Elissa Dwi Lestari

Analysis of the Effect of Effort Expectancy, Social Influence, Hedonic Motivation, Price Value, Habit, and Flow on MMORPG'...

Quick Submit

Quick Submit

Universitas Multimedia Nusantara

Document Details

Submission ID
trn:oid:::1:3133695298

Submission Date
Jan 21, 2025, 9:06 AM GMT+7

Download Date
Jan 21, 2025, 9:19 AM GMT+7

File Name
5770_xmp.pdf

File Size
337.5 KB

6 Pages

3,909 Words

21,762 Characters

4% Overall Similarity

The combined total of all matches, including overlapping sources, for each database.

Filtered from the Report

- Bibliography
- Quoted Text
- Cited Text
- Small Matches (less than 8 words)
- Internet sources
- Publications

Exclusions

- 6 Excluded Matches

Match Groups

6 Not Cited or Quoted 4%
Matches with neither in-text citation nor quotation marks

0 Missing Quotations 0%
Matches that are still very similar to source material

0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation

0 Cited and Quoted 0%
Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
4% Submitted works (Student Papers)

Integrity Flags

0 Integrity Flags for Review

No suspicious text manipulations found.

Our system's algorithms look deeply at a document for any inconsistencies that would set it apart from a normal submission. If we notice something strange, we flag it for you to review.

A Flag is not necessarily an indicator of a problem. However, we'd recommend you focus your attention there for further review.

Match Groups

- **6** Not Cited or Quoted 4%
  Matches with neither in-text citation nor quotation marks
- **0** Missing Quotations 0%
  Matches that are still very similar to source material
- **0** Missing Citation 0%
  Matches that have quotation marks, but no in-text citation
- **0** Cited and Quoted 0%
  Matches with in-text citation present, but no quotation marks

Top Sources

0% Internet sources
0% Publications
4% Submitted works (Student Papers)

Top Sources

The sources with the highest number of matches within the submission. Overlapping sources will not be displayed.

1	Student papers	universititeknologimara 1%
2	Student papers	Erasmus University of Rotterdam <1%
3	Student papers	University of Durham <1%
4	Student papers	Multimedia University <1%
5	Student papers	University of South Africa <1%
6	Student papers	Segi University College <1%

Available Online at www.e-iph.co.uk
Indexed in Clarivate Analytics WoS, and ScienceOPEN
https://www.amerabra.org

E-B Environment - Behaviour Proceedings Journal

ABRIC2023Langkawi
https://fbm.uitm.edu.my/abric/index.php

e-IPH e-International Publishing House Ltd., United Kingdom

The 5th Advances in Business Research Conference 2023
Langkawi Island, Malaysia, 27 Sep 2023
Organised by: Faculty of Business and Management, UiTM Puncak Alam, Selangor, Malaysia

Analysis of the Effect of Effort Expectancy, Social Influence, Hedonic Motivation, Price Value, Habit, and Flow on MMORPG's Intention to Play

Marvella Samudera, Elissa Dwi Lestari*, Florentina Kurniasari
**Corresponding Author*

Bachelor of Management, Universitas Multimedia Nusantara, Tangerang, Indonesia

marvella.samudera@student.umn.ac.id, elissa.lestari@umn.ac.id, florentina@umn.ac.id
Tel: +62817739695

Abstract
With more Internet access, MMORPGs have grown in popularity. In Indonesia, the biggest gaming market in Southeast Asia, this genre is less popular. Therefore, studying what inspires Indonesian MMORP users is necessary. The study used a quantitative research design on 221 online gamers who were familiar with MMORPGs but had never played them. The study tested research hypotheses using multivariate linear regression analysis. The study discovered that hedonic motivation, price value, habit, and flow all have a positive impact on one's intention to play MMORPG online games, but effort expectation and social influence have no impact.

Keywords: Intention to Play; Flow; Hedonic Motivation; Price Value;

DOI: https://doi.org/10.21834/e-bpj.v9iSI19.5770

1.0 Introduction

Indonesia's video game market was worth USD 1.130 billion in 2018, placing 17th globally (Loeis et al., 2022). Mobile games accounted for 45% of the worldwide video game business in 2019, reaching $68.5 billion. Newzoo reports 62.1 million players in Indonesia and US$1.1 billion in revenue. Indonesia ranks 12th globally in gaming players, making it Southeast Asia's largest user (Ericska et al., 2021).

MMORPGs have gained in popularity as the Internet has become more accessible. According to Wang et al. (2021). There are 240 million MMORPG players worldwide (19 million active). Many MMORPG players share a fantasy or sci-fi virtual environment. They trade and interact with players. Character development points let players shape character evolution (Danka, 2020). MMORPGs topped mobile gaming in 2019, with USD 7.5 billion and 26.9%. MMORPG updates seem to have halted (Wang et al., 2021). Single-player casual games are 87% popular in Indonesia. Battle Royale games rank second with 74.6%. 74.4 percent ranked FPS games third. The least popular are RPGs (66.4%) and MMORPGs (67.6%). This shows that MMORPGs are less prevalent in Indonesia (Amalia, 2021). Indonesia's game sector is promising. This challenge requires user behavioral visibility so developers may target diverse people worldwide. Thus, game designers, advertisers, organizations, and gadget developers better understand players' intentions when playing online games (MMORPGs in this research).

DOI: https://doi.org/10.21834/e-bpj.v9iSI19.5770

Samudera, M., et.al., The 5th Advances in Business Research Conference (ABRIC2023Langkawi), Langkawi Island, Malaysia, 27 Sep 2023, E-BPJ, Mar, 9(S.I.19) 2024 (pp.67-72)

E-games are growing, yet behavioral objectives, usability, and technological adoption are understudied (Ong et al., 2023). By integrating factors like perceived ease of use (effort expectation) and perceived usefulness (performance expectancy), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) model for customer technology adoption is robust. Information systems, psychology, and sociology were used to build UTAUT2 to explain customers' motivations to utilize new IT technologies (Venkatesh et al., 2012). UTAUT2 explains the antecedents of behavioral intention (drivers of new technology usage) and outcomes (user behavior) (Jang & Byon, 2020). UTAUT2 analyzes consumer adoption of online game technologies. Limited UTAUT2 research has examined online gaming (Ramírez-Correa et al., 2019).

Since playing games is a leisure activity, this study includes flow (Merhi, 2016) and hedonic motivation (Chang et al., 2019; Ong et al., 2023) in the model since gaming is considered leisure. According to Loisa and Purwanto (2020), habit and price value are other UTAUT2 factors that increase customers' adoption of technology. Based on previous research, this study examines how EE, SI, HM, PV, Habit, and Flow affect Indonesian gaming intentions.

2.0 Literature Review

2.1 Effect of Effort Expectancy (EE) on Intention to Play

According to Loisa & Purwanto's (2020) study, one's expectation of the app's ease of use drives one to be captivated in adopting technology. E-sports participants must master new technology because each game has a distinct user interface, regulations, and virtual surroundings. If a new e-sports game is too difficult, players may give up on it. (Jang & Byon, 2020). Therefore, the hypothesis in this study is:

H1: EE has a positive impact on the Intention to Play e-games.

2.2 Effect of Social Influence (SI) on Intention to Play

Social influence is the extent to which customers feel vital individuals (e.g., family and friends) think they should adopt specific technology (Venkatesh et al., 2012). SI drives game users and followers, according to Jang and Byon (2020). Interest in a new game comes from suggestions from friends. In Bower & Jong's (2020) study on immersive virtual reality (VR) in education, students were interested in using VR after teachers taught them and recommended it. As a result, the hypothesis in this research is:

H2: SI has a positive impact on Intention to Play online games.

2.3 Effect of Hedonic Motivation (HM) on Intention to Play

Technology-related joy is called hedonic motivation. Hedonistic drive strongly influences technology acquisition and use (Chang et al., 2019). Hedonic motivation strongly predicts consumer technology use (Gong et al., 2019). Furthermore, Ong et al. (2023) suggested studying how hedonistic reasons affect user intentions to embrace new technologies. According to Nikolopoulou et al. (2021), hedonic incentives enhanced primary school teachers' enthusiasm for using mobile learning. Jang & Byon (2020) discovered that HM factors positively and significantly affected customers' intentions to play online MMORPG games. As a result, the following is the study's hypothesis:

H3: HM has a positive impact on Intention to Play.

2.4 Effect of Price Value (PV) *on Intention to Play*

An individual's cognitive tradeoff between a product or service's perceived benefits and monetary costs is called price value. If the price matches the quality, customers will keep buying. PV was found to affect the user's intention to buy in-game merchandise in the game being played (Ramírez-Correa et al., 2019). According to mobile internet usage research (Nikolopoulou et al., 2021), PV favorably impacts instructors' decision to utilize the Internet in their instruction. Jang and Byon (2020) found that PV strongly predicts video game buying intent. The following is the study's hypothesis:

H4: PV has a positive effect on Intention to Play.

2.5 Effect of Habit on Intention to Play

According to Lytvyn et al. (2019) research on Malaysian students' mobile learning usage, habits strongly impact information system use intentions. Cai et al. (2021) found that habits strongly impact logistics technology utilization. Online gaming encourages trying new games. Gamers' habits motivate them to fulfill daily gaming tasks. Challenge establishes the habit that continually impacts one's game purpose (Jang & Byon, 2020). Therefore, the hypothesis in this study is:

H5: Habit has a positive impact on Intention to Play.

2.6 Effect of Flow on Intention to Play

Chen et al. (2018) found that flow experience increases the likelihood of trying mobile purchasing services. According to Hallmann and

Samudera, M., et.al., The 5th Advances in Business Research Conference (ABRIC2023Langkawi), Langkawi Island, Malaysia, 27 Sep 2023, E-BPJ, Mar, 9(S.I.19) 2024 (pp.67-72)

Giel (2018), flow experience motivates people to perform time-consuming tasks without remuneration. Games involve several activities that improve flow. Shin (2010) and Jang & Byon (2020) found that flow increased gaming customer activity intentions. Therefore, the hypothesis in this study is:

H6: Flow has a positive impact on Intention to Play.

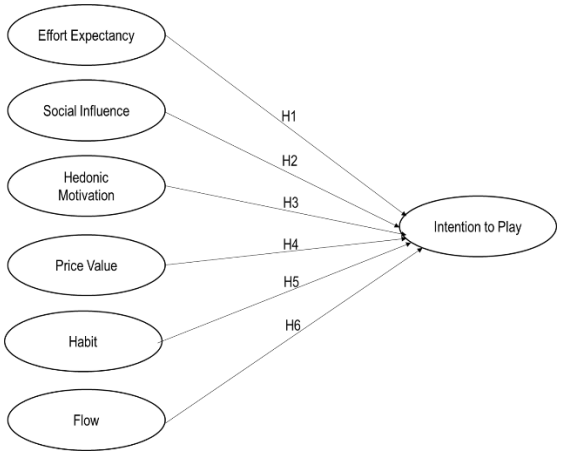

Fig. 1: Research Model

3.0 Methodology

3.1 Procedure and Participants

This study employed judgmental non-probability sampling since researchers selected respondents using specified criteria (Malhotra et al., 2017). Based on judgmental sampling, Indonesian residents aged 17–33 who were active online gamers familiar with MMORPG games but had never played them were sampled. In the study, computerized questionnaires are distributed and collected. Only 221—81.85%—of the 270 replies fit the research requirements. Data analysis and processing are done with IBM SPSS 26. Multivariate regression analysis tested research hypotheses.

3.2 Measures

This study incorporates prior definitions and measures. Zhao and Bacao (2020) defined and measured effort expectation and flow. Faroqi et al. (2020) defined and measured social influence. Vieira et al. (2018) defined and measured hedonic motivation factors, whereas Jang and Byon (2020) defined and measured variable pricing value. Venkatesh et al. (2012) defined and measured the habit variable, whereas Ramírez-Correa et al. (2019) defined and measured the desire to play variable. This research examined indicators using statements on the Likert scale with one to seven points to determine how much respondents agreed or disagreed.

3.3 Model

The study used a linear multivariate regression model in which the intention to play consumer online games (Y) was determined by a vector (X) of the explanatory variables consisting of effort expectancy (EE), social influence (SI), hedonic motivation (HM), price value (PV), habit (H), and flow (F). The regression model can be described as follows:

$$Y = a + b1\ EE + b2\ SI + b3\ HM + b4\ PV + b5\ H + B6\ F + e$$

4.0 Result and Discussion

4.1 Respondent Profile

The majority of respondents are female (57%), aged 17 to 22 (49%), and have a habit of playing online games for 30 minutes to 1 hour every day (56%).

4.2 Multivariate Regression Result

Table 2. Coefficient Determination result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimates
1	0.876	0.767	0.761	1.33342

Samudera, M., et.al., The 5th Advances in Business Research Conference (ABRIC2023Langkawi), Langkawi Island, Malaysia, 27 Sep 2023, E-BPJ, Mar, 9(S.I.19) 2024 (pp.67-72)

Dependent variable: intention to play
Predictors: (Constant) Flow, Hedonic Motivation, Effort Expectancy, Price value, Social Influence, Habit
(Source: SPSS output)

Based on Table 2, it is seen that the adjusted value of R^2 in this study is 0.761. In other words, the 76.1% variance in intention to play online games can be explained by the variables EE, SI, HM, PV, Habit, and Flow.

Table 3. F Test (ANOVA) result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1253.797	6	208.966	117.529	0.000
	Residual	380.493	214	1.778		
	Total	1634.290	220			

Dependent variable: intention to play
Predictors: (Constant) Flow, Hedonic Motivation, Effort Expectancy, Price value, Social Influence, Habit
(Source: SPSS Data)

The F-test tests the null hypothesis for all model variables in regression analysis. Table 3 shows that the significance value (Sig.) or the probability value of Anova output is 0,000. Thus, the independent variables of EE, SI, HM, PV, Habit, and Flow simultaneously influence the Intention to Play because it has met the minimum value significance < 0.05 criteria.

Table 4. T Test result

Model		Unstandardized Coefficients		Standardized Coefficients			
		B	Std. Error	B	t	Sig.	Decision
1	(Constant)	0.571	1.032		0.553	0.581	
	EE	0.000	0.060	0.000	0.004	0.996	H1 Rejected
	SI	0.016	0.062	0.016	0.266	0.791	H2 Rejected
	HM	0.262	0.055	0.226	4.736	0.000	H3 Supported
	PV	0.290	0.054	0.309	5.402	0.000	H4 Supported
	H	0.268	0.067	0.290	4.009	0.000	H5 Supported
	F	0.146	0.058	0.149	2.150	0.033	H6 Supported

(Source: SPSS Data)

The regression T-test is evaluated by comparing the significance and t-values. The null hypothesis is rejected if the significance criterion is below 0.05 and the t-value is more significant than 1.651. Table 4 shows that EE and SI are significant > 0.05. This result suggests that EE and SI do not affect online gameplay. The variables HM, PV, habit, and flow have t values over 1,651 and rate sig <0.05. HM, PV, habit, and flow positively affect online gaming intention. Thus, this study's final regression equation is:

$$Y = 0{,}571 + 0{,}262\ HM + 0{,}290\ PV + 0{,}268\ H + 0{,}146\ F + 1{,}032$$

5.0 Discussion and Conclusion

The study examines factors that affect the intention to play online games, especially in the MMORPG genre. The study uses multivariate linear regression analysis to identify and evaluate the effect of independent variables such as EE, SI, HM, PV, habit, and flow on the intention to play online games.

The hypothesis test indicated that EE does not affect play intention. Intention to use mobile apps is unaffected by EE. This finding is consistent with research by Fadzil (2017) on Malayan student mobile app users, demonstrating that respondents' propensity to use mobile applications is unaffected by even the slightest effort or difficulty. In this survey, respondents said game ease did not impact their propensity to play MMORPGs. The AI guides players through maps and quests to advance in this MMORPG game, making it easy. Most responders are also MMORPG veterans so that they can play and appreciate the game flow.

This hypothesis test reveals that SI does not alter MMORPG play intention. Singh and Srivastava (2018) found that SI did not affect Indian mobile banking users' intentions. Mobile banking simplifies daily Internet payments. In this survey, respondents said their MMORPG playing plans were unaffected by others. Instead of meeting to play the MMORPG game, players would make new friends after downloading and playing it. Then, they will make MMORPG pals online. Thus, the responder believed their closest friends did not impact this MMORPG.

This study also shows that Hedonic Motivation affects MMORPG's Intention to Play. Merikivi et al. (2017) discovered that pleasure, a facet of Hedonic motivation, influence online game flow, aesthetic design, system renewal, and difficulties. Thus, hedonic incentive strongly influences people's intention to play MMORPGs, emphasizing the need for fun and engaging components in online game design.

The hypothesis testing shows that PV affects MMORPG's Intention to Play. The findings confirm Jang's (2020) research on e-sports uptake. According to the study, customers would be more interested in playing a matching game if they thought they got value from

buying in-game things. Nikolopoulou et al. (2021) revealed a favorable association between PV and instructors' decisions to use mobile Internet in their instruction. Higher prices mean better Internet quality.

The hypothesis testing reveals that habit impacts MMORPG Intention to Play. The findings support Jang (2020), who observed that most new gamers felt challenged to finish their daily gaming tasks. Due to curiosity and spiritual difficulties, they would play games naturally. Ong et al. (2023) examined how Habit affects online gaming. In this aspect, Habit greatly influences consumer online mobile gaming. After developing habits, people will rely on themselves.

Finally, flow affects online game Intention to Play. The results support Jang & Byon's (2020) and Shin's (2010) findings that flowing experiences motivate players to play online games and feel immersed in them. Flow strongly influences customers' willingness and intention to adapt and play online virtual games.

6.0 Conclusion& Recommendations.

This study demonstrated that HM, PV, habit, and flow impact online gaming intention. These factors affect customers' value perception, habits, and immersive online games—these outcomes impact game creators and marketers. To retain customers, game marketers and developers should optimize online game prices. They should also set goals and promote behaviors to keep players playing. Game marketers and developers should emphasize smooth and engaging player experiences. Creating an immersive play is possible with challenging, intriguing, and engaging game design. Game marketers and developers should consider gender's impact on player objectives. Understanding gender's moderating influence helps game marketers and developers meet the needs and preferences of male and female (majority of this research respondent) players, increasing their inclination to play. The research's limitations is that it focused mostly on the intention to play online games rather than actual gameplay behavior that would lead to in-app payments for game creators. Furthermore, the study focuses solely on the MMORPG genre.

Acknowledgments

We acknowledge LPPM Universitas Multimedia Nusantara for financing the research.

References

Amalia, E. I. (2021). *Niko Partners: Kebanyakan Gamers di Asia Tenggara Suka Game Multiplayer*. Dailysocial. Id. https://hybrid.co.id/post/niko-partners-kebanyakan-gamers-di-asia-tenggara-suka-game-multiplayer

Bower, M., & Jong, M. S. Y. (2020). Immersive virtual reality in education. *British Journal of Educational Technology*, *51*(6), 1981–1990. https://doi.org/10.1111/bjet.13038

Cai, L., Yuen, K. F., Xie, D., Fang, M., & Wang, X. (2021). Consumer's usage of logistics technologies: Integrating habit into the unified theory of acceptance and use of technology. *Technology in Society*, *67*(November). https://doi.org/10.1016/j.techsoc.2021.101789

Chang, T.-S., Hsiao, W.-H., Chen, T.-C., & Ganbold, E. (2019). Hedonic, Utilitarian, and Social Motivations for Consumers Purchase Mobile in-App Content Behavior. *International Journal of Innovation in Management*, *7*(1), 1–7.

Chen, Y. M., Hsu, T. H., & Lu, Y. J. (2018). Impact of flow on mobile shopping intention. *Journal of Retailing and Consumer Services*, *41*(March), 281–287. https://doi.org/10.1016/j.jretconser.2017.04.004

Danka, I. (2020). Motivation by gamification: Adapting motivational tools of massively multiplayer online role-playing games (MMORPGs) for peer-to-peer assessment in connectivist massive open online courses (cMOOCs). *International Review of Education*, *66*(1), 75–92. https://doi.org/10.1007/s11159-020-09821-6

Ericska, R. A., Nelloh, L. A. M., & Pratama, S. (2021). Purchase intention and behavioral use of freemium mobile games during the Covid-19 outbreak in Indonesia. *Procedia Computer Science*, *197*(2021), 403–409. https://doi.org/10.1016/j.procs.2021.12.156

Fadzil, F. H. (2017). A Study on Factors Affecting the Behavioral Intention to Use Mobile Apps in Malaysia. *SSRN Electronic Journal*. https://ssrn.com/abstract=3090753 Faroqi, A., Apol Pribadi, S., & Tri Lathif, M. S. (2020). Exploring Online Shoppers' Acceptance of Electronic Marketplace Using UTAUT and the Flow Theory. *Journal of Physics: Conference Series*, *1569*(2). https://doi.org/10.1088/1742-6596/1569/2/022051

Gong, X., Zhang, K. Z. K., Cheung, C. M. K., Chen, C., & Lee, M. K. O. (2019). Alone or together? Exploring the role of desire for online group gaming in players' social game addiction. *Information and Management*, *56*(6), 0–1. https://doi.org/10.1016/j.im.2019.01.001

Hallmann, K., & Giel, T. (2018). eSports – Competitive sports or recreational activity? *Sport Management Review*, *21*(1), 14–20. https://doi.org/10.1016/j.smr.2017.07.011

Jang, W. (William), & Byon, K. K. (2020). Antecedents and consequences associated with esports gameplay. *International Journal of Sports Marketing and Sponsorship*, *21*(1), 1–22. https://doi.org/10.1108/IJSMS-01-2019-0013

Loeis, M., Hubeis, M., Suroso, A. I., & Dirdjosuparto, S. (2022). A Strategy for reducing the skill gap for the game development sector of the Indonesia creative industries. *Decision Science Letter*, *11*(2022), 105–112. https://doi.org/10.5267/dsl.2022.10.003

Loisa, J., & Purwanto, E. (2020). The Intention and Use Behaviour of the Mobile Banking System in indonesia: UTAUT Model. *Technology Reports of Kansai University*, *62*(6), 2757–2767. https://www.researchgate.net/publication/343230847

Lytvyn, V., Vysotska, V., Shatskykh, V., Kohut, I., Petruchenko, O., Dzyubyk, L., Bobrivetc, V., Panasyuk, V., Sachenko, S., & Komar, M. (2019). Design of a recommendation system based on Collaborative Filtering and machine learning considering the user's personal needs. *Eastern-European Journal of Enterprise Technologies*, *4*(2–100), 6–28. https://doi.org/10.15587/1729-4061.2019.175507

Malhotra, N. K. (2020). *Marketing research : an applied orientation seventh edition*. Pearson Education Limited.

Malhotra, N., Nunan, D., & Birks, D. (2017). *Marketing Research: An Applied Approach* (5th Editio). Pearson.

Merhi, M. I. (2016). Towards a framework for online game adoption. *Computers in Human Behavior*, pp. *60*, 253–263. https://doi.org/10.1016/j.chb.2016.02.072 Merikivi, J., Tuunainen, V., & Nguyen, D. (2017). What makes continued mobile gaming enjoyable? *Computers in Human Behavior*, *68*, 411–421. https://doi.org/10.1016/j.chb.2016.11.070

Nikolopoulou, K., Gialamas, V., & Lavidas, K. (2021). Habit, hedonic motivation, performance expectancy, and technological pedagogical knowledge affect teachers' intention to use mobile Internet. *Computers and Education Open*, *2*(July), 100041. https://doi.org/10.1016/j.caeo.2021.100041

Ong, A. K. S., Prasetyo, Y. T., Robas, K. P. E., Persada, S. F., Nadlifatin, R., Matillano, J. S. A., Macababbad, D. C. B., Pabustan, J. R., & Taningco, K. A. C. (2023). Determination of Factors Influencing the Behavioral Intention to Play "Mobile Legends: Bang-Bang" during the COVID-19 Pandemic: Integrating UTAUT2 and System Usability Scale for a Sustainable E-Sport Business. *Sustainability (Switzerland)*, *15*(4), 1–26. https://doi.org/10.3390/su15043170

Ramírez-Correa, P., Rondán-Cataluña, F. J., Arenas-Gaitán, J., & Martín-Velicia, F. (2019). Analyzing the acceptance of online games in mobile devices: An application of UTAUT2. *Journal of Retailing and Consumer Services*, *50*(December 2018), 85–93. https://doi.org/10.1016/j.jretconser.2019.04.018

Shin, D. H. (2010). The dynamic user activities in massive multiplayer online role-playing games. *International Journal of Human-Computer Interaction*, *26*(4), 317–344. https://doi.org/10.1080/10447310903575473

Singh, S., & Srivastava, R. . (2018). Predicting the Intention to Use Mobile Banking in India Introduction. *International Journal of Bank Marketing*, *36*(2), 357–378. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly: Management Information Systems*, *27*(3), 425–478. https://doi.org/10.2307/30036540

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. *MIS Quarterly: Management Information Systems*, *36*(1), 157–178. https://doi.org/10.2307/41410412

Vieira, V., Santini, F. O., & Araujo, C. F. (2018). A meta-analytic review of hedonic and utilitarian shopping values. *Journal of Consumer Marketing*, *35*(4), 426–437. https://doi.org/10.1108/JCM-08-2016-1914

Wang, H., Zhang, Z., Khalid, M. N. A., Iida, H., & Li, K. (2021). MMORPG evolution analysis from explorer and achiever perspectives: A case study using the final fantasy series. *Information (Switzerland)*, *12*(6), 1–18. https://doi.org/10.3390/info12060229

Zhao, Y., & Bacao, F. (2020). Theoretical Development: Extending the Flow Theory with Variables from the UTAUT2 Model. *2020 IEEE 6th International Conference on Computer and Communications, ICCC 2020*, pp. 2427–2431. https://doi.org/10.1109/ICCC51575.2020.9345049