

Factors Influencing Intention to Return to Watch Indonesian Films on Online Streaming Services

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Abstract. The purpose of this study is to identify the key factors within the Theory of Planned Behavior that significantly impact the intention to return for watching Indonesian films on online streaming services. Additionally, the research seeks to assess the influence of perceived usefulness from the Technology Acceptance Model, electronic Word of Mouth (EWOM), and the audience's level of involvement on this intention. This study utilized an online questionnaire distributed via social networks, securing a sample of 375 individuals aged 17 and above who have watched Indonesian films on online streaming services. The collected data underwent analysis through a partial least squares structural equation model (PLS-SEM) employing SmartPLS 3 software. The study's results reveal that the intention to return for watching Indonesian films on online streaming services is influenced by perceived behavioral control, subjective norms, and involvement. These factors collectively play a crucial role in shaping viewers' decisions to return to watch Indonesian films on digital platforms.

Keywords: online streaming service, Indonesian film, Theory of Planned Behavior, Technology Acceptance Model, electronic word-of-mouth, involvement.

1 Introduction

The film industry involves various roles and entities contributing to the creation and distribution of movies. The filmmaking process relies on skilled and creative teamwork to effectively communicate messages and stories to the audience through audiovisual mediums. Film production studios have a range of distribution channels, including cinemas, home video, cable TV, and digital platforms on communication devices. Different parties and decision-makers are involved in each option. The choice of a film often depends on its genre, a significant factor in viewers' decisions. In 2018, Indonesian cinema was predominantly characterized by drama, followed by horror, action, and comedy [1]. Consumers select genres based on their emotions or strong desires, influenced by their current mood. Curiosity also plays a role; someone intrigued by a widely discussed or positively reviewed story may watch it regardless of their usual genre preference. One of the most commonly accepted beliefs about film audiences is that their film selection is heavily influenced by interpersonal communication [2]. Interpersonal communication, including *Word of Mouth* (WOM) or recommendations from others, can have a significant impact in influencing viewers' decisions to watch a movie.

This research seeks to deepen the understanding of Word-of-Mouth (WOM) and electronic Word-of-Mouth (EWOM) in the specific context of Indonesian films and online streaming. Notably, the Theory of Planned Behavior (TPB) plays a pivotal role in substantiating certain models proposed by researchers. Additionally, the study incorporates the Technology Acceptance Model (TAM) developed by Davis in 1986. TAM highlights perceived usefulness (PU) and perceived ease of use (PEU) as key factors influencing individual attitudes and behaviours in the context of technology adoption [3]. This investigation particularly emphasizes the aspect of perceived usefulness. By integrating this concept, the research illuminated the comprehensive factors that influence audience behaviour within the framework of online streaming services.

2 Literature review

2.1 Electronic Word of Mouth

After choosing a product, consumers assess the variance between their pre-purchase expectations and the actual value of the product. With the rise of internet technology and social media, electronic word of mouth (EWOM) has become a crucial aspect of product marketing. EWOM involves sharing information and recommendations about a product or service online, including social media, forums, blogs, and user reviews. In today's marketing landscape, strategies involving EWOM, such as influencer collaborations, user reviews, and social media campaigns, are significant. Companies leverage these approaches to reach a broader audience, fostering consumer trust and creating a positive buzz around their products. In the context of word of mouth (WOM), a positive brand image plays a vital role. Consumers with positive views of a brand often indirectly recommend the product through everyday conversations, user reviews, or social media. Recommendations from satisfied consumers wield significant influence over others' perceptions and purchasing decisions. The literature on consumer satisfaction and service quality affirms that disparities between expectations and actual values significantly impact consumer satisfaction [4]. Secondly, prospect theory officially introduces loss aversion [5].

H1: EWOM has a positive effect on the intention to return to watch Indonesian films on online streaming services

2.2 Perceived Usefulness from Technology Acceptance Model

The Technology Acceptance Model (TAM) was developed to address the shortcomings of the Theory Reasoned Action (TRA) [6]–[9]. TRA is widely used to explain various human behaviors, particularly those related to social and psychological issues. The theory suggests that a person's beliefs, attitudes, and intentions can be combined to predict their behavior. TAM builds on this concept but also considers how a person's reactions and perceptions affect their attitude and behavior. It proposes that the perception of ease of use reflects how individuals see technology as user-friendly, while the perception of usability reflects how individuals view technology as helpful in achieving their goals. These perceptions shape individuals' attitudes toward technology, influencing their intention to adopt and use it. TAM acknowledges external factors like social influences and environmental conditions that can impact individual attitudes and intentions toward technology. Therefore, TAM provides a more comprehensive framework

for understanding technology acceptance. The definition of perceived usefulness is the degree of confidence a person has that the use of a particular system will improve its performance [3]. Users who perceive technology as easier to use are more likely to perceive it as useful. Similarly, users who recognize the usefulness of online streaming services are more likely to exhibit positive intentions to use them if they perceive them as easy to use [10]. Specifically, within the realm of online streaming services, users who perceive the technology as easy to use are also inclined to perceive it as useful. Therefore, the perception of online streaming services being easy to use can significantly influence users' perception of its usability.

H2: Perceived usefulness has a positive effect on the intention to return to watch Indonesian films on online streaming services

2.3 Theory Planned Behavior

The Theory of Planned Behavior posits that an individual's attitude toward a behavior is shaped by three main factors: attitude, subjective norms, and perceived behavioral control. In this context, the belief perspective involves amalgamating various characteristics and attributes of information to form the intention for a particular behavior. While emphasizing the significance of attitude in predicting behavior, this theory also acknowledges the importance of considering subjective norms and perceived behavioral control. Integrating this perspective within the Theory of Planned Behavior provides a more comprehensive understanding of the factors influencing consumer intentions and behavior, particularly in the context of return to watching Indonesian films on online streaming services.

2.4 Subjective Norms

According to [7], subjective norm is a term that refers to normative beliefs based on benefits, which are often referred to as normative beliefs. A person is more likely to desire an object or behavior if they are influenced by those around them to engage in it, or if they perceive that the environment or people around them support their actions. When consumers engage in activities like buying or using products, they face decisions. This process considers both internal factors, such as personal preferences, values, and needs, and external factors that can impact the final decision. Internal factors include price, quality, brand, lifestyle, and personal preference. External factors involve influence from others, either through direct word-of-mouth or online reviews and recommendations. Before making a decision, consumers often seek information and reviews about a product or service, which can shape their perceptions and provide helpful insights.

H3: Subjective norms have a positive effect on the intention to return to watch Indonesian films on online streaming services

2.5 Perceived Behavioral Control

To address the shortcomings of the TRA theory, especially in situations where voluntary control is significant, [7] introduced the concept of perceived behavioral control. This addition gave rise to the Theory of Planned Behavior (TPB). In predicting the intention to return to watch Indonesian films on online streaming services, the TPB incorporates behavioral control as a crucial element. Behavioral control, as defined by [7], refers to a person's confidence in executing a preferred behavior. It assesses the level of control an individual has over a behavior,

considering a continuum from actions that are easily accomplished with sufficient effort and resources.

H4: Perceived behavioral control has a positive effect on the intention to return to watch Indonesian films on online streaming services

2.6 Attitude

An individual's attitude describes how they see or perceive things [9]; in this study, attitude refers to people who have a liking attitude to watch Indonesian films on online streaming services. In the context of this study, attitudes towards films have a direct and significant influence on the intention to watch films [11]. In the context of this study, attitude refers to individual attitudes towards return to watch Indonesian films on online streaming services. This attitude reflects an individual's preference towards watching the film, which can be either a positive attitude (like) or a negative attitude (dislike).

H5: Attitude has a positive effect on the intention to return to watch Indonesian films on online streaming services

2.7 Involvement

Involvement is a deep emotional connection driven by personal motivation, either because the product aligns with one's self-image or brings joy in thinking about its use [12]. Past studies on traditional media products indicate that engagement can impact purchasing behavior [13]. Specifically, highly involved movie consumers are more likely to discern file quality and prefer copyrighted files over pirated ones [14]. Quality and experience play a significant role in their film preferences, with a focus on superior visuals and audio for maximum satisfaction. Pirated files often lack quality, with lower resolution and unclear sound. Consumers deeply involved in film appreciate artwork and the film production process. They value copyright, choosing legitimate content to support the film industry and ensure fair compensation for filmmakers. Highly involved movie consumers also understand the legal and ethical aspects of content acquisition, recognizing the harm of pirated files to creators and the industry. Consequently, they lean towards choosing copyrighted files as a more ethical and lawful option. In summary, the greater consumers' involvement with the film category, the higher they value its monetary worth.

H6: Involvement has a positive effect on the intention to return to watch Indonesian films on online streaming services

2.8 Intention to Use

According to [3], the "Intention to Use" refers to a person's inclination to continue using a technology. The attitude towards a technology serves as a predictor of its usage by an individual. This intention reflects an individual's response to a product or service, representing their decision or inclination to adopt and utilize the product or service in the future. The decision can be influenced by the perceived benefits, usefulness, quality, and value of the product or service. A person's behavior in using something can be conscious or involuntary, voluntary or involuntary, and may or may not align with social norms. Society's accepted standards regulate this behavior. In this study, the "Intention to Use" reflects individuals' desire or intention to return to watch Indonesian films on online streaming services. Measurement can focus on how

strongly individuals intend to engage in this behavior, assessed through a scale or evaluation of their level of desire to return to watch Indonesian films on online streaming services.

Figure 1 shows the proposed study model

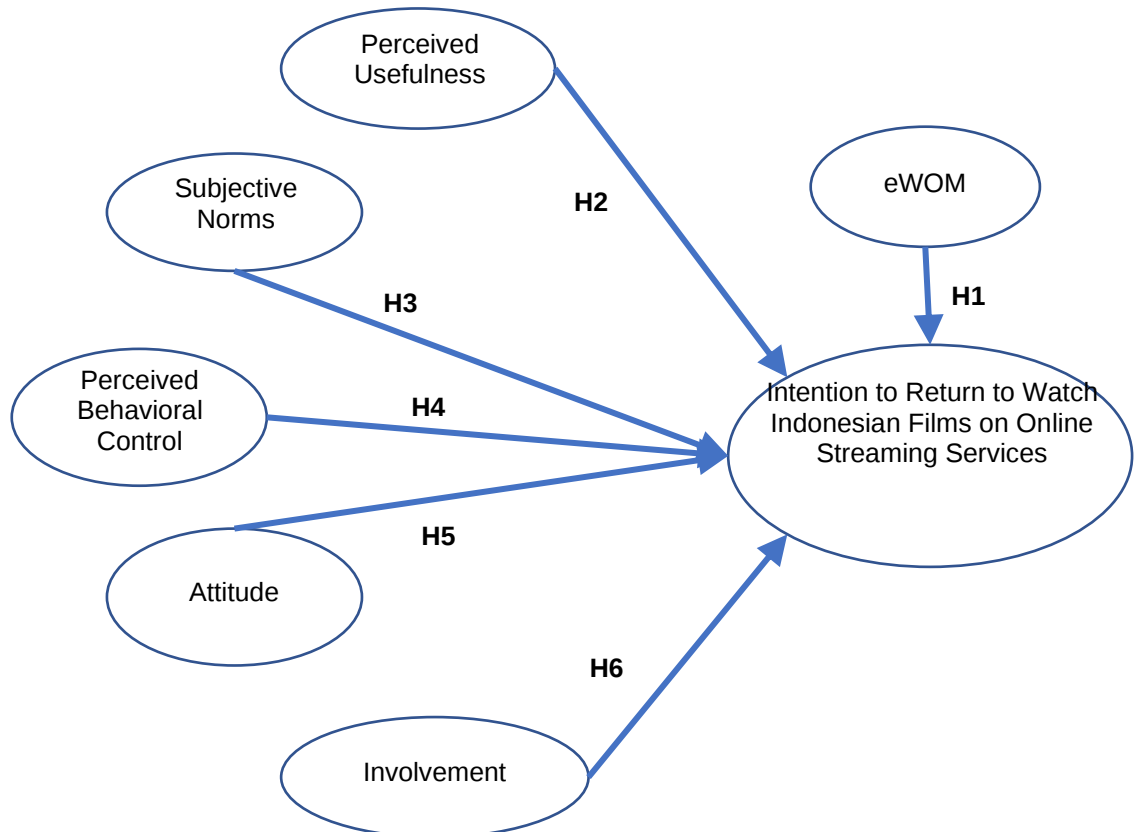


Fig. 1. Study Model. Source: own elaboration

3 Methodology

The researcher utilized purposive sampling, selecting respondents who were older than 17 years old and had watched Indonesian films within the last three months prior to the research. A total of 375 respondents were considered adequate as they surpassed the minimum sample size recommended by [15] at a ratio of 5:1, which necessitates five times the number of parameters. Given the presence of 40 questions in this research, a minimum sample of 200 respondents was required.

To ensure the validity of the research content, we modified the indicators from previous studies to suit the context of this research. Indicators were used for EWOM (4 items), PU (6 items), SN (7 items), PBC (4 items), ATT (6 items), INV (8 items), and INT (5 items). A five-point Likert

scale ranging from 1 to 5 was used to measure all items. A pre-test involving 50 respondents was conducted to validate the instrument.

4 Findings and Discussion

4.1 Respondent Profile Analysis

The majority of respondents are women with a percentage of 63.5% compared to male respondents who are 36.5%. The age group of 26-35 years has the highest number of respondents, reaching 194 people (52%), outperforming other age groups. It is followed by the age group of 17-25 years (37%), the age group of 36-45 years (11%), and the age group of 46-55 (0%), respectively. There were no respondents over 55 years who filled out the questionnaire for this study. The type of work respondents who filled out the most research survey were private employees (41%). Then the student work group is the second largest respondent (17%), followed by the government employee (13%), employees of state-owned enterprises (12%), entrepreneurs (12%), professionals (3%), housewives (1%) and others (1%). the highest level of education that has been completed by research respondents shows that S1/D4 (undergraduate) is the largest group overall, with a total of 193 people or equivalent to 51% of the total research participants. The second rank is held by respondents who have just completed their studies in high school or equivalent, as many as 87 people or 23% of the total research participants. The distribution of domicile of research respondents, involving 26 provinces out of a total of 34 provinces throughout Indonesia. The province with the highest number of respondents was West Java, followed by DKI Jakarta, East Java, Central Java, Banten, East Kalimantan, Lampung, West Sumatra, Bali, DI Yogyakarta, West Kalimantan, NTB, Riau, South Sumatra, Jambi, Riau Islands, Maluku, North Sulawesi, Bengkulu, South Kalimantan, Central Kalimantan, NAD, West Papua, and South Sulawesi respectively. Furthermore, shows the total expenditure per respondent per month. The group with expenditures in the range of Rp2,000,000 to Rp5,000,000 is the most (46%). Followed by the expenditure group of IDR 1,000,000-IDR 2,000,000 (23%), then the group of IDR 5,000,000-IDR 9,000,000 (16%). Furthermore, there is a group with an expenditure range below IDR 1,000,000 (12%), and finally a group with expenditure per respondent above IDR 9,000,000 (3%).

4.2 Measurement Model Analysis

The highest loading factor value is in the INT3 indicator with a score of 0.841 with the statement "If I use online streaming services today, I prefer to watch Indonesian movies". Meanwhile, there are several indicators that have a loading factor below 0.5 including PU3, PU5, PBC2, and INT1 so that these indicators are not included in the test.

4.3 Hypothesis Test Analysis

There are six hypotheses that need to be analyzed in the next stage related to the output path coefficient to provide information about the relationship between constructs and their significance to the model. The path coefficient test must consider the limitations in accepting or rejecting the hypothesis in the model. The significance level or critical value used is (α) of 5%, and t-statistics of 1.96. Therefore, the applicable criterion is if the t-statistic > 1.96 , then the hypothesis is acceptable; And if the t-statistic < 1.96 , then the hypothesis is rejected.

H1: EWOM has a positive effect on the intention to return to watch Indonesian films on online streaming services

The relationship between Electronic Word of Mouth (EWOM) and Intention (INT) variables is indicated by a path coefficient value of 0.063. Analysis results revealed a t-statistic value of 1.057, which is below 1.96, and a p-value of 0.145, exceeding 0.05. Hence, it can be concluded that the relationship between EWOM and the intention to return to watch Indonesian films on online streaming services lacks significant impact.. Thus, Hypothesis 1 (H1) **rejected**.

H2: Perceived usefulness has a positive effect on the intention to return to watch Indonesian films on online streaming services

The data processing results for Hypothesis 2 (H2) reveal a t-statistic value of 1.526, accompanied by a corresponding p-value of 0.064. Given that the p-value exceeds the threshold for statistical significance, which is 0.05, it indicates that the relationship between perceived usefulness and the intention to return to watch Indonesian films on online streaming services is not statistically significant. Therefore, H2 is **rejected**.

H3: Subjective norms have a positive effect on the intention to return to watch Indonesian films on online streaming services

The relationship between subjective norms and intention variables is characterized by a path coefficient value of 0.163. Analysis results revealed a t-statistic value of 2.053, exceeding 1.96, and a p-value of 0.02, smaller than 0.05. Hence, it can be concluded that the relationship between subjective norms and the intention to return to watch Indonesian films on online streaming services has a significant impact. Thus, H3 is **supported**.

H4: Perceived behavioral control has a positive effect on the intention to return to watch Indonesian films on online streaming services

The relationship between perceived behavioral control variables and the intention to return to watch Indonesian films on online streaming services is characterized by a path coefficient value of 0.123. Analysis results revealed a t-statistic value of 2.039, exceeding 1.96, and a p-value of 0.021, smaller than 0.05. Therefore, it can be concluded that the relationship between perceived behavioral control and the intention to return to watch Indonesian films on online streaming services has a significant impact. Thus, H4 is **supported**.

H5: Attitude has a positive effect on the intention to return to watch Indonesian films on online streaming services

The data processing results for Hypothesis 5 indicate a path coefficient value of 0.013, a t-statistic of 0.306, which is below 1.96, and a p-value of 0.38, exceeding 0.05. These findings suggest that the relationship between perceived usefulness and the intention to return to watch Indonesian films on online streaming services is not statistically significant. Therefore, H5 is **rejected**.

H6: Involvement has a positive effect on the intention to return to watch Indonesian films on online streaming services

The relationship between the involvement variable and the intention to return to watch Indonesian films on online streaming services has a path coefficient value of 0.581. The results of the analysis showed a t-statistic value of 9.784, which is greater than 1.96, and a p-value of 0, which is smaller than 0.05. Therefore, it can be concluded that the relationship between

involvement and the intention to return to watch Indonesian films on online streaming services has a significant impact. Thus, H6 is **supported**.

Figure 2 shows the results of the structural model.

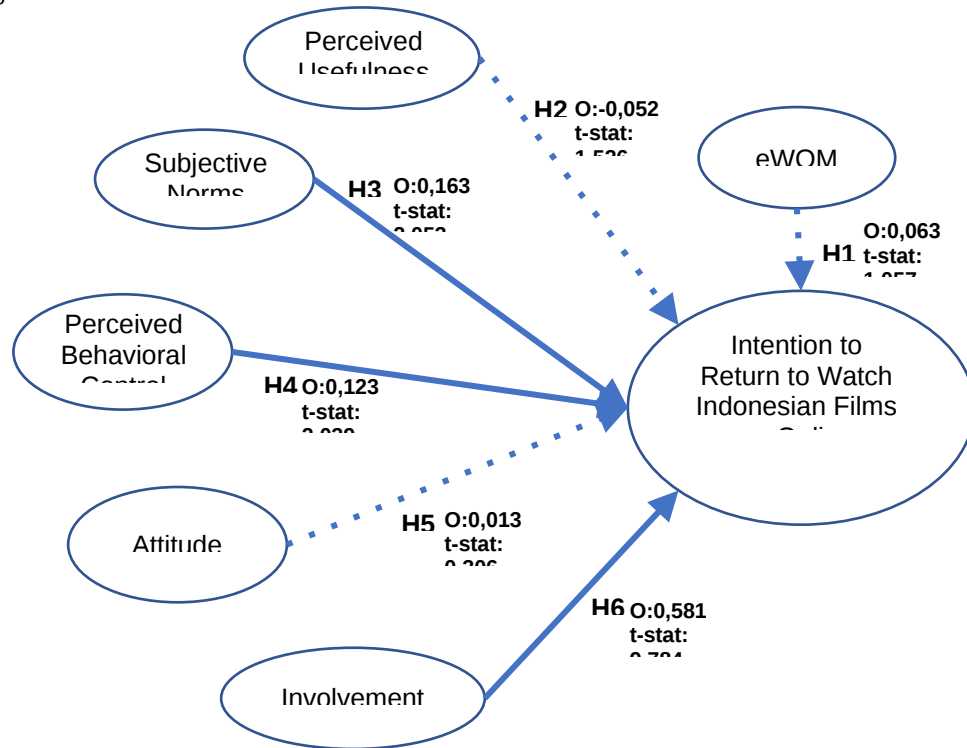


Fig. 2. Results of the Structural Model. Source: own elaboration.

4.4 The Effect of Electronic Word-of-Mouth on Intention (Hypothesis 1)

This study mirrors previous findings, such as in [16] study, which also showed that Electronic Word of Mouth (EWOM) was not significant in influencing viewing intentions. However, contradictions with the research of [17] highlight the complexity of the impact of EWOM that can vary. Distrust of EWOM's sources and the unique characteristics of the Indonesian film market may moderate its effects. To understand more, it is necessary to conduct an in-depth analysis of the content and credibility of EWOM, as well as the dynamics of audience preferences in the context of Indonesian films.

4.5 The Effect of Perceived Usefulness on Intention (Hypothesis 2)

Findings that are in line with [18] research show that perceived usefulness does not have a significant direct influence on viewing intentions. However, the perspective provided by [19] suggests that the indirect impact of perceived usefulness through attitude may exert a more

significant influence. As such, it should be noted that although there is no direct relationship, perceptions of the usefulness of the service may have an impact through shaping audience attitudes. Further digging into attitude's role as a mediator can provide deeper insight into the complexity of the factors that influence viewers' decisions on online streaming services.

4.6 The Effect of Subjective Norms on Intention (Hypothesis 3)

This study also confirms [20] research which shows that subjective norms have a significant influence on viewing intentions. Results confirming the positive impact of subjective norms on intent to use online streaming services are also consistent with previous research findings [19]–[21]. Therefore, it can be concluded that users of online streaming services tend to rely on reference groups and are influenced by their reference opinions about online streaming services. The implications of these findings could provide a basis for service providers to understand the importance of reference group perceptions in shaping audience intentions on online streaming platforms.

4.7 The Effect of Perceived Behavioral Control on Intention (Hypothesis 4)

The findings are in line with [15] which confirms that perceived behavioral control significantly affects film viewing intentions. The implication is that perceived behavioral control has a dominant influence on movie-watching intent, providing further understanding of the factors that motivate audiences to use online streaming services. These results can be a valuable guide for service providers to improve user experience and strengthen perceived behavioral control factors in order to increase audience intentions in enjoying Indonesian film content on online streaming services.

4.8 The Effect of Attitude on Intention (Hypothesis 5)

This study shows findings that contradict previous studies such as [22] which found attitude has a significant effect on intentions. The difference in results can be understood if there is variation in the quality or relevance of the content offered by the online streaming service. Having access to different types of content also creates challenges, where other factors can become more dominant in influencing viewing intentions. Thus, the complexity of audience dynamics and content characteristics may be a major factor in why attitudes do not significantly affect the intention to watch Indonesian films on online streaming services.

4.9 The Effect of Involvement on Intention (Hypothesis 6)

The findings of this study support the results of [16] which found that the level of engagement (involvement) positively affects film viewing intentions. These results reflect the importance of audience engagement in creating a bond with the film's characters and storyline. When the audience feels engaged and connected to the experience gained from the film, the intention to watch the film in the future can increase significantly. This shows that creating content that is able to attract attention and engage with the audience can be an effective strategy in increasing the intention to watch Indonesian films on online streaming services.

5 Conclusion

This study validates the reliability of the Planned Behavior Theory (TPB) in understanding factors influencing individual behavioral intentions, focusing on perceived behavioral control, subjective norms, and attitude. Perceived behavioral control significantly impacts the intention to return to watch Indonesian films through online streaming services, emphasizing the importance of strategies enhancing individuals' self-control in this context. Subjective norms, reflecting social influences, also play a crucial role in shaping the intention to watch Indonesian films online. Notably, previous experience in online streaming positively influences self-control in the decision to return to watch Indonesian films, highlighting the impact of past experiences on future behavioral choices. The findings support the relevance of TPB in predicting behavioral intentions related to online movie watching. Surprisingly, attitude does not significantly influence the intention to return to watch, challenging traditional TPB assumptions. Additionally, integrating the Technology Acceptance Model (TAM), the study reveals that perceived usefulness in the context of online streaming services has less significance in stimulating the intention to return to watch Indonesian films. The study underscores the complexity of consumer behavior in adopting online technologies. Electronic Word-of-Mouth (EWOM) surprisingly does not significantly impact the intention to return to watch, contrary to its presumed influence. Conversely, the positive effect of involvement on the intention to return to watch suggests that emotional and cognitive engagement significantly shapes consumer intent, indicating a deeper personal connection and satisfaction with the film.

References

- [1] Otoritas Jasa Keuangan (OJK), "DAFTAR EFEK SYARIAH (DES) Per Juni 2021 Perkembangan Saham Syariah," *Otoritas Jasa Keuangan*, pp. 1–2, 2021, [Online]. Available: <https://www.ojk.go.id/id/kanal/syariah/data-dan-statistik/saham-syariah/Pages/Statistik-Saham-Syariah---Juni-2021.aspx>
- [2] R. J. Faber and T. C. O'Guinn, "Effect of Media Advertising and other Sources on Movie Selection," *Journal. Q.*, vol. 61, no. 2, pp. 371–377, doi: 10.1177/107769908406100219.
- [3] F. D. Davis, *A technology acceptance model for empirically testing new end-user information systems. Dissertation*. Cambridge: Massachusetts Institute of Technology.
- [4] R. L. Oliver, "Satisfaction: A Behavioral Perspective on the Consumer, McGraw-Hill." New York, NY.
- [5] D. Kahneman and A. Tversky, "Prospect theory: an analysis of decision under risk," *Econom. J. Econom. Soc.*, vol. 47, no. 2, pp. 263–292.
- [6] I. Ajzen, "From intentions to action: a theory of planned behavior," *Action Control*, pp. 11–39, doi: 10.1007/978-3-642-69746-3_2.
- [7] I. Ajzen, "The theory of planned behavior, *Organizational Behavior and Human Decision Processes*," vol. 50, no. 2.
- [8] I. Ajzen and M. Fishbein, *Understanding Attitudes and Predicting Social Behaviour*. Englewood Cliffs, NJ: PrenticeHall.
- [9] M. Fishbein and I. Ajzen, *Belief, Attitude, Intentions, and Behavior: An Introduction to Theory and Research*. Boston, MA: Addison-Wisley.
- [10] C. Porter and N. Donthu, "Using the technology acceptance model to explain how attitudes determine internet usage: the role of perceived access barriers and demographics," *J. Bus. Res.*, vol. 59, no. 9, pp. 999–1007, doi: 10.1016/j.jbusres.2006.06.003.
- [11] O. Vergara *et al.*, "Marketing Responsable: Ventaja Distintiva en la Cadena de Valor de las Organizaciones," *J. Manag. Bus. Stud*, vol. 1, no. 16, pp. 44–74, doi: 10.3390/su13168724.
- [12] R. A. Higue and L. F. Feick, "Enduring involvement: Conceptual and measurement issues," *Adv.*

Consum. Res., vol. 16, no. 1, pp. 690–696.

- [13] M. J. Pucely, R. Mizerski, and P. Perrewe, “A comparison of involvement measures for the purchase and consumption of pre-recorded music,” *Adv. Consum. Res.*, vol. 15, no. 1, pp. 37–42.
- [14] B. Culiberg, M. K. Koklic, I. Vida, and D. Bajde, “Examining the effects of utilities and involvement on intentions to engage in digital piracy,” *Comput. Human Behav.*, vol. 61, pp. 146–154.
- [15] P. M. Bentler and C. P. Chou, “Practical issues in structural modeling,” *Sociol. Methods Res.*, vol. 16, no. 1, pp. 78–117.
- [16] N. A. Ramírez-castillo *et al.*, “Sustainable moviegoer intention to attend cinemas based on the theory of planned behavior,” *Sustain. (switzerl.)*, vol. 13, no. 16, doi: 10.3390/su13168724.
- [17] E. Ulker-Demirel, A. Akyol, and G. G. Simsek, “Marketing and consumption of art products: the movie industry,” *Arts Mark.*, vol. 8, no. 1, pp. 80–98, doi: 10.1108/aam-06-2017-0011.
- [18] K. Bhatt, “Adoption of online streaming services: moderating role of personality traits,” *Int. J. Retail Distrib. Manag.*, vol. 50, no. 4, pp. 437–457, doi: 10.1108/IJRDM-08-2020-0310.
- [19] C.-L. Hsu, C.-F. Wang, and J. C.-C. Lin, “Investigating customer adoption behaviors in mobile financial services,” *Int. J. Mob. Commun.*, vol. 9, no. 5, pp. 477–494.
- [20] J. Cha, “Predictors of television and online video platform use: a coexistence model of old and newbvideo platforms,” *Telemat. Informatics*, vol. 30, no. 4, pp. 296–310,, doi: 10.1016/j.tele.2013.01.001.
- [21] H. Kim, T. T. Kim, and S. W. Shin, “Modelling roles of subjective norms and eTrust in customers’ acceptance of airline B2C eCommerce websites,” *Tour. Manag.*, vol. 30, no. 2, pp. 266–277.
- [22] C. C. Chen and Y. C. Lin, “What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement,” *Telemat. Informatics*, vol. 35, no. 1, pp. 293–303, doi: 10.1016/j.tele.2017.12.003.