



Content Creators Role in Artificial Intelligence Integrated Social Media platforms and Creative Performance

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Abstract

The study examines the relationship between playfulness, personal innovativeness, and flow experience in shaping the creative use of Artificial Intelligence integrated social media platforms, ultimately influencing creative performance. Additionally, the moderating role of Generations X, Y, and Z in these relationships is explored. Grounded in the Theory of Reasoned Action and Media Richness Theory, this research focuses on users of major social media platforms Facebook, TikTok, and Instagram. Utilizing a cross-sectional online survey of 480 respondents, the findings confirm that playfulness, personal innovativeness, and flow experience have a positive impact on the creative use of social media platforms, which in turn enhances creative performance. Moreover, the results validate the moderating influence of generational differences in this framework. The study makes theoretical contributions by integrating key constructs into a unified model, while also providing practical insights for social media developers, digital strategists, and policymakers. Several key policy recommendations and directions for future research are also discussed.

Keywords

Content Creators; Social Media Platform; Creative Performance;
Playfulness; Artificial Intelligence; Flow Experience

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1. Introduction

Social media platforms have become essential tools for socialization, communication, and knowledge exchange (Lu & Hsiao, 2010). The rapid advancement of networking sites has facilitated seamless interaction, allowing users to share and obtain information efficiently (Chen et al., 2011). The proliferation of digital innovations has significantly altered the way individuals engage with technology. The increasing use of AI integrated social media platforms, particularly in the post-pandemic era, has led to a transformation in content creation and digital engagement. Creative AI integrated social media platforms, including Google, Instagram, Facebook, and Twitter, provide users with an avenue for digital interaction, offering features such as online communities, recommendations, and content evaluation (Zhang et al., 2022). Creative performance, which encompasses the ability to generate original ideas and implement novel solutions, has emerged as a critical component of social media engagement (Sisson et al., 2022). It is defined as an individual-level construct involving active participation in idea generation and innovative contributions (Perry-Smith, 2006). The relationship between the creative use of AI integrated social media platforms and creative performance has garnered increasing scholarly attention, particularly in assessing user satisfaction and platform effectiveness. Playfulness in AI integrated social media platforms reflects an individual's perception of enjoyment and curiosity while interacting with digital platforms (Kauschinger et al., 2022). It manifests when users experience attentiveness, interest, and pleasure while engaging with platforms such as Facebook and Instagram (De Backer et al., 2022). Meanwhile, personal innovativeness refers

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to an individual's willingness to adopt and experiment with new technologies (Agarwal & Prasad, 1998). Innovative individuals actively seek knowledge about emerging digital trends, enhancing their adaptability to technological advancements (Bennani & Arpacı, 2022). Similarly, flow experience represents a state of deep involvement in an activity, characterized by concentration, control, and intrinsic motivation (Huang et al., 2022). This study examines the impact of these psychological constructs on the creative utilization of AI integrated social media platforms and their subsequent effect on creative performance. Generational differences play a crucial role in shaping user engagement with digital platforms. Individuals from different generational cohorts exhibit distinct characteristics, values, and technological preferences, which are shaped by their socialization and exposure to technological advancements. Generation X, typically born between 1965 and 1979, is known for its pragmatic approach to digital adoption (De Aparicio, 2022). Generation Y, also known as Millennials, represents the first globally connected generation, exhibiting high adaptability to digital innovations (Ogiemwonyi, 2022). Generation Z, born after 1995, has been raised in a digitally immersive environment, making them highly proficient in online interactions and content creation (De Aparicio, 2022). Understanding the influence of these generational differences on social media engagement is essential for comprehending variations in creative performance across age groups. The theoretical foundation is based on the Theory of Reasoned Action (TRA) and Media Richness Theory (MRT). Media Richness Theory suggests that communication effectiveness is enhanced when interactive platforms provide multiple cues, enabling richer digital interactions (Daft & Lengel, 1984). In the context of social media, this theory explains how interactive features facilitate engagement and collaboration, fostering creativity. The Theory of Reasoned Action establishes a relationship between individual attitudes and behaviors, highlighting how perceptions of playfulness, innovativeness, and flow experience shape user engagement (Oeldorf-Hirsch & Chen, 2022). Two theories are integrated to examine the impact of psychological and generational factors on social media engagement and creative performance. This study examines the impact of playfulness, personal innovativeness, and flow experience on the creative use of AI integrated social media platforms and their subsequent effect on creative performance. Additionally, it explores the moderating role of Generations X, Y, and Z in shaping these relationships among users of major Artificial Intelligence (AI) integrated AI integrated social media platforms (Facebook, TikTok, Instagram). The study provides valuable insights into the factors influencing creative engagement on AI integrated social media platforms and contributes to the existing literature by examining generational differences as a moderating factor.

2. Literature Review

The theoretical foundation of this research is grounded in two key theories: the Theory of Reasoned Action (TRA) and Media Richness Theory (MRT). Media Richness Theory posits that communication effectiveness is enhanced through channels that provide multiple cues, immediate feedback, and personalization, fostering richer interpersonal interactions (Daft & Lengel, 1984). Within the context of social media, the creative use of these platforms is shaped by interactive features that facilitate engagement, collaboration, and content creation. Playfulness, personal innovativeness, and flow experience contribute to this engagement, reinforcing the interpersonal relationships that drive creative outcomes. The Theory of Reasoned Action (TRA) establishes a direct link between attitudes and behaviors, explaining how individual perceptions influence digital engagement (Oeldorf-Hirsch & Chen, 2022). TRA asserts that a person's behavior is shaped by their intention, which is determined by attitudes and subjective norms. Attitudes reflect an individual's evaluation of a specific behavior, whereas subjective norms refer to the perceived social pressures associated with that behavior. In the context of social media, users' perceptions of playfulness, personal innovativeness, and flow experience influence their engagement with digital platforms, shaping their creative performance. By integrating these two theories, this research presents a comprehensive framework that examines the antecedents and outcomes of social media app usage. This theoretical foundation supports the argument that individual characteristics and generational differences play a crucial role in shaping the creative engagement of social media users, ultimately impacting their creative performance.

2.1. Playfulness and Creative Use of Social Media Apps

Playfulness emerges from the enjoyment and engagement individuals experience during social interactions, often leading to a sense of temporal dilation due to their absorption in online participation. It represents a temporary state of intrinsic enjoyment, encouraging individuals to engage creatively and inventively (Song et al., 2017). Defined as “the extent to which an individual is curious about an interaction and finds it enjoyable and interesting” (McShane et al., 2021), playfulness significantly influences user engagement in digital environments. Adapting these concepts to social media, prior research highlights the essential role of playfulness in shaping interactive online experiences, particularly in the context of social media marketing and engagement strategies (McShane et al., 2021). Several studies have explored how playfulness influences users' responses to digital innovations, including website interactions (Ahn et al., 2007; Lin et al., 2005), online marketing strategies (Gao et al., 2009) and social networking sites (Sledgianowski & Kulwiwat, 2009). AI integrated social media platforms designed for creative engagement exhibit seven core attributes: identification, dialogues, sharing, presence, relationships, reputations, and groups. These attributes allow users to navigate, explore, and interact with various elements of the digital environment (Kietzmann et al., 2011). Furthermore, research suggests that social media apps facilitate creative activities such as content creation, idea sharing, and community building (Cho et al., 2010; Morris & Ogan, 2018; Smock et al., 2011). Users leverage these platforms to express opinions, share knowledge, and establish connections based on shared interests, aspirations, or challenges (Smock et al., 2011). Additionally, creative engagement in social media provides a source of intrinsic motivation and enjoyment in the early stages of content creation (McShane et al., 2021; Morris & Ogan, 2018; Smock et al., 2011). Given the substantial body of literature linking playfulness with creative engagement in social media, the following hypothesis is proposed:

H1: Playfulness is positively associated with the creative use of social media apps.

2.2. Personal Innovativeness and Creative Use of Social Media Apps

Personal innovativeness is conceptualized as the extent to which an individual is willing to accept and explore new technology (Agarwal & Prasad, 1998). It reflects an individual's inclination to experiment with and adopt novel digital tools. Highly innovative individuals actively seek new knowledge and are more comfortable with adopting emerging technologies (Musurmonov et al., 2021). This characteristic plays a pivotal role in technology acceptance and engagement with digital platforms (Bennani & Arpaci, 2022). Social media usage involves various interactive dimensions, including identification, dialogues, sharing, presence, relationships, reputations, and group participation (Kietzmann et al., 2011). While social media engagement enhances creative expression, excessive usage may also lead to exhaustion (Kwon et al., 2020; Lee et al., 2016). However, individuals with higher personal innovativeness are intrinsically motivated to explore and utilize AI integrated social media platforms creatively. Their willingness to embrace digital advancements fosters a more dynamic approach to content creation, encouraging experimentation with various tools and formats. The Media Richness Theory provides theoretical support for the direct association between personal innovativeness and creative social media usage. This theory suggests that individuals gravitate toward media that effectively convey rich and complex information, particularly those that align with their preferences and skills (Daft & Lengel, 1984). In the context of social media, innovative individuals leverage interactive features to enhance creative performance, leading to a positive relationship between personal innovativeness and creative engagement with digital platforms. Thus, the following hypothesis is proposed:

H2: Personal innovativeness is positively associated with the creative use of social media apps.

2.3. Flow Experience and Creative Use of Social Media Apps

Flow experience is characterized by an optimal state of deep engagement, where individuals experience a balance between their skills and the challenges presented by an activity. It includes intense concentration, loss of self-consciousness, a sense of control, and intrinsic enjoyment (Huang et al., 2022). This psychological state fosters immersion in activities that stimulate creativity and innovation, particularly among younger individuals, who often achieve personal development through flow experiences (Tse et al., 2021). The utilization of social media apps is driven by various motivations, including learning, entertainment, social interaction, escapism, passing time, and habitual use (Harrigan et al., 2021). The interactive features of these platforms, such as identification, dialogues, sharing, presence, relationships, reputations, and group collaborations enable users to engage with diverse digital content and express their creativity (Kietzmann et al., 2011). Research suggests that social media serves as a critical tool for creative individuals, facilitating content generation, idea sharing, and community-building (Cho et al., 2010; Morris & Ogan, 2018; Smock et al., 2011). Furthermore, these platforms provide an engaging and immersive environment that supports early-stage creative expression (McShane et al., 2021). The theory of media richness offers additional support for linking flow experience to the creative use of social media apps. Rich media environments provide immediate feedback and interactive capabilities, enhancing users' ability to communicate complex ideas and engage in creative digital practices. Prior studies highlight a strong relationship between flow experience and digital creativity, as individuals in a state of flow are more likely to experiment with innovative content and utilize social media apps in creative ways. Thus, based on theoretical and empirical evidence, the following hypothesis is proposed:

H3: Flow experience is positively associated with the creative use of social media apps.

2.4. Creative Use of Social Media Apps and Creative Performance

The rapid advancement of social media has significantly transformed the dissemination of information, enabling users to share digital content across various online platforms (Pop et al., 2022). AI integrated social media platforms facilitate collaboration, knowledge exchange, and interactive engagement, making them instrumental in enhancing creative expression. Various platforms support user-generated content, allowing individuals to share feedback, evaluate products and services, and build digital communities (Singh et al., 2021). These networks foster a dynamic environment where users contribute ideas, offer insights, and engage in global knowledge-sharing (Oeldorf-Hirsch & Chen, 2022). Creative performance is characterized by the ability to take risks, explore novel approaches, and implement innovative solutions (Singh et al., 2021). Technological advancements have been found to enhance creative performance across various domains, as they provide new tools and methods for content creation (Zhang et al., 2021). Evidence suggests that digital platforms, particularly social media, play a crucial role in fostering creativity by enabling individuals to connect, collaborate, and exchange ideas. The accessibility of online technologies encourages users to engage in brainstorming and innovative thinking, facilitating the development of original content (Putri & Etikariena, 2021). Furthermore, the theory of reasoned action supports the notion that behaviors stem from attitudes and perceptions. Within the context of social media, individuals who creatively utilize these platforms are more likely to engage in behaviors that enhance their creative performance. The integration of digital tools with creative practices presents opportunities for experimentation, content refinement, and audience engagement, ultimately leading to enhanced creative outcomes. Thus, based on theoretical and empirical foundations, the following hypothesis is proposed:

H4: Creative use of social media apps is positively related to creative performance.

2.5. *Moderating Role of Generation X, Y, Z*

Generations X, Y, and Z represent a significant portion of social media users (Parra-López et al., 2011). However, their characteristics and social networking behaviors differ (Gardiner et al., 2014). Generation X is often described as individualistic, critical, and less inclined to exhibit organizational trust and commitment (Song et al., 2017). In contrast, Generation Y, having grown up in an era of rapid technological advancements, demonstrates higher adaptability and frequently employs digital tools to accomplish tasks (Berkup, 2014). Generation Z, being digital natives, exhibits an even greater affinity for technology, preferring interactive and visually engaging content (Priporas et al., 2017). Playfulness, as conceptualized by McShane et al. (2021), refers to an individual's engagement, curiosity, and enjoyment in an activity. (Balkaya & Akkucuk, 2021) further highlight that playfulness consists of three dimensions: concentration, curiosity, and intrinsic enjoyment. Given that generational cohorts differ in personality traits and digital behaviors, their attitudes toward playfulness and creative social media use are likely to vary. This suggests that Generations X, Y, and Z may moderate the relationship between playfulness and creative engagement with AI integrated social media platforms. Personal innovativeness plays a pivotal role in technology adoption, with individuals exhibiting high personal innovativeness more likely to explore and implement new technologies (Khazaei & Tareq, 2021; Lu, 2014). Prior research has emphasized the distinction between global and context-specific innovativeness, which affects how individuals approach digital tools (Agarwal & Prasad, 1998; Musurmonov et al., 2021). Highly innovative individuals actively seek new information and embrace novel perspectives (Bennani & Arpacı, 2022). Given that generational differences influence both technology adoption and behavioral engagement, it is reasonable to hypothesize that Generations X, Y, and Z will demonstrate varying levels of personal innovativeness in their creative use of AI integrated social media platforms. This hypothesis is grounded in the Theory of Reasoned Action and Media Richness Theory, which assert that an individual's media choices and creative engagement are shaped by their cognitive and behavioral predispositions (Demir & Seferoglu, 2020). Flow experience, a state of deep immersion and optimal engagement, has significant implications for creative performance (Massimini et al., 1987). Research indicates that professionals in creative fields, including artists, athletes, and digital content creators, frequently experience flow states that enhance their performance and productivity (Demir & Seferoglu, 2020). Digital platforms such as Instagram, Twitter, and Facebook facilitate immersive interactions, fostering creativity and social engagement (Zhang et al., 2022). The fundamental dimensions of creative performance 'person, place, process, and product' highlight the role of individual traits in shaping creative outcomes (Perry-Smith, 2006; Sisson et al., 2022). Since generational differences shape how individuals respond to digital experiences, it is anticipated that Generations X, Y, and Z will moderate the relationship between flow experience and creative use of AI integrated social media platforms (Rese et al., 2020).

- H5a: Generations X, Y, and Z moderate the relationship between playfulness and creative use of social media apps.
- H5b: Generations X, Y, and Z moderate the relationship between personal innovativeness and creative use of social media apps
- H5c: Generations X, Y, and Z moderate the relationship between flow experience and creative use of social media apps.

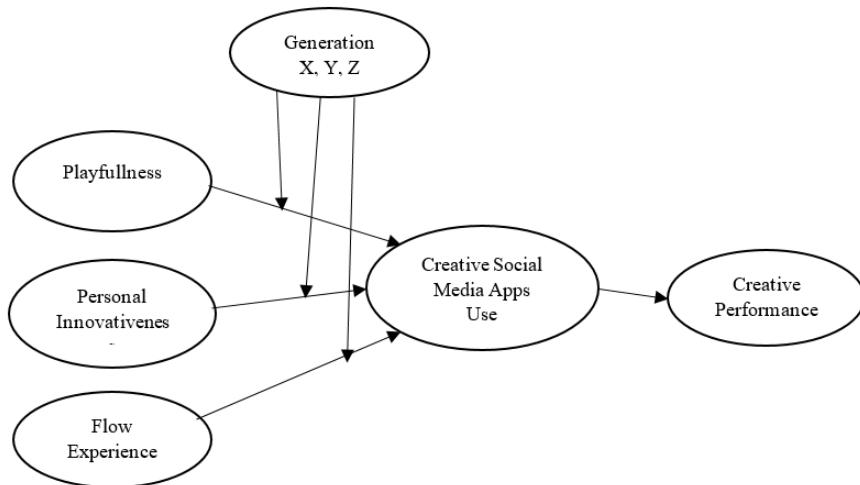


Figure 1. Proposed Research Model

3. Research Methodology

3.1. Participants and Procedure

This study employs a quantitative research design using an online survey to examine the proposed hypotheses. The target population comprises active users of creative AI integrated social media platforms, specifically Facebook, TikTok, and Instagram, across Asian countries. A structured questionnaire was distributed to potential participants, ensuring voluntary participation through informed consent. An introductory letter outlined the research objectives, confidentiality measures, and assurances of anonymity, emphasizing that no personal information would be shared or identifiable in the results. To enhance representativeness, participants were recruited through purposive sampling, targeting individuals who are actively engaged in creating social media content. A total of 650 individuals were invited, of whom 480 consented and completed the survey, resulting in a 72% response rate. The questionnaire was administered in English, with participants confirming their proficiency in the language to ensure comprehension and accurate responses.

3.2. Measures

A structured 17-item questionnaire was designed to assess the relationships among playfulness, personal innovativeness, flow experience, creative social media application usage, and creative performance. All measures were adapted from previously validated scales and assessed using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Playfulness was measured using a 3-item scale adapted from Cheong and Park (2005). Sample items included: "When interacting with others using creative social media, I do not realize the passage of time" and "Interacting with others through creative social media is enjoyable." Personal innovativeness was assessed using a 4-item scale developed by Agarwal and Prasad (1998). Example statements included: "If I learn about a new information technology, I actively seek ways to experiment with it" and "Among my peers, I am usually the first to explore emerging digital tools." Flow Experience was measured with a 3-item scale derived from Hsu and Lu (2004). Sample items included: "I feel fully immersed when using creative AI integrated social media platforms" and "I experience a sense of control and enjoyment while using creative social media tools." Creative Social Media Application Usage was examined using a 2-item scale adapted from Valkenburg et al. (2021). Items included: "How frequently do you view and interact with stories on Snapchat?" and "How much time in the past hour have you spent viewing posts or stories on Instagram?" Creative Performance was

evaluated through a 5-item scale adapted from Chen et al. (2015) and Tang (2016). Example items included: “Social media serves as a valuable source of new creative ideas for me” and “Engagement with AI integrated social media platforms introduces me to innovative working methods.” The adopted measurement scales ensure construct validity and reliability while aligning with prior research frameworks. The collected data will be analyzed using structural equation modeling (SEM) to validate the proposed conceptual model and test the hypothesized relationships.

4. Data Analysis and Results

4.1. Measurement Model

The measurement and structural models were assessed using SmartPLS 4.0. The analysis revealed that demographic variables, including gender, designation, and marital status, exhibited a significant impact on the creative use of AI integrated social media platforms and creative performance. To account for these effects, all three demographic characteristics were controlled in the study.

4.2. Sample Demographics

The sample consisted of participants from three generational cohorts: Generation X (38%), Generation Y (33%), and Generation Z (29%), covering a diverse range of users engaged with AI integrated social media platforms such as Facebook, TikTok, and Instagram. Reliability and validity assessments were conducted using Cronbach's alpha (CA) and composite reliability (CR) to evaluate internal consistency (Henseler et al., 2015). The reliability coefficients for all constructs exceeded the threshold of 0.70, demonstrating adequate reliability (Sarstedt et al., 2017). Convergent validity was assessed through factor loadings and average variance extracted (AVE). All factor loadings exceeded the recommended threshold of 0.70, and AVE values were above 0.50, confirming acceptable convergent validity.

Table 1. Composite Reliability, Cronbach's Alpha and AVE values

Constructs/Items	CA	Rho-A	CR	AVE
Creative Performance	0.868	0.906	0.903	0.652
Creative Social Apps use	0.730	0.722	0.834	0.717
Flow Experience	0.701	0.711	0.833	0.625
Personal Innovativeness	0.805	0.808	0.873	0.632
Playfullness	0.707	0.736	0.835	0.629

Note: CR=Composite Reliability; AVE=Average Variance Extracted; CA= Cronbach's Alpha

To establish discriminant validity, Fornell and Larcker (1981) criterion was applied, comparing the square root of AVE with inter-construct correlations. The results indicated that the square root of AVE for each construct exceeded its correlation with other constructs, confirming adequate discriminant validity (Sarstedt et al., 2017).

Table 2. Discriminant Validity

	CP	CSMP	FE	PI	P
CP	0.808				
CSMP	0.833	0.847			
FE	0.231	0.263	0.791		
PI	0.579	0.460	0.355	0.795	
P	0.506	0.467	0.193	0.386	0.793

Note: CP=Creative Performance; CSMP= Creative AI Integrated Social Media Platforms; FE= Flow Experience; PI= Personal Innovativeness; P= Playfulness

The findings confirm that the measurement model exhibits strong reliability and validity, ensuring that the constructs used in the study accurately capture the intended theoretical dimensions. These results provide a robust foundation for evaluating the structural relationships in the subsequent analysis.

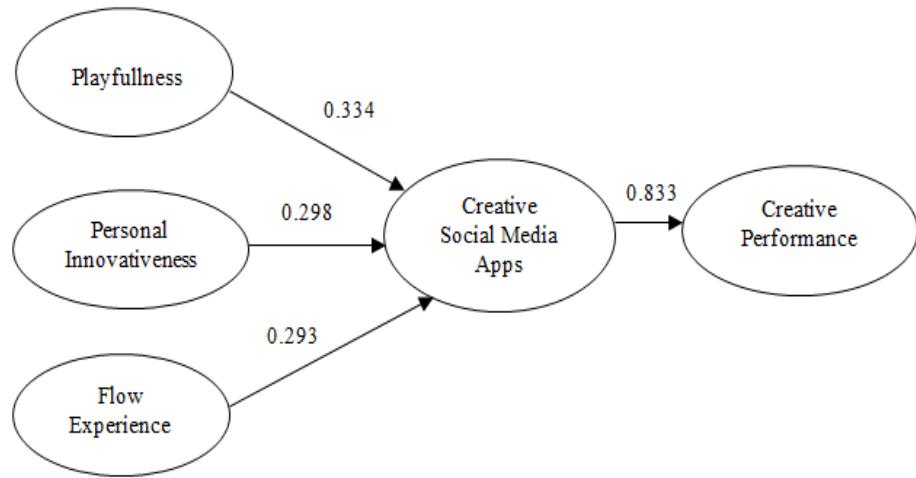


Figure 2. PLS Algorithm results

4.3. Assessment of Structural Model

The structural model was assessed to examine the hypothesized relationships and test the proposed model. As outlined by Sarstedt et al. (2017), structural equation modeling was employed to examine the interdependencies among the constructs. The model estimation in PLS provided an evaluation of the inner model by analyzing the direct relationships, t-values, and regression coefficients. Regression analysis defines an indirect effect as equivalent to a standardized beta (β) value, while t-values and beta values determine significance (Henseler et al., 2015). A t-value exceeding 1.64 is considered statistically significant (Hair et al., 2017), guiding the decision to support or reject the proposed hypotheses. The study investigates both direct effects and the predicted relationships among variables using a structural model. SmartPLS 4.0 was used to generate results, including path coefficients, t-values, p-values, and standard errors, as recommended by Ramayah et al. (2018). These values were examined to determine hypothesis acceptance. The results of the hypothesis testing indicate significant relationships among the constructs. The relationship between creative AI integrated social media platforms (CSMP) and creative performance (CP) was significant ($\beta = 0.833$, $t = 6.437$, $p = 0.000$), supporting the hypothesis. The path from engagement in playfulness (EP) to CSMP also demonstrated statistical significance ($\beta = 0.293$, $t = 4.724$, $p = 0.002$). Additionally, personal innovativeness (PI) was positively related to CSMP ($\beta = 0.298$, $t = 4.719$, $p < 0.001$), and playfulness (P) significantly influenced CSMP ($\beta = 0.334$, $t = 5.504$, $p < 0.001$). These findings validate the hypothesized relationships, demonstrating the significance of individual and psychological factors in shaping creative engagement with AI integrated social media platforms.

Table 3. Hypothesis Testing

	B-Value	Sample Mean	Standard Deviation	T value	P-value	
CSMP -> CP	0.833	0.836	0.013	6.437	0.000	Accept
EP -> CSMP	0.293	0.292	0.054	4.724	0.002	Accept
PI -> CSMP	0.298	0.302	0.063	4.719	0.000	Accept
P-> CSMP	0.334	0.337	0.061	5.504	0.000	Accept

Note: CP=Creative Performance; CSMP=Creative AI integrated Social Media Platforms; FE= Flow Experience; PI= Personal Innovativeness; P= Playfulness

4.4. Assessment of R^2

The second stage of structural model assessment involved evaluating the coefficient of determination (R^2) to measure the predictive accuracy of the model (Hair et al., 2011). The coefficient of determination represents the variance explained in the endogenous constructs by the exogenous variables (Rigdon, 2012). Higher R^2 values indicate greater predictive accuracy, with Chin (1998) suggesting that an R^2 value of 0.13 is weak, 0.33 is moderate, and 0.67 is strong. The R^2 values for the endogenous constructs indicate that creative performance ($R^2 = 0.694$) exhibits strong predictive power, while creative social media apps ($R^2 = 0.336$) demonstrate moderate predictive capability. These results confirm that the model effectively explains the variance in creative performance and creative social media engagement.

Table 4. Assessment of R square

	R^2
Creative Performance	0.694
Creative Social Media Apps	0.336

5. Discussion

The findings provide empirical evidence supporting the positive associations between playfulness, personal innovativeness, and flow experience with the creative use of AI integrated social media platforms, ultimately influencing creative performance. The results further validate the moderating role of Generations X, Y, and Z in these relationships among users of Facebook, TikTok, and Instagram. Additionally, demographic analysis revealed that male users exhibited higher levels of creative performance on AI integrated social media platforms, with Generation X comprising approximately 39% of the sample. The study found that playfulness plays a crucial role in digital interactions, as it fosters a sense of enjoyment and engagement, which positively correlates with the creative use of AI integrated social media platforms. This finding aligns with prior research emphasizing the role of playfulness in digital marketing and user engagement (Masek & Stenros, 2021; McShane et al., 2021). Similarly, personal innovativeness was found to have a significant positive association with creative social media use and creative performance, supporting earlier findings (Agarwal & Prasad, 1998; Musurmonov et al., 2021). These findings provide strong empirical support for Hypotheses 1 and 2. Additionally, flow experience was positively associated with the creative use of AI integrated social media platforms, reinforcing its role in facilitating deep engagement in digital interactions. The study further confirmed that the creative use of AI integrated social media platforms enhances creative performance, substantiating Hypotheses 3 and 4 in the Asian context. These findings contribute incremental empirical evidence to the literature on digital creativity. Lastly, identified a unique moderating effect of Generations X, Y, and Z, demonstrating that generational differences influence the relationships between antecedents and the creative use of AI integrated social media platforms. These results provide empirical support for Hypotheses 5a, 5b, and 5c, underscoring the significance of generational attributes in influencing digital engagement and creativity.

6. Implications, Limitations, and Future Research Directions

6.1. Theoretical Implications

This study contributes to the theoretical discourse in several ways. First, it integrates playfulness, personal innovativeness, and flow experience as antecedents of creative social media use within a unified theoretical model. This represents an incremental advancement in the literature by consolidating these constructs into a single framework. Second, the study introduces the novel concept of Generation X, Y, and Z as a moderating factor, addressing an underexplored area in digital innovation research. This inclusion broadens the understanding of generational differences in social

media engagement and creative behavior. Third, by combining the Theory of Reasoned Action and Media Richness Theory, this research provides a more comprehensive perspective on digital innovation and user behavior. The integration of these two theories offers a new lens through which scholars can examine the interplay between individual attitudes, digital platform engagement, and creative outcomes. Finally, the study extends the empirical application of these theories, particularly in the post-pandemic era. The findings highlight the evolving nature of digital engagement and open new avenues for further exploration of social media's role in fostering creativity.

6.2. Practical Implications

The insights from this research hold significant implications for policymakers, social media developers, and digital marketing professionals. First, the study identifies creative social media app usage as a key driver of creative performance, emphasizing its importance for AI integrated social media platforms, content creators, and digital marketing strategists. Understanding the factors that enhance creative engagement can inform platform design and improve user experience. Second, the inclusion of demographic and organizational factors provides valuable information for businesses seeking to optimize creative performance through AI integrated social media platforms. By leveraging insights on playfulness, innovativeness, and flow experience, organizations can tailor their digital strategies to enhance user engagement. Third, the findings suggest that interactive and enjoyable social media experiences contribute to higher levels of creative engagement. Social media managers and app developers should focus on integrating features that encourage playfulness and innovation, such as gamification elements, collaborative tools, and immersive digital experiences. Additionally, the study underscores the significance of generational differences in social media engagement. Digital marketers and HR professionals can use these insights to develop targeted strategies that cater to the preferences of Generation X, Y, and Z, optimizing content delivery and platform usability. Finally, organizations can apply these findings to improve employee creativity and engagement. By encouraging the strategic use of AI integrated social media platforms in professional settings, businesses can foster a culture of innovation and knowledge sharing among employees.

6.3. Limitations and Future Research Directions

Despite its contributions, limitations should be addressed in future research. First, the research was conducted among social media users in Asian countries, limiting the generalizability of the findings. Future studies could expand the geographical scope by including participants from diverse cultural backgrounds to provide a more comprehensive understanding of digital engagement and creative performance. Second, employed a cross-sectional design, capturing data at a single point in time. Future research could adopt a longitudinal approach to establish causality and examine how user behavior evolves over time. Third, while the study focused on playfulness, personal innovativeness, and flow experience as antecedents of creative social media use, other psychological and contextual factors may also influence digital creativity. Future research could explore additional variables such as motivation, self-efficacy, and digital literacy. Fourth, only three AI integrated social media platforms Facebook, TikTok, and Instagram examined. Expanding the scope to include other platforms, such as LinkedIn, Snapchat, and emerging metaverse applications, could provide a more holistic view of social media's role in creative performance. Finally, while the study explored generational differences as a moderating factor, future research could investigate additional moderating variables, such as personality traits, cultural influences, and digital skills, to further refine the proposed framework.

6.4. Conclusion

The study presents a comprehensive evaluation of the factors influencing creative performance in AI integrated social media platforms, focusing on playfulness, personal innovativeness, and flow experience. The findings confirm the significant impact of these psychological constructs on digital creativity, highlighting the role of creative social media use in enhancing user engagement. The study

also advances digital innovation research by integrating the moderating role of generational differences, offering valuable insights into how Generation X, Y, and Z engage with AI integrated social media platforms. By incorporating the Theory of Reasoned Action and Media Richness Theory, this research provides a robust theoretical foundation for understanding digital behavior in the post-pandemic era. The implications of extend beyond academia, offering practical guidance for social media developers, digital marketers, and organizational leaders seeking to enhance creative engagement through technology. While the study has limitations, it paves the way for future research to explore the evolving landscape of digital creativity and innovation. By shedding light on the complex interplay between psychological factors, digital engagement, and generational differences, this research contributes to a deeper understanding of creative performance in the digital age. The insights serve as a foundation for future investigations into the role of emerging technologies in shaping creative expression and user experiences.

References

Agarwal, R., & Prasad, J. (1998). A Conceptual and Operational Definition of Personal Innovativeness in the Domain of Information Technology. *Information Systems Research*, 9(2), 204-215. <https://doi.org/10.1287/isre.9.2.204>

Ahn, T., Ryu, S., & Han, I. (2007). The impact of Web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263-275. <https://doi.org/10.1016/j.im.2006.12.008>

Balkaya, S., & Akkucuk, U. (2021). Adoption and Use of Learning Management Systems in Education: The Role of Playfulness and Self-Management. *Sustainability*, 13(3), 1127. <https://doi.org/10.3390/su13031127>

Bennani, K. S., & Arpacı, I. (2022). Factors Influencing Individual and Organizational Adoption of Cryptocurrencies. In *Cryptofinance* (pp. 147-169). https://doi.org/10.1142/9789811239670_0008

Berkup, S. B. (2014). Working with generations X and Y in generation Z period: Management of different generations in business life. *Mediterranean journal of social Sciences*, 5(19), 218-229. <https://doi.org/10.5901/mjss.2014.v5n19s>

Chen, J., Hong, X., & and Whinston, A. B. (2011). Moderated Online Communities and Quality of User-Generated Content. *Journal of Management Information Systems*, 28(2), 237-268. <https://doi.org/10.2753/MIS0742-1222280209>

Chen, M. H., Chang, Y. Y., & Chang, Y. C. (2015). Entrepreneurial orientation, social networks, and creative performance: middle managers as corporate entrepreneurs. *Creativity and Innovation Management*, 24(3), 493-507. <https://doi.org/10.1111/caim.12108>

Cheong, J. H., & Park, M. C. (2005). Mobile internet acceptance in Korea. *Internet research*. <https://doi.org/10.1108/10662240510590324>

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (Vol. 295, pp. 295-336).

Cho, H., Chen, M., & Chung, S. (2010). Testing an integrative theoretical model of knowledge-sharing behavior in the context of Wikipedia. *Journal of the American Society for Information Science and Technology*, 61(6), 1198-1212. <https://doi.org/10.1002/asi.21316>

Daft, R. L., & Lengel, R. H. (1984). Information richness: A new approach to managerial behavior and organizational design. *Research in Organizational Behavior*, 6, 191-233.

De Aparicio, P. C. X. (2022). La investigación para la generación del internet: milenials y centenials. *Centro Sur*, 6(1). <https://doi.org/10.37955/cs.v6i1.223>

De Backer, L., Van Keer, H., & Valcke, M. (2022). The functions of shared metacognitive regulation and their differential relation with collaborative learners' understanding of the learning content. *Learning and Instruction*, 77, 101527. <https://doi.org/10.1016/j.learninstruc.2021.101527>

Demir, Ö., & Seferoglu, S. S. (2020). A Comparison of Solo and Pair Programming in Terms of Flow Experience, Coding Quality, and Coding Achievement. *Journal of Educational Computing Research*, 58(8), 1448-1466. <https://doi.org/10.1177/0735633120949788>

Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>

Gao, Q., Patrick, R. P.-L., & and Salvendy, G. (2009). Perception of Interactivity: Affects of Four Key Variables in Mobile Advertising. *International Journal of Human-Computer Interaction*, 25(6), 479-505. <https://doi.org/10.1080/10447310902963936>

Gardiner, S., Grace, D., & King, C. (2014). The Generation Effect: The Future of Domestic Tourism in Australia. *Journal of Travel Research*, 53(6), 705-720. <https://doi.org/10.1177/0047287514530810>

Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. <https://doi.org/10.1007/s11747-017-0517-x>

Hair, J. F., M., R. C., & and Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. <https://doi.org/10.2753/MTP1069-6679190202>

Harrigan, P., Daly, T. M., Coussemant, K., Lee, J. A., Soutar, G. N., & Evers, U. (2021). Identifying influencers on social media. *International Journal of Information Management*, 56, 102246. <https://doi.org/10.1016/j.ijinfomgt.2020.102246>

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>

Hsu, C.-L., & Lu, H.-P. (2004). Why do people play on-line games? An extended TAM with social influences and flow experience. *Information & Management*, 41(7), 853-868. <https://doi.org/10.1016/j.im.2003.08.014>

Huang, Q., Hu, M., & Chen, H. (2022). Exploring Stress and Problematic Use of Short-Form Video Applications among Middle-

Aged Chinese Adults: The Mediating Roles of Duration of Use and Flow Experience. *International Journal of Environmental Research and Public Health*, 19(1).

Kauschinger, M., Letner, A., Schreieck, M., Urbach, N., Böhm, M., & Krcmar, H. (2022). *Individual enterprise social network adoption: The influence of perceived network externalities and perceived social capital advantage* Wirtschaftsinformatik 2022 Proceedings,

Khazaei, H., & Tareq, M. A. (2021). Moderating effects of personal innovativeness and driving experience on factors influencing adoption of BEVs in Malaysia: An integrated SEM–BSEM approach. *Helijon*, 7(9). <https://doi.org/10.1016/j.helijon.2021.e08072>

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251. <https://doi.org/10.1016/j.bushor.2011.01.005>

Kwon, E. P., English, A. E., & Bright, L. F. (2020). Social media never sleeps: antecedents and consequences of social media fatigue among content creators. *The Journal of Social Media in Society*, 9(2), 150-172.

Lee, A. R., Son, S.-M., & Kim, K. K. (2016). Information and communication technology overload and social networking service fatigue: A stress perspective. *Computers in Human Behavior*, 55, 51-61. <https://doi.org/10.1016/j.chb.2015.08.011>

Lin, C. S., Wu, S., & Tsai, R. J. (2005). Integrating perceived playfulness into expectation-confirmation model for web portal context. *Information & Management*, 42(5), 683-693. <https://doi.org/10.1016/j.im.2004.04.003>

Lu, H.-P., & Hsiao, K.-L. (2010). The influence of extro/introversion on the intention to pay for social networking sites. *Information & Management*, 47(3), 150-157. <https://doi.org/10.1016/j.im.2010.01.003>

Lu, J. (2014). Are personal innovativeness and social influence critical to continue with mobile commerce? *Internet Research*, 24(2), 134-159. <https://doi.org/10.1108/IntR-05-2012-0100>

Masek, L., & Stenros, J. (2021). The Meaning of Playfulness: A Review of the Contemporary Definitions of the Concept across Disciplines. *Eludamos: Journal for Computer Game Culture*, 12(1), 13-37. <https://doi.org/10.7557/23.6361>

Massimini, F., Csikszentmihalyi, M., & Carli, M. (1987). The Monitoring of Optimal Experience A Tool for Psychiatric Rehabilitation. *The Journal of Nervous and Mental Disease*, 175(9).

McShane, L., Pancer, E., Poole, M., & Deng, Q. (2021). Emoji, Playfulness, and Brand Engagement on Twitter. *Journal of Interactive Marketing*, 53(1), 96-110. <https://doi.org/10.1016/j.intmar.2020.06.002>

Morris, M., & Ogan, C. (2018). The Internet as mass medium. In *The media, journalism and democracy* (pp. 389-400). Routledge.

Musurmonov, R., Burkhanov, A., & Musurmonova, M. (2021). Innovative activity-a factor of educational efficiency. *European Journal of Molecular & Clinical Medicine*, 8(3), 1238-1241.

Oeldorf-Hirsch, A., & Chen, Y. (2022). Mobile mindfulness: Predictors of mobile screen time tracking. *Computers in Human Behavior*, 129, 107170. <https://doi.org/10.1016/j.chb.2021.107170>

Ogiemwonyi, O. (2022). Factors influencing generation Y green behaviour on green products in Nigeria: An application of theory of planned behaviour. *Environmental and Sustainability Indicators*, 13, 100164. <https://doi.org/10.1016/j.indic.2021.100164>

Parra-López, E., Bulchand-Gidumal, J., Gutiérrez-Taño, D., & Díaz-Armas, R. (2011). Intentions to use social media in organizing and taking vacation trips. *Computers in Human Behavior*, 27(2), 640-654. <https://doi.org/10.1016/j.chb.2010.05.022>

Perry-Smith, J. E. (2006). Social Yet Creative: The Role Of Social Relationships In Facilitating Individual Creativity. *Academy of Management Journal*, 49(1), 85-101. <https://doi.org/10.5465/amj.2006.20785503>

Pop, R.-A., Zsuzsa, S., Dan-Cristian, D., & and Alt, M.-A. (2022). The impact of social media influencers on travel decisions: the role of trust in consumer decision journey. *Current Issues in Tourism*, 25(5), 823-843. <https://doi.org/10.1080/13683500.2021.1895729>

Priporas, C.-V., Stylos, N., & Fotiadis, A. K. (2017). Generation Z consumers' expectations of interactions in smart retailing: A future agenda. *Computers in Human Behavior*, 77, 374-381. <https://doi.org/10.1016/j.chb.2017.01.058>

Putri, K. A., & Etikariena, A. (2021). Proactive personality & employee creativity: the role of organizational learning culture as mediator. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 10601-10611. <https://doi.org/10.33258/birci.v4i4.3111>

Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0. In *An updated guide and practical guide to statistical analysis* (Vol. 1).

Rese, A., Kopplin, C. S., & Nielebock, C. (2020). Factors influencing members' knowledge sharing and creative performance in coworking spaces. *Journal of Knowledge Management*, 24(9), 2327-2354. <https://doi.org/10.1108/JKM-04-2020-0243>

Rigdon, E. E. (2012). Rethinking Partial Least Squares Path Modeling: In Praise of Simple Methods. *Long Range Planning*, 45(5), 341-358. <https://doi.org/10.1016/j.lrp.2012.09.010>

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Treating Unobserved Heterogeneity in PLS-SEM: A Multi-method Approach. In H. Latan & R. Noonan (Eds.), *Partial Least Squares Path Modeling: Basic Concepts, Methodological Issues and Applications* (pp. 197-217). Springer International Publishing. https://doi.org/10.1007/978-3-319-64069-3_9

Singh, A., Vij, T. S., Kaur, R., & Kaur, D. (2021). Impact of social media on Consumer Behaviour. *Turkish Journal of Computer and Mathematics Education*, 12(5), 1216-1225.

Sisson, N. M., Impett, E. A., & Shu, L. H. (2022). Can Induced Gratitude Improve Creative Performance on Repurposing Tasks? *Journal of Mechanical Design*, 144(5). <https://doi.org/10.1115/1.4052586>

Sledgianowski, D., & Kulviwat, S. (2009). Using Social Network Sites: The Effects of Playfulness, Critical Mass and Trust in a Hedonic Context. *Journal of Computer Information Systems*, 49(4), 74-83. <https://doi.org/10.1080/08874417.2009.11645342>

Smock, A. D., Ellison, N. B., Lampe, C., & Wohn, D. Y. (2011). Facebook as a toolkit: A uses and gratification approach to unbundling feature use. *Computers in Human Behavior*, 27(6), 2322-2329. <https://doi.org/10.1016/j.chb.2011.07.011>

Song, S. Y., Cho, E., & Kim, Y.-K. (2017). Personality factors and flow affecting opinion leadership in social media. *Personality and Individual Differences*, 114, 16-23. <https://doi.org/10.1016/j.paid.2017.03.058>

Tang, C. (2016). Accessed external knowledge, centrality of intra-team knowledge networks, and R&D employee creativity. *R&D Management*, 46(S3), 992-1005. <https://doi.org/10.1111/radm.12160>

Tse, D. C. K., Jeanne, N., & Csikszentmihalyi, M. (2021). Living well by “flowing” well: The indirect effect of autotelic personality on well-being through flow experience. *The Journal of Positive Psychology*, 16(3), 310-321. <https://doi.org/10.1080/17439760.2020.1716055>

Valkenburg, P. M., Beyens, I., Pouwels, J. L., van Driel, I. I., & Keijsers, L. (2021). Social Media Browsing and Adolescent Well-Being: Challenging the “Passive Social Media Use Hypothesis”. *Journal of Computer-Mediated Communication*, 27(1), 1-19. <https://doi.org/10.1093/jcmc/zmab015>

Zhang, M., Xu, P., & Ye, Y. (2022). Trust in social media brands and perceived media values: A survey study in China. *Computers in Human Behavior*, 127, 107024. <https://doi.org/10.1016/j.chb.2021.107024>

Zhang, Q., Ma, Z., Ye, L., Guo, M., & Liu, S. (2021). Future Work Self and Employee Creativity: The Mediating Role of Informal Field-Based Learning for High Innovation Performance. *Sustainability*, 13(3), 1352. <https://doi.org/10.3390/su13031352>

Questionnaire Items

Variables	Items	Sources
Playfulness	<ol style="list-style-type: none"> 1. When interacting with others using creative social media, I do not realize the time elapse. 2. I feel good when interacting with others using creative social media. 3. It is fun to interact with others using creative social media. 	(Cheong & Park, 2005)
Personal Innovativeness	<ol style="list-style-type: none"> 1. If I heard about a new information technology, I would look for ways to experiment with it. 2. Among my peers, I am usually the first to explore new information technologies. 3. I like to experiment with new information technologies. 4. In general, I am hesitant to try out new information technologies 	(Agarwal & Prasad, 1998)
Flow Experience	<ol style="list-style-type: none"> 1. Do you think you have ever experienced flow in using creative social media. 2. In general, how frequently would you say you have experienced “flow” when you using creative social media. 3. Most of the time I use creative social media I feel that I am in flow. 	(Hsu & Lu, 2004)
Creative Social Media Apps Use	<ol style="list-style-type: none"> 1. How much time in the past hour have you spent viewing posts/stories of others on Instagram? 2. viewing stories of others on Snapchat? 	
Creative Performance	<ol style="list-style-type: none"> 1. It is a good source of new creative ideas for me. 2. It increases the number of my creative ideas. 3. It increases the originality of my work. 4. It suggests completely new working methods to me. 5. It gives me insight into ideas and concepts from others that are useful for my work. 	(Chen et al., 2015; Tang, 2016)