [43] and mobile payment apps [12]. This underscores the unique capacity of gamification in news platforms to amplify retention by addressing both cognitive and experiential drivers. Perceived usefulness (PU) emerges as a critical perceptual factor, significantly influencing both satisfaction ($\beta = 0.206$, $p = 0.003$) and CI ($\beta = 0.322$, $p < 0.001$). These results align with Bhattacharjee's ECM-ISC [25], which posits that users' belief in a system's utility drives sustained engagement. However, the moderate explanatory power of PU ($R^2 = 58.1\%$) suggests that while gamification enhances perceived value, external factors such as content relevance or platform usability—variables not directly measured in this study—may further shape utility perceptions.

Hypothesis	Relationship	Path Coefficient	T Statistics	P-Value	Supported?
H1	CF $\rightarrow$ PU	0.762	21.247	0.000	Yes
H2	CF $\rightarrow$ SAT	0.500	7.388	0.000	Yes
H3	PU $\rightarrow$ SAT	0.206	3.020	0.003	Yes
H4	PU $\rightarrow$ CI	0.322	5.200	0.000	Yes
H5	SAT $\rightarrow$ CI	0.489	7.409	0.000	Yes
H6	CN $\rightarrow$ IM	0.204	2.789	0.005	Yes
H7	AN $\rightarrow$ IM	0.326	4.256	0.000	Yes
H8	RN $\rightarrow$ IM	0.413	7.319	0.000	Yes
H9	IM $\rightarrow$ CI	0.129	2.217	0.027	Yes
H10	IM $\rightarrow$ SAT	0.240	3.106	0.002	Yes

Table 6. Hypothesis Testing

Satisfaction (SAT), however, stands out as the strongest direct predictor of CI ($\beta = 0.489$, $p < 0.001$), exceeding the influence of PU. This finding mirrors trends observed in gamified fitness apps [31]. The high variance explained in SAT (78.7%) highlights how gamification transforms news consumption into an intrinsically rewarding experience, where satisfaction—rooted in the confirmation of expectations—becomes central to retention. Confirmation (CF) further reinforces this dynamic, exerting dual influence on PU ($\beta = 0.762$) and SAT ($\beta = 0.500$). This validates ECM-ISC's core premise: meeting user expectations, such as delivering seamless gamified interactions, reinforces both

utility perceptions and experiential satisfaction. For Indonesian Gen Z, who navigate information-dense digital environments, platforms that consistently fulfill these expectations are more likely to secure long-term engagement.

The study reveals nuanced relationships between gamification-induced intrinsic motivation (IM) and continuance intention. Relatedness (RN) emerges as the most potent driver of IM ($\beta = 0.413$, $p < 0.001$), a finding that contrasts with Western studies where autonomy typically dominates [8, 9]. This divergence reflects the centrality of communal values in Indonesian society, where features fostering social interaction—such as leaderboards or shared achievements—resonate deeply. For instance, Tribunnews' "Community Polls" feature, which enables users to compare opinions with peers, exemplifies how social connectivity can amplify motivation and CI. Autonomy (AN), while significant ($\beta = 0.326$, $p < 0.001$), manifests differently in this context. Indonesian Gen Z favors guided autonomy—structured choices such as selecting avatars from predefined options—over open-ended customization, a preference that mitigates decision fatigue and aligns with cultural norms prioritizing harmony over individualism.

Competence (CN), though the weakest predictor ($\beta = 0.204$, $p = 0.005$), remains statistically significant, mirroring findings in gamified education research [39]. Features like puzzles cater to skill-building without overwhelming users, a balance critical for a generation characterized by fragmented attention spans. Intrinsic motivation further operates through dual pathways: it directly influences CI ($\beta = 0.129$, $p = 0.027$) and indirectly enhances it via satisfaction ($\beta = 0.240$, $p = 0.002$). This dual role underscores gamification's capacity to convert psychological fulfillment—such as pride in earning badges—into tangible retention outcomes.

CONCLUSION

Using the ECM-ISC and SDT models, this study achieved its dual goals and made important theoretical and practical contributions by investigating the factors influencing Indonesian Gen Z users' continuance intention (CI) on gamified digital news platforms. The results show that satisfaction and intention to continue are significantly influenced by both user perceptions, as evidenced by perceived usefulness, and user experiences, as evidenced by confirmation. Crucially, users' intention to keep using these platforms is strongly impacted both directly and indirectly by intrinsic motivation factors brought about by gamification, especially relatedness, autonomy, and competence. The research model highlights the applicability and validity of the suggested theoretical framework by explaining a significant amount of the variance in continuance intention, satisfaction, and intrinsic motivation.

These findings can guide the creation of more sustainable and captivating gamified news experiences that satisfy the changing tastes of the Gen Z audience in Indonesia. Even though the study makes significant contributions, there are still chances for future research to build on these findings and deepen our understanding of user engagement in the ever-changing world of gamified digital news consumption because of the limitations with regard to self-reported data and the requirement for longitudinal and cross-cultural analyses.

Limitation & Future Research

Although this study offers insightful information about the factors influencing Indonesian Gen Z users of gamified digital news platforms' intention to continue, it is crucial to recognize its limitations and think about potential future research avenues.

The current study's reliance on survey respondents' self-reported data is one of its main limitations. Self-reported data may be prone to social desirability bias, where respondents tend to give answers that are seen as more socially acceptable, despite the fact that this is a common approach in consumer behavior research. The relationships between the constructs may be overestimated or underestimated as a result of this bias.

Furthermore, the current research model emphasizes how user perceptions, experiences, and intrinsic motivation factors influence continuance intention both directly and indirectly. Although this offers a thorough analysis of the fundamental factors that contribute to consistent use, the model might be extended to incorporate more variables that could improve our comprehension of user engagement in gamified digital news platforms.

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Declaration of interest: The authors declare no competing interest.

Data availability: Dataset for this study is openly available from Mendeley Data at [DOI: 10.17632/kt58rjgmc.1](https://doi.org/10.17632/kt58rjgmc.1)

APPENDIX

Appendix 1 – Preliminary Research by Author

[\[Forms\]](#)

Appendix 2 - Number of Gen Z Demography of Top 3 Digital News Platform in Indonesia Based on SEO Tools

[\[DOCX File\]](#)

Appendix 3 - This study's questionnaire items

[\[DOCX File\]](#)

Appendix 4 – Total Collection Demographic Information

[\[DOCX File\]](#)

Appendix 5 – Reliability & Convergent Validity Tests

[\[DOCX File\]](#)

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