

# Examining mobile game's loyalty strategy: The case of honkai star rail

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**ABSTRACT**

The mobile gaming industry is experiencing exponential growth, as evidenced by its contribution of half the revenue to the global gaming market. Honkai Star Rail, a product of Mihooyo, has secured the prestigious position of Best Mobile Game Award in 2023. A year post-launch, Honkai Star Rail has maintained its status as a top-tier mobile game, consistently ranking among the top 15 grossing applications. The effectiveness of strategies implemented by game developers can significantly enhance customer loyalty and repurchase behaviour. This phenomenon underscores the dynamic nature of the mobile gaming sector. It highlights the critical role of strategic planning in sustaining market position and fostering consumer engagement in this highly competitive digital ecosystem. Therefore, this research examines whether the variables of In-game Reward, Flow Experience, and Content Marketing mediated by Customer Satisfaction can affect the player's loyalty. Researchers use quantitative methods and S.P.S.S. and Amos 26 applications to process and test the data in this research process. Based on the data collected from 225 respondents from Indonesia, in-game rewards, flow experience, and content marketing significantly affect the loyalty of Honkai Star Rail's players, with the mediating variable of satisfaction.

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**1. Introduction**

In recent years, the gaming industry has shifted rapidly from traditional platforms like consoles and PCs to mobile gaming. This transition is evidenced by the exponential growth in mobile gaming revenue since 2012. By 2018, mobile games surpassed traditional gaming platforms and became the dominant segment in the global industry. Mobile gaming was projected to generate \$95.4 billion in revenue by 2022, representing nearly half of the market, with a compound annual growth rate of 11.3% (Cai et al., 2022). These statistic not only underscore the increasing dominance of mobile gaming but also point to its anticipated continued growth in the coming years (Cai et al., 2022). Moreover, Southeast Asia has emerged as a promising market for mobile games, with a total revenue of \$2.6 billion and a year-on-year revenue escalation of 17.4% in 2019. According to Fernandes (2019) in Purnami & Agus (2020) the substantial growth in revenue within the mobile gaming sector highlights Southeast Asia's potential as a lucrative market for mobile game enterprises, offering a bright future for the industry. This fact is further supported by data obtained from the Datareportal website, revealing that as of January 2023, a significant segment of internet users in Indonesia, accounting for 42.3%, predominantly participate in online gaming as their primary online activity (Fitra Ramadhan & Benny Mutiara, 2023). Mobile gaming dominance in Indonesia outstrips the statistics for its regional counterparts. This phenomenon is attributed to the country's affordability and accessibility of smartphones (thejakartapost.com, 2024).

The majority of mobile games adopt a freemium model, offering free gameplay while generating revenue through in-app purchases or advertisements. This business model is fundamentally dependent on player retention, as only a small fraction of users typically make purchases. However, the likelihood of spending increases the longer players remain engaged. Similarly, games that rely on ad-based revenue require sustained player interaction to maximize ad exposure. Consequently, extended player retention directly correlates with higher revenue potential, underscoring its critical role in the monetization strategy of freemium mobile games. In this highly competitive market environment, mobile games continuously strive to attract new users while maintaining the engagement of their existing player base. This process frequently requires extensive marketing strategies, cross-promotional efforts, and the application of data analytics to enhance user experience. By analyzing player behavior, developers make adjustments to game difficulty, offer incentives, and refine features to maximize player retention. Games that fail to sustain user engagement risk losing market share to competitors rapidly.

Currently, it is noted that one of the trending mobile games, *Honkai Star Rail*, received an award for Best Mobile Game in *The Game Awards 2023* after being launched for only six months. According to an article from (Liputan6.com, 2023), it was revealed that *Honkai Star Rail* faced tough competition in winning the Best Mobile Game category, alongside with other popular titled games such as *Final Fantasy VII: Ever Crisis*, *Hello Kitty Island Adventure*, *Monster Hunter Now*, and *Terra Nil*. This indicates that *Honkai Star Rail*, despite being only six months old, has been able to implement effective marketing strategies. These include in-game rewards for free-to-play players, a well-designed player experience, and engaging content marketing produced by the developers. Data acquired from Appmagic.com (2023) also revealed that *Honkai Star Rail* became the 13<sup>th</sup> highest grossing apps in mobile store in 2023. In 2024, *Honkai Star Rail* continued to retain its revenue, recording in April 2024, one year after its initial launch as the 8th highest-grossing mobile game, with revenues exceeding \$50,000 USD. *Honkai Star Rail* stands out among other mobile games by offering console-level graphics, fluid animations, immersive storytelling, and a strategic turn-based combat system, offering a rich gameplay experience for a mobile game. The game features a variety of characters and regular updates with new content, keeping players busy with numerous activities. *Honkai Star Rail* is also known for its generous rewards, which are regularly given through social media campaigns, events, live streams, and milestones. These rewards range from in-game currencies to playable characters that the player can obtain freely. Recently, to celebrate its winning several nominations, including *The Game Awards 2023*, *Google Play's Best Game 2023* and *iPhone Game of The Year 2023*, *Honkai Star Rail* gave away limited character Dr. Ratio for free. This act of giving rewards to the players further reinforces their image as a free-to-play friendly game. *Honkai Star Rail* also leverages strong content marketing, community-building initiatives and its relationship with the Hoyoverse ecosystem, attracting a loyal global player base and strengthening its success in the competitive mobile gaming market.

In-game reward is digital items that are acquired by the player (Hsiao et al., 2020). In-game rewards have emerged as a key determinant in fostering player loyalty, attracting both newcomers and long-term players alike. According to Danaher et al. (2020) reward is one of the loyalty program elements. Implementing rewards is a prevalent method for enhancing individuals' efficiency across diverse fields, such as business and gaming Kavaliova, M. et al. (2016) in Dimou et al. (2020). Cheung M et al. (2023) define virtual rewards in mobile gaming as digital assets such as virtual currencies, badges, additional game equipment, commodities, or tier-based rewards that players earn throughout their gameplay experience. According to research conducted by (Hwang & Choi, 2020) found that reward positively influence consumer loyalty. This is supported by the research conducted by Sabah Ibrahim & Yesiltas (2021), which found that rewards, acting as a mediating factor, exerted the most significant influence on employee loyalty, which was used as a proxy for consumer loyalty, Other studies conducted by Baker & Legendre (2021) revealed that reward could potentially promote customer loyalty. Virtual rewards offered within a mobile game such as game currencies, equipment, commodities, or segment rewards also serve as an extrinsic reward to improve game performance (Hsiao & Chen, 2016). *Honkai Star Rail* frequently offers players in-game currency through events or special milestones, which can be used to unlock new characters or items, keeping players motivated to continue playing.

Flow experience pertains to a unique mental state where individuals become completely absorbed in an activity. People experiencing flow are intensely focused on the task and derive pleasure from their involvement. As a result, they naturally ignore irrelevant information and process relevant information according to their current emotional state (Wang et al., 2021). In the context of gaming, D. Choi & Kim (2004) describe the flow state as an optimal psychological experience during gameplay. A player entering

this state while engaging in an online game signifies deep interest and curiosity, a strong sense of control over its mechanics, and intense focus on the gameplay, free from external distractions. According to S. Choi et al. (2016), factors that contribute to flow experience are exploring ability, accessibility, interactivity, systematic content, and induced motivation. In addition, Zhou (2020) stated that interaction between human and computer have significant influence on Flow experience. The way humans interact with computers and each other greatly impacts the Flow Experience. Prior study by Chou et al. (2023) concluded that flow experience is a predictor to mobile game user behavior. Flow state has previously been identified in gaming and esports studies as one of the relevant predictors of playing and in-game purchasing behaviors (Liao et al., 2019). Content marketing involves producing worthwhile content to draw in and keep clients, with the goal of encouraging them to make purchases. (Ramadania et al., 2023). According to Ramadania et al. (2023) there is significant influence between content marketing variables on satisfaction, content marketing on trust, and content marketing on loyalty. Content marketing can aid a company in establishing its brand and fostering trust in the digital age. The widespread availability of the internet, coupled with the popularity of social media and microblogging platforms, has contributed significantly to this trend (Ajina, 2019). Honkai Star Rail's content marketing strategy leverages social media, in-game events, and community engagement to build anticipation and maintain player interest. Through regular updates, trailers, and character reveals on platforms like *Twitter* and *YouTube*, the game keeps fans excited with visually captivating content. Collaborations with influencers, special events, and limited-time rewards help generate buzz and attract new players. Additionally, the developers engage with the community through forums and social channels, promoting fan art and player-driven content to foster a strong sense of connection. Cross-promotion with other *Hoyoverse* titles like *Genshin Impact* also expands the game's reach, contributing to its ongoing success.

Customer satisfaction, defined as the comparison between expectations and actual gameplay experiences, is vital for business sustainability and player loyalty. Satisfied players are more engaged and likely to remain loyal, making satisfaction a critical mediator between gameplay elements and loyalty (Kotler, 2022). Loyalty, in turn, fosters long-term engagement and reduces customer acquisition costs, essential in the competitive mobile gaming market (Cheung M et al., 2023). This study aims to analyze Honkai Star Rail's marketing strategy, focusing on the impact of in-game rewards, flow experience, and content marketing on player loyalty, with satisfaction as a mediating factor. The findings offer practical insights for developers to refine strategies and enhance player engagement over time.

## 2. Research Method

For this study, the chosen research design is causal research. A questionnaire was administered to respondents who met particular standards. The questionnaire utilized a Likert scale ranging from 1 to 5, with categories including strongly agree (score of 5), agree (score of 4), neutral (score of 3), disagree (score of 2), and strongly disagree (score of 1). Data was gathered from a sample of 225 individuals from Indonesia who play *Honkai Star Rail*. The sampling method employed was purposive sampling, focusing on individuals who meet the following criteria: 1) Players of *Honkai Star Rail* 2) live in Indonesia 3) Have been playing *Honkai Star Rail* for a minimum of three months 4) Have seen *Honkai Star Rail*'s promotional content (promotional video, trailer, shorts and music video). These respondent criteria were chosen in order to acquire the data suitable for this research.

The measurement items for this research are obtained from previous research. 2 items from Cheung M et al. (2023) and two items from Hsiao & Chen (2016) were retrieved for measuring in-game rewards, four items were obtained from D. Choi & Kim (2004) to measure flow experience, two items from Lou & Xie (2021) and two items from Bui et al. (2023) were retrieved as a measurement indicator for content marketing, four items were obtained from Rusli & Berlianto (2022) to measure satisfaction. Four items were chosen from Liestyana & Hara (2023) as a measurement for loyalty. Given the interrelationships among the variables in this study, the structural equation model (S.E.M.) using A.M.O.S. 26 is deemed the most suitable for analyzing data and testing hypotheses. S.E.M. allows for the exploration of the connections between independent and dependent variables.

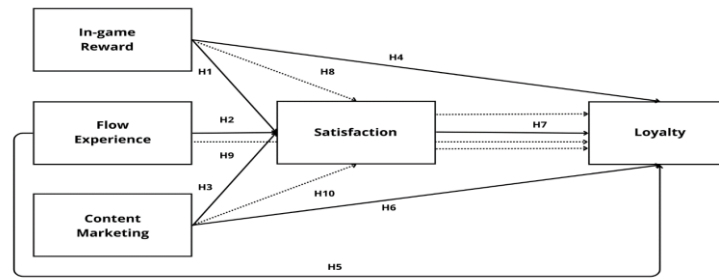


Figure 1. Research framework

### In-game reward, Loyalty and Satisfaction

The concept of rewards is one of the intrinsic motivations inherent to humans. Previous studies have explored the effects of motivational factors across various domains. A study by Lin et al., (2005) in Cheung M et al., (2023) aimed that extrinsic motivation and Intrinsic motivational factors play a crucial role in forecasting user satisfaction and the intention to continue using web portals. According to Panjaitan (2021), digital loyalty programs contribute positively towards customer satisfaction. In addition, the result from research conducted by Domínguez et al. (2013) in Lopes & Casais (2024) indicates that reward systems can emotionally and socially influence players, offering a motivating and enjoyable method to encourage progress in gaming. Research findings from (Cheung M et al., 2023) indicate that virtual rewards significantly influence customer satisfaction and reward underscores the critical role of perceived value and variety in shaping customer satisfaction metrics, ultimately contributing to the efficacy of loyalty initiatives in digital commerce ecosystems.

### Flow Experience, Loyalty and Satisfaction

The online flow state is an ideal state of happiness and entertainment. In the end, as a phenomenon, it will result in customer loyalty (D. Choi & Kim, 2004). Furthermore, Kim and Han (2004) in Ertemel et al. (2021) discovered that when consumers are completely engrossed and focused on the flow state, they comprehend and appreciate mobile marketing messages more. Additionally, they found that purchase intentions, including but not limited to customer satisfaction, are fostered by a high engagement flow state. Flow experience foster a state of complete concentration on current activity, accompanied by heightened pleasure and diminished self-awareness. In digital environments, enhancing user experience is paramount due to the profound impact of these affective states on user satisfaction. The quality of information presented serves as a critical determinant of user experience, exerting a substantial influence on satisfaction and loyalty (Mohammadi & Dickson, 2021). Within the specific context of this research, the information is embodied in the narrative and game aspects of *Honkai Star Rail*.

### Content Marketing, Loyalty and Satisfaction

The process of producing worthwhile content postings with the goal of drawing in and involving customers in order to persuade them to make purchases is known as content marketing (Ramadania et al., 2023). The customer will feel satisfied with their transaction by making the right decision. Customer satisfaction can support the customers in having a positive impression of the product and service offered by a business organization (Khairawati, 2019). Compelling content is a powerful catalyst in attracting prospective consumers to corporate digital platforms, fostering sustained interest in brand communications, and ultimately facilitating repeat purchase behaviour (Barkah et al., 2022). A favourable evaluation of Digital Content Marketing experiences can enhance brand loyalty, highlighting that a well-crafted digital content strategy that resonates with customer values can foster lasting customer commitment (Bui et al., 2023).

The research constructs and structural models were analyzed and validated using Structural Equation Modeling (SEM) through AMOS 26 software. Model fit was assessed using various indices, including the Tucker-Lewis Index (TLI), Incremental Fit Index (IFI), Comparative Fit Index (CFI), Normal Fit Index (NFI), Root Mean Square Error of Approximation (RMSEA), Root Mean Square Residual (RMR), Goodness of Fit Index (GFI), chi-square ( $\chi^2$ ), and CMIN/DF. Construct reliability was determined by calculating Composite Reliability (CR) and Average Variance Extracted (AVE), in line with Hair et al. (2022). Validity was examined using standardized loading factors (SLF), which must reach a minimum threshold of 0.50. Moreover, SEM analysis was employed to evaluate and interpret the study's hypotheses. A hypothesis

reflects a causal relationship if the computed t-value for each coefficient equals or exceeds the critical t-value of 1.96 at a significance level of  $\alpha = 0.05$ .

### 3. Result and Discussion

The information gathered for this study provides information about the respondents' gender, residence, age, education, occupation, the frequency of play, and daily playtime. Questionnaires for this research were distributed via several social media platform including *Facebook*, *Discord* and *Whatsapp*. The criteria of respondents are as follow: 1) Live in Indonesia 2) Have been playing *Honkai Star Rail* for a minimum of three months 3) Have seen *Honkai Star Rail*'s promotional content (promotional video, trailer, shorts and music video).

**Table 1.** Profile of respondents

Category	Items	F	%
Gender	Male	185	82.2%
	Female	40	17.8
	Total	225	100%
Domicile	Sumatra	23	10%
	Java	142	62.9%
	Kalimantan	51	22.7%
	Sulawesi	3	1.3%
	Bali and Nusa Tenggara	4	1.8%
	Maluku	1	0.4%
	Papua	1	0.4%
Total	225	100%	
Age	Under 17	7	3.1%
	17-24	171	76%
	25-34	46	20.4%
	35-44	1	0.4%
	Total	225	100%
Education	Elementary School	2	1%
	Junior High School	2	0.9%
	Senior High School	129	57.3%
	Diploma	8	3.6%
	Bachelor (S1)	81	36%
	Magister (S2/S3)	3	1.3%
Total	225	100%	
Occupation	Students	17	7.55%
	Undergraduate	117	52%
	Private Employee,	44	19.55%
	Entrepreneur	20	8.88%
	Civil Servants	5	2.2%
	Freelancer	8	3.5%
	Unemployed	14	6.22%
Total	225	100%	
Playing Frequency	Every day	178	79%
	2-6 times a week	5	2%
	1 time a week	27	12%
	Rarely	15	7%
	Total	225	100%
Habit (play time per day)	Less than 1 hour	73	32.4%
	1-2 hour	120	53.3%
	3-4 hour	26	11.6%
	5-6 hour	4	1.8%
	More than 6 hours	2	0.9%
	Total	225	100%

The study surveyed 225 respondents to examine *Honkai Star Rail*'s player loyalty. Most respondents were male (82.2%), with females representing 17.8%. Participants predominantly resided on Java Island (62.9%), with others coming from Kalimantan (22.7%), Sumatra (10%), and smaller representations from Sulawesi, Bali, Nusa Tenggara, Maluku, and Papua. The age distribution was primarily within the 17-24 range (76%), followed by the 25-34 age group (20.4%), and a minor proportion below 17 years or between 35-44 years. Regarding educational background, most respondents held a high school diploma (57.3%) or a bachelor's degree (36%). Occupation-wise, the largest group consisted of undergraduate students (52%), followed by private employees (19.55%) and entrepreneurs (8.88%). The data

also revealed that 79% of respondents played *Honkai Star Rail* daily, with the majority spending between 1-2 hours per session (53.3%).

### Measurement model

The standard goodness of fit value is referred to in the model test results. On the other hand, the acquisition of SLF value will be examined in the validity test. On the other hand, the reliability test will evaluate the acquisition of CR and average variance extracted AVE.

**Table 2.** Measurement model

Goodness of Fit	Cut-off Value	Results	
X2	Expected to be low	302.611	
Df		182	
X2 - Significance Probability	$\geq 0.05$	0	
CMIN/DF	$\leq 2.00$	1.663	Fit
RMSEA	$\leq 0.08$	0.054	Fit
NFI	$\geq 0.90$	0.912	Fit
TLI	$\geq 0.90$	0.957	Fit
IFI	$\geq 0.90$	0.963	Fit

According to the model conformance test displayed in Table 2, conformity can be declared and the model conformance requirements are approved. It fits well based on five measures. The study model's configuration can be considered satisfactory and accepted if three to four measurements have a reasonable degree of appropriateness or are above the cut-off value.

**Table 3.** Validity and reliability tests

Item		SLF	AVE	CR
In-game Reward	The virtual rewards in <i>Honkai: Star Rail</i> are what I have been desiring.	0.776		
	When I log in and play the game, I can earn some in-game currency.	0.795		
	I play the game every day because I want to earn free rewards.	0.758	0.596	0.880
	I have many chances to win in-game currency in the game.	0.825		
	I want to earn some free currency to obtain new characters.	0.794		
Flow Experience	I felt curious while playing <i>Honkai: Star Rail</i> .	0.902		
	I was in control of the game when I played.	0.843	0.735	0.917
	I was entirely absorbed in the story while playing.	0.854		
	I was deeply focused on the game.	0.869		
Content Marketing	<i>Honkai: Star Rail</i> promotional content (videos, campaigns, interactive posts) provides relevant information.	0.732		
	<i>Honkai: Star Rail</i> promotional content is entertaining.	0.785		
	The <i>Honkai: Star Rail</i> social media account is a reliable source for product information.	0.795	0.530	0.818
	My experience with <i>Honkai: Star Rail</i> content is very satisfying.	0.719		
Satisfaction	I am satisfied with <i>Honkai: Star Rail</i> .	0.874		
	I feel fulfilled by <i>Honkai: Star Rail</i> .	0.868		
	I'm happy with <i>Honkai: Star Rail</i> .	0.855	0.742	0.920
	The overall feeling I get when I play <i>Honkai: Star Rail</i> puts me in a good mood.	0.813		
Loyalty	I intend to keep playing <i>Honkai: Star Rail</i> .	0.848		
	<i>Honkai: Star Rail</i> is my first choice when deciding to adopt a mobile game.	0.834		
	I would like to post positive messages about <i>Honkai: Star Rail</i> on various internet message boards.	0.773	0.760	0.927
	If others want to choose a mobile game to play, I would recommend <i>Honkai: Star Rail</i> .	0.824		

The built model's indicators meet the validity and reliability requirements, according to validity and reliability test results, which are shown in Table 3. The indicator's standardized loading factor (S.L.F.) value is greater than 0.50, indicating that all components are sufficient and reliable for evaluating the overall makeup of the generated model. score greater than 0.70 on the Construct Reliability (C.R.). This demonstrates that each tool is trustworthy and able to measure structures uniformly across all constructed models.

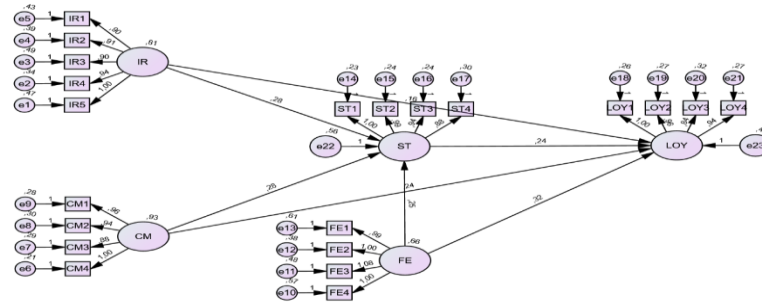


Figure 2. Full model testing

**Hypothesis Testing**

The results of evaluating the influence of the relationships between the variables in the study setup created for this inquiry are shown in the following.

Table 4. Hypothesis testing

Hypothesis	Items	Std Estimate	S.E.	C.R	p-values	Description
H1	IR→ST	0.281	0.074	3.81	***	Significant
H2	FE→ST	0.252	0.085	2.953	0.003	Significant
H3	CM→ST	0.283	0.071	3.968	***	Significant
H4	IR→LOY	0.156	0.067	2.317	0.021	Significant
H5	FE→LOY	0.324	0.08	4.06	***	Significant
H6	CM→LOY	0.244	0.066	3.711	***	Significant
H7	ST→LOY	0.243	0.069	3.531	***	Significant

If the p-value is less than 0.05 ( $\alpha = 0.05$ ), the results of the hypothesis test can be accepted based on the data shown in Table 4. All of the submitted hypotheses are deemed acceptable or important since they satisfy all of the requirements, as shown in Table 4 above. We provide Table 5, which was derived from the Sobel test findings, to validate the indirect influence of the inherent mediating variable.

Table 5. The sobel test – significance of mediation

Hypothesis	Path	Sobel Test		Description
		t-Stat	P Value	
H <sub>8</sub>	IR→ST→LOY	2.58217271	0.00981804	Significant
H <sub>9</sub>	FE→ST→LOY	2.26804423	0.02332651	Significant
H <sub>10</sub>	CM→ST→LOY	2.63917082	0.00831091	Significant

According to Table 5's Sobel test results, a p-value of less than 0.05 ( $\alpha = 0.05$ ) indicates that the test's statistical value is acceptable. It is known from Table 5 above that the three hypotheses put forth have a significant positive impact, and the p-value demonstrates that the hypothesis is correct. As demonstrated in Table 4, the p-value of less than 0.05 ( $\alpha = 0.05$ ) and the t-score value of 3.81, which is greater than the t-statistic of 1.96, suggest that in-game rewards significantly influenced player satisfaction. This outcome is in line with past research by Alkandi et al. (2023) and Cheung M et al. (2023) which highlighted how well reward systems work to increase user loyalty and engagement. By implementing compelling in-game rewards, developers can create a sense of accomplishment among the players, encouraging consistent participation and deeper immersion in the game. With a score value of 2.953 and a p-value of 0.003, which is below the significance level of 0.05 ( $\alpha = 0.05$ ), the second hypothesis is statistically supported and shows that the player's satisfaction with a mobile game is positively impacted by the condition of flow. This finding is supported by the previous research conducted by D. Choi & Kim (2004) and Kim (2022). flow experience significantly enhances player satisfaction by creating a deeply engaging and immersive experience. Flow, often described as a state of “optimal experience,” occurs when a player becomes fully absorbed in the game, losing track of time and self-awareness due to the engaging nature of activity. Game elements that balance challenge with the player’s skill level, offer clear goals, and provide immediate feedback facilitate this state.

The results of the third hypothesis test indicate a p-value of less than 0.05 ( $\alpha = 0.05$ ) and a t-score value of 3.968, which is higher than the suggested t-statistic score of 1.96. According to this finding, satisfaction is positively impacted by content marketing. Previous researchers’ results, in which Ramadania et al. (2023) stated that content marketing significantly influences satisfaction, further support this finding.

The continuous engagement of *Honkai Star Rail* players via social media, trailers, and in-game events ensures a sustained connection with the game, reinforcing positive user experiences and satisfaction. Moving on to the fourth hypothesis, the hypothesis testing shows a t-score value of 2.317 and a p-value of 0.021, which confirms the presented hypothesis of the positive influence of in-game reward on the loyalty of a mobile game player. This finding is in line with the previous result of research conducted by Hwang & Choi (2020). In the case of *Honkai Star Rail*, rewards not only boost engagement but also drive long-term loyalty by offering players a steady stream of incentives that enhance their gaming experience.

The hypothesis testing of the fifth hypothesis displays a t-score value of 4.06 along with a p-value of less than 0.05 ( $\alpha = 0.05$ ). This result shows that flow experience has a positive impact on loyalty. Flow states enhance user engagement and cultivate loyalty by enabling players to immerse themselves fully in the game. This aligns with Xie & Yuan (2021), who found that experiences promoting deep focus and intrinsic enjoyment contribute positively to loyalty, fostering a lasting bond between players and the game.

Based on the sixth hypothesis testing, Content marketing was shown to significantly enhance loyalty, showing a t-score value of 3.711 and a p-value less than 0.05 ( $\alpha = 0.05$ ). *Honkai Star Rail's* marketing strategies forge a meaningful connection between the game and its players through relevant and appealing content, contributing to long-term brand loyalty. This finding supports Bui et al. (2023), who suggested that content marketing strengthens brand loyalty by fostering positive digital experiences aligned with user values. The seventh hypothesis testing of satisfaction significantly influences loyalty, showing a t-score value of 3.531 and a p-value less than 0.05. Satisfied players are more likely to recommend the game to others and remain engaged. This finding is consistent with Suharto et al. (2022), who emphasize that satisfaction is foundational to customer loyalty, as it reduces the likelihood of switching and solidifies the user's bond with the game. The Sobel test results reveal a significant indirect effect of in-game rewards on loyalty through satisfaction (t-Stat = 2.582, p-value < 0.05). This demonstrates that rewards directly enhance loyalty and elevate it by increasing satisfaction. Research from Cheung M et al. (2023) corroborate these findings, noting that rewards' variety and perceived value contribute to satisfaction, thus reinforcing loyalty.

The findings confirm a significant indirect effect of flow experience on loyalty mediated by satisfaction, with a t-stat of 2.268 and a p-value of 0.05. Flow experiences, by heightening engagement, indirectly drive loyalty through enhanced satisfaction, as proposed by Mohammadi & Dickson (2021), who found that flow states in digital contexts elevate user satisfaction and subsequently foster loyalty. Content marketing was also found to significantly influence loyalty through satisfaction (t-Stat = 2.639, p-value < 0.05). Effective content marketing strategies not only draw players in but also bolster satisfaction, which in turn reinforces loyalty. This finding aligns with Khairawati (2019), who identified satisfaction derived from content marketing as a critical contributor to long-term customer loyalty.

#### 4. Conclusion

This research indicates that in-game rewards, flow experience, and content marketing significantly maintain customer loyalty in mobile games. Moreover, the study elucidates the mediating relationship between satisfaction and player loyalty. This research provides new insights and can be a blueprint for mobile game developers' marketing strategies to achieve sustainable customer loyalty. From a theoretical standpoint this research contributes to the understanding of how in-game rewards, flow experience, and content marketing shape customer loyalty in the context of mobile gaming. It extends Flow Theory from Csikszentmihalyi, (1990) by illustrating how a balance between challenge and player skill in games like *Honkai Star Rail* creates immersive experiences that foster deeper engagement and satisfaction. By applying flow theory to the gaming industry, the study confirms that games designed to induce flow states can drive user retention and loyalty. Additionally, the research supports and expands on Motivational Theory by demonstrating how in-game rewards, as extrinsic motivators, encourage repeat play and contribute to satisfaction and loyalty, which is key in digital environments where sustained engagement is crucial. The study also advances the understanding of Content Marketing Theory by showcasing how tailored digital marketing strategies, including frequent updates and social media engagement, enhance user satisfaction and brand loyalty in the gaming sector. It reinforces the idea that content marketing is not just about attracting new players but about maintaining engagement by providing valuable and engaging information, fostering long-term loyalty. By integrating these variables with Customer Satisfaction as a mediating factor, the research deepens theoretical frameworks that explain loyalty-building strategies in mobile gaming and provides a more comprehensive view of how psychological and marketing factors interact to drive player loyalty in competitive digital

environments. The practical implications of the research on *Honkai Star Rail*'s loyalty strategies suggest several critical approaches for mobile game developers. First, offering valuable and frequent in-game rewards, such as virtual currency, items, and free characters, can significantly boost player engagement and loyalty. Daily login bonuses and special event rewards keep players active and invested in the game. Secondly, promoting a solid flow experience is critical. Developers should focus on designing gameplay that balances challenge with player skill, providing clear goals and immersive narratives. This fosters deep engagement, making players more likely to stay loyal. Additionally, content marketing is pivotal in maintaining and expanding the player base. Regular updates, trailers, social media engagement, and collaborations with influencers help keep the game fresh and exciting, enhancing player satisfaction. By prioritizing these strategies and ensuring a positive user experience, developers can improve player retention, satisfaction, and loyalty, ultimately leading to long-term success in a highly competitive mobile gaming market. Limitation, this research has several limitations. First, it is geographically limited to Indonesia, which may affect the generalizability of the findings to other regions with different cultural and economic contexts. The sample size of 225 respondents, primarily young, male, and students, may not fully represent the diverse player base of *Honkai Star Rail*. The research focuses on in-game rewards, flow experience, and content marketing, without considering other factors like social interactions, technological improvements, or customer service, which may also influence loyalty. Furthermore, the study uses satisfaction as the only mediating variable, leaving out other potential mediators such as trust or emotional engagement. Future research should address these limitations by expanding the geographical scope, including more diverse samples, and exploring additional variables.

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