

BUILDING MUSLIM CUSTOMER LOYALTY IN MARKETPLACE THROUGH MDA FRAMEWORK FOR MALE AND FEMALE MILLENNIALS

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ABSTRACT

Purpose: Gamification have been widely applied as marketing strategies for sustainable valueadded development. This research have explored the relationships between the gamification components and consumer continuous usage at marketplace's games.

Design/methodology: This research analyzed and comparing behaviour between man and woman, how game elements anda mechanics impact their gaming behavior and awaken positive feelings to increase the stickiness of the marketplace. This research model empirically surveyed 100 (each man and woman) marketplace app users, based on the Mechanics–Dynamics–Aesthetics (MDA) framework.

Findings: The results show that the self-challenge is a pre-factor that affects self-benefit, fun, and social interaction, while self-benefit and social interaction affect fun. The results also show that both men and women, they all feel that the games on the marketplace have simple playing rules, making it fun for players to play and win. The results of the hypothesis test show that (1) The MDA Framework variable partially has a positive and significant influence on the Loyalty variable for male game players in the marketplace by 25.71%, and (2) partially has a positive and significant influence on the variable Loyalty of female game players in the marketplace by 26.01%.

Practical implications: The empirical implication of this research is to determine the conditions and factors that cause man and woman become a loyal customer of a marketplace.

Originality/Value: It's not just the education or entertainment industry that must involve games in its activities, but marketplaces can also build consumer loyalty through games. The contribution of this research focuses on efforts focus on fun activities that can build customer loyalty of the market place.

Keywords: MDA Framework, Customer Loyalty, Marketplace, Millenial Generation

A. INTRODUCTION

Gamification is defined as the use of game mechanics and gaming approaches to engage audiences and help them solve problems or challenges (Humlung & Haddara, 2019). In other words, gamification in marketing is the technique of incorporating games into the sales process to provide additional value to customers and keep them engaged with the company for a long period of time through game experiences. It even makes customers repeatedly play games on the company's app; if they don't play the game, they might feel "something is missing".

The use of online games has become a phenomenon that attracts many researchers and software makers to conduct research, analyze and follow the development of gamification (Rodrigues et al., 2019). This includes marketers who have begun to implement gamification as one of the company's programs to attract consumers and bind existing consumers to continue interacting with the company which ultimately creates consumer loyalty. One of the contexts where games can be added in e-commerce features that are currently mushrooming.

Several e-commerce companies in Indonesia have implemented gamification in their applications, such as Shopee, Tokopedia, Bukalapak and many more. Shopee and Tokopedia provide rewards in the form of points that can be used for shopping, or provide points that can be used as discount vouchers.

The majority of program users become addicted to gaming because of this brief incentive offer. Some of the games in these online stores are designed to discourage users from using the marketplace app. Some people even use their apps to play games more often than browsing the marketplace for goods. According to survey findings released in January 2022 by We Are Social (*SINDOnews.Com Pages on Tuesday*, 2022), there are 205 million internet users in Indonesia. This indicates that 73.7% of Indonesians as a whole use the internet. This figure increased by more than 1% in January compared to 2021 data. This can be attributed to many people being addicted to video games in the contemporary environment-especially with the COVID-19 pandemic and the increasing number of people forced to stay at home-marketplace companies are embracing gamification. When people have more free time, they are more likely to play games.

based on the results of the study states that when a person experiences happiness-in this case, receiving a reward from a game. A large amount of dopamine is released into the player's brain, leading to persistent craving (addiction). According to research by Kianoosh Karimi and Javad Nickpayam (Kianoosh & Nickpayam, 2017), games seem to be precisely calibrated to offer incentives that capture our interest and keep us playing. Shopee and Tokopedia were the most popular e-commerce sites in Indonesia during the first quarter of 2023, with 158 million and 117 million visitors respectively. Visitors can choose from a wide selection of entertaining games in each of these markets (Databox, 2023). Shopee offers *Shopee Tanam*, *Shopee Pets*, *Shopee Tebak Kata*, *Lucky Prize*, *Shopee Capit* and *Shopee Candy*. On the other hand, Tokopedia offers the games *Panen Telur* games, *Tap-Tap kotak*, *Kuis Tokopedia*, *Top Guest*, *And Undang Untung*. Simplistically games are designed based on two things, namely all players are stereotypes that will be developed into characters in the game, and game mechanics are designed as a tool to approach game players (Taspinar et al., 2016). The player will keep playing the game if he feels that it fits him, which will make him feel happy and eventually make him want to play the same game again.

The desire to play repeatedly opens the door for loyalty behavior. When a consumer opens a marketplace application, the greater chance that a product purchase will occur in the marketplace both after and before playing games. This loyalty behavior is an asset for the company because it can increase company profits. Gamification is currently a marketing program that aims to create consumer loyalty. Having loyal customers brings many advantages, some research shows that consumer loyalty is able to rerout consumer attention from the selling price of the products offered as well as from competitors price offers (Gupta et al., 2018). In other words, loyal consumers don't particularly care about price, they consider the benefits and quality of the product more than the costs. And loyal consumers from a marketplace will often play the games provided to get vouchers or discounted prices from the points they win in games that can be used for shopping at the marketplace.

The marketplace selection behavior of men is different from women, currently many surveys show that Tokopedia visitors are dominated by male visitors, while Shopee visitors are dominated by female visitors. Based on the results of a survey conducted by the Tempo Data and Analysis Center (PDAT) by conducting a survey of 1,207 respondents of e-commerce users in several major cities in Indonesia, it shows that Shopee is ranked the most popular by women, while for men Tokopedia and Bukalapak are more popular, followed by Shopee in third place(Rizki Dwi A, 2023).

Based on the explanation above, this research focuses on how the market approach can attract and increase user loyalty by providing games that match the characteristics of the majority of users, especially women, as seen on the Shopee platform. Shopee seems to realize that most of its visitors are women, and so they provide games that are designed according to the preferences of those users. In contrast to previous studies that have emphasized game participation in the education and entertainment sectors, this study explores user participation in games on e-commerce platforms.

B. LITERATURE REVIEW

Several researches on gamification using the MDA framework method have been widely discussed in several articles and journals, some of them are Hunicke (Lu & Ho, 2020), (Ruhi, 2015), (Kusuma et al., 2018), as well as research conducted by Moniaga et al. (Moniaga JV, Astriani MS, Hambali S, Wijaya Y, 2017), which uses the MDA framework method in security studies classroom. Several previous research has focused on using the MDA framework in the world of education, online communities, social media and some research in the medical world. However, this research will focus on men and women who play games in the marketplace and are the millennial generation (gen Y). Based on the opinions of several experts and sources, the millennial generation are those who born in 1980-2000 (KPPA dan BPS, 2018). This source will be the age reference for the millennial generation used in this research.

1. Games from a sharia perspective

In the current era of information technology development, it is very difficult to avoid technological developments in various fields, one of which is online games in marketplace. According to Buya Yahya, a caretaker of the Cirebon Al-Bahjah Da'wah Development Institute, game is not a haram game as long as there is no gambling in it and it does not make us abandon our obligations. This means that it is not the game that makes someone sin, but how we play it so that we do not neglect our obligations to Allah (*SINDOnews.Com Pages on Tuesday, 2022*).

“.....and worldly life is nothing but games and joking...” (Q.S. Al-An’Am:32). This verse shows that Islam does not prohibit entertainment as long as it does not contradict Islamic law and interfere with required acts of worship such as fasting and prayer. According to several different sites, these games are acceptable as long as they do not contain graphic or intimate content, are harmless, and have nothing to do with witchcraft. MUI has banned a number of online games for having content deemed inappropriate, including violence, gambling, fraud, and indulgence in aurat. Overall, playing online games

is basically a permissible activity in Islam, but this may change depending on the manner in which it is played and the impact it has on daily life. In a good way, online gaming can be an entertainment that does not contradict the principles of the religion.

2. Gamification

According to Deterding et al., (Deterding S, Dixon D, Khaleed R, 2011), Gamification means adding game elements into non-gaming context. Hence, gamification is inserting game elements into a different context that is not a game. This game must be interesting and provide a new sensation where consumers feel challenged to conquer every challenge that exists. This game should also cause feelings of happy and fun. This feeling will create opportunities for reuse.

Robson, et al. suggest that gamification is the application of lessons from the gaming domain to change behavior in non-gaming situations. In other words, gamification is an application that aims to change user behavior. The expected behavior is the desire to play the game continuously (Robson et al., 2015).

Games that are designed do not always have to provide complex and serious challenges. But many consumers like silly and even childish challenges. Like the coin-catching game in one of the marketplaces, this game is simple but able to provide a sense of fun, especially when the coins you get can be exchanged for rupiah and can be spent. There are also games that only shake your phone to win the game, but of course there are challenges. Although it appears straightforward, the players may experience exhilaration due to the obstacles and rewards. Games should be designed with components that add to the user's enjoyment in addition to the intrinsically motivating character of the game (Martí-Parreño et al., 2016).

Gamification design applies game elements to improve motivation or change users' attitudes, such as using badges to award the completion of optional learning tasks and make users happy (Tang et al., 2020). The most important point is to make game users feel happy, if they are happy then the evoked positive response is a motivation to have more interaction with the company, brand or product. According to Matsumoto (Matsumoto, 2016), the strategy of giving motivation to players can be done through three points in the game, namely (1) task, players must reach a certain level; (2) interface, the ability to control his avatar; and (3) feedback, feedback or responses that players can give to their game.

3. MDA Framework

The MDA framework helps formulate how the relationship will be built between the company and its customers. This relationship ultimately determines whether it will create customer loyalty or generate high customer turnover. The MDA framework concept was first formulated by Hunicke, LeBlanc and Zubek (R Hunicke, M. LeBlanc, 2004). The MDA framework consists of three components, namely:

- Mechanics, is the core of the game which includes the main objectives, rules and some interesting feedback features such as (1) points; (2) leaderboards; (3) levels; (4) challenges; (5) virtual treasure; and (6) badges.
- Dynamics related to behavior, the duration of a game, how players set their strategy, and how players interact with the game they are playing. The dynamics are carried

out as (1) challenge, providing a limited time challenge while creating competition between players; (2) fellowship, a challenge for players to play in groups; (2) expression, allowing players to leave marks as a form of expression towards games; and (4) narrative/dramatic tension, a dramatic narrative to create tension and relief as well as dissolution.

c. Aesthetics describes the overall feeling of players when interacting with the game. Games that are well designed will be able to express the emotions felt by players, including joy, frustration, fantasy and friendship. Furthermore Hunicke et al. explain what is included in the aesthetics of a game such as (1) sensation; (2) Fantasy; (3) natarive; (4) challenge; (5) fellowship; (6) discovery; (7) expression; dan (8) submission.

The gaming approach of MDA frameworks uses game aspects that might boost users' motivation and attitude. The goal of gamification, like (Robson et al., 2015), is to alter user behaviour by creating a desire to play the game constantly. Users' responses to the MDA framework can be positively influenced by its mechanics, dynamics, and aesthetic components. Players are being encouraged to play the game repeatedly as a result.

There are several experts who use the MDA framework in their research. One of them is Umar Ruhi. According to Ruhi (Ruhi, 2015), the MDA framework can create factors that are related to learning processes, which are challenges, curiosity, fantasy, and control. Moreover, Ruhi explained that MDA frameworks consist of (1) mechanics, describing the rules of the game and components in the game which in the process are able to regulate the actions performed by the user; (2) dynamics, describes clear rules of play throughout the game run-time; (3) Aesthetics, describes the emotional response that comes among players when they interact with the game system.

These days, widely adopting the MDA framework method and then modifying it with a more specific context and adapted to the research object. (Robson et al., 2015), changed the formula to the MDE framework, namely Mechanics, Dynamics and Emotions. It is different from the formula modified by (Winn, 2016), namely the DPE framework which stands for the Design, Play and Experience component. According to Winn, the designer designs the game; the player plays the game; which results in the player's experience.

4. Mechanics

Unlike Huncke et al which suggests that mechanics consists of (1) points; (2) leaderboards; (3) levels; (4) challenges; (5) virtual treasure; dan (6) badges, Umar Ruhi argued that mechanics are related to the game's components, control, and courses. Mechanics describe rules or components that implemented in games, such as (1) basic action; (2) algorithm; (3) game engine; (4) game elements; etc (Kusuma et al., 2018). It can be said that mechanics are related to the rules of the game. This includes rules for how they can get points, how they can level up, elements of challenges for players and more.

Mechanics must be designed in concrete detail in order to produce game components that can make the game more interesting to play. Putra et al. (Kusuma et al., 2018), divides Mechanics into several components, namely: (1) game title, the title chosen

must be able to represent an overview of the game as a whole; (2) genre and topic, must be able to describe the game; (3) goal, what is the main goal of this game to create a happy ending; (4) the platform, device or software that must be available for the game to be played; (5) ESRB rating, means the rating of this game whether all ages or limited; (6) levels, the story route in the game so that it ends the way the player wants; (7) concept art, related to logos, character designs, backgrounds and others.

5. Dynamics

Dynamics relates to the storyline in a game, how players play a game with a limited time. Dynamics also designs the levels of challenges that will be faced by players, so players have to choose and think about strategies in order to complete missions and pass these challenges. Dynamics are related to the game's context, constraints, choices, chance, consequences, completion, continuation, competition, and cooperation (Ruhi, 2015).

6. Aesthetics

visuals that impact the emotions of gamers during gameplay. An emotion will surface when players navigate choices and confront roadblocks in the game's narrative. Put another way, the game's dynamics will cause players to feel things, and the aesthetic components must be able to express those feelings. These are supposed to be fun games.

There are 8 aspects of aesthetics related to fun games according to Hunicke et al (Kusuma et al., 2018) which are: (1) Sensation: sense of pleasure as the result of trying something new; (2) Challenge: being challenged to finish certain tasks; (3) Discovery: finding out new things through exploration or trying new strategy; (4) Fellowship: engaged in social networking; (5) Expression: ability to express player's choices in game; (6) Fantasy: immersion to virtual world; (7) Submission: devotion to the game; dan (8) Narrative: storyline that catch player's interest.

In his research, Putra et al (Kusuma et al., 2018), measuring aesthetics into seven components, namely: (1) sensation or response of the five senses, responses to what is heard and seen when playing games; (2) fantasy, regarding the player's impression after playing the game and what is memorable from the game according to them; (3) narrative or dramatization, the storyline that develops from the existing plot must be able to bring up the player's curiosity about the continuation of the story in the game; (4) challenge, related to the challenges faced to reach the end of the game; (5) discovery, related to new things they find in the game; (6) expression or creativity, related to the player's freedom to express and choose the route/strategy as desired; (7) submission, related to the time limit that players have.

7. Customer Loyalty

Loyalty is like a very valuable asset for every company. The more loyal a consumer is, the more often he will buy the company's products and the more often he will recommend it to the people around him. Consumer loyalty is a competitive force for every company. The use of loyalty programs is an important issues for the success of any retail organization, because persuade new customers is more expensive than maintain existing ones (Roopa Singh, 2012). Customer loyalty also can be defined as very satisfied customer who inclined to purchase company products (Rashid et al., 2020).

A loyalty program can be defined as a foster of loyal customer behaviour, which give a rewards as a set of marketing activities (Gupta et al., 2018) Some rewards that are able to attract consumers quickly and make consumers loyal are short-term incentives, such as discount vouchers applied by several companies, as well as the marketplace. Giving points as a reward for winning game players in the marketplace makes these players attached to the company. They feel benefit because the points are used as discounts and can be used for shopping in the same application. This is what makes reward is a foster customer loyalty. Having customer loyalty is like having a key components for a product's long-term viability (Amin et al., 2012).

There are four type of loyalty program user regarding their attitudes (Magatef & Tomalieh, 2015), which is: (1) Never, who are not affected by customer loyalty programs and their rewards in any way; (2) Light consumers, who are moderately being influence by their incentives programs; (3) Heavy consumers, who are highly influenced by member reward programs; (4) Extreme consumers, who are addicted with loyalty programs.

Griffin argued that the criteria of a loyal consumer are (1) repeat purchase (buyback); (2) retention, customer only purchase product from the company; (3) related sales of service, customer wants to utilize the same product in the future; and (4) referrals or refers to others, customers advice others to consume products (Budianto, 2019). Generally, customer loyalty has been referred as a link between repeat purchasing, customer attitude and financial performance (Ngo Vu & Nguyen Huan, 2016).

The following research hypotheses will be developed: (1) MDA frameworks can increase customer loyalty among millennial-generation male and female market place customers; (2) MDA frameworks can foster loyalty among millennial-generation man market place customers; and (3) MDA frameworks can foster loyalty among millennial-generation woman market place customers.

C. METHOD

The author used 100 respondents for every male and female marketplace client in this comparison analysis. A quantitative strategy combined with descriptive survey analysis is the study methodology employed. Simple random selection was used to gather the marketplace customer sample. The author creates a questionnaire to get information from the respondent. The respondent is a person who has participated in at least one marketplace game. The analytical tool utilised was taken from earlier literature reviews.

Table 1. The Theoretical Variable Operationalization

VARIABLE	DIMENSION	INDICATOR	STATEMENT
MDA Framework	Mechanics	1. Game's title	1. Interesting game's title
		2. Points earned	2. There are clear rules for obtaining points in the games.
		3. Leaderboard	3. Each player can clearly see their position on the leaderboard in the games.
		4. Rute games	4. Clear games rules for each level or games route.
		5. Challenge	5. Challenges in games are interesting to play.
		6. Badges	6. There are different badges for each player's position in the game
	Dynamics	1. Storyline	1. Gameplay attracts player's attention.

		2. Characters 3. Time limit 4. Rules 5. Expression	2. The characters in the game are diverse and interesting. 3. Challenges with a time limit make games more interesting. 4. Simple rules make the game easier to understand. 5. There are features that can show players' expressions while playing
	Aesthetics	1. Sensation 2. Challenge 3. Fantasy 4. Narrative 5. Discovery 6. Submission 7. Expression	1. Gives a different game sensation when playing. 2. Bring up the feeling of being challenged to complete the game. 3. Players feel immersed in the world of the games they play. 4. The gameplay raises curiosity. 5. There are new things that players find in games. 6. Time limits make games feel tense. 7. Freely choose the route to complete the game.
	Repeat purchase	1. Play back. 2. keep collecting points	1. Willing to play again. 2. Willing to continuously collecting points.
Loyalitas	Retention	1. Interest toward games in the marketplace. 2. Interest toward points from games.	1. More interested to playing games in the marketplace than in other application. 2. More interested to collecting points from games in the marketplace than points in other games..
	Related sales of service	1. Playing other games in the same marketplace.	1. Willing to playing other games in the same marketplace.
	Referrals	1. Recommend to friends. 2. Recommend to family.	1. Willing to recommend the games in the marketplace to friends. 2. Willing to recommend the games in the marketplace to family.

Source: Data processed, 2024

D. RESULT AND DISCUSSION

From the results of research data processing, it is known that the validity test results for each research variable are as follows:

Table 2. Validity Test Result

Variable	No. Item	r- hitung	r- tabel	Keterangan	r- hitung	r- tabel	Keterangan
MDA Framework (X)	1	0,621	0,1966	Valid	0,656	0,1966	Valid
	2	0,665	0,1966	Valid	0,635	0,1966	Valid
	3	0,663	0,1966	Valid	0,489	0,1966	Valid
	4	0,679	0,1966	Valid	0,644	0,1966	Valid
	5	0,721	0,1966	Valid	0,600	0,1966	Valid
	6	0,641	0,1966	Valid	0,694	0,1966	Valid
	7	0,766	0,1966	Valid	0,684	0,1966	Valid
	8	0,743	0,1966	Valid	0,652	0,1966	Valid

	9	0,438	0,1966	Valid	0,608	0,1966	Valid
	10	0,584	0,1966	Valid	0,647	0,1966	Valid
	11	0,640	0,1966	Valid	0,686	0,1966	Valid
	12	0,690	0,1966	Valid	0,712	0,1966	Valid
	13	0,675	0,1966	Valid	0,634	0,1966	Valid
	14	0,663	0,1966	Valid	0,695	0,1966	Valid
	15	0,758	0,1966	Valid	0,726	0,1966	Valid
	16	0,709	0,1966	Valid	0,551	0,1966	Valid
	17	0,607	0,1966	Valid	0,554	0,1966	Valid
	18	0,671	0,1966	Valid	0,595	0,1966	Valid
	19	0,827	0,1966	Valid	0,774	0,1966	Valid
	20	0,820	0,1966	Valid	0,774	0,1966	Valid
Loyalitas (Y)	21	0,773	0,1966	Valid	0,863	0,1966	Valid
	22	0,806	0,1966	Valid	0,875	0,1966	Valid
	23	0,883	0,1966	Valid	0,817	0,1966	Valid
	24	0,797	0,1966	Valid	0,819	0,1966	Valid
	25	0,799	0,1966	Valid	0,861	0,1966	Valid

Source: Data processed, 2024

The statement is deemed valid and may be utilised for additional data measurement, according to the preceding table. The Cronbach's alpha formula is utilised to compute the reliability test results. If a dataset's Cronbach's Alpha value is more than 0.60, it can be deemed dependable. The following are the Cronbach's alpha formula results:

Table 3. Reliability Test

Variabel	Ketetapan	Cronbach's Alpha	Keterangan	Cronbach's Alpha	Keterangan
MDA Framework (X)	0,6	0,923	Reliabel	0,912	Reliabel
Loyalitas (Y)	0,6	0,909	Reliabel	0,922	Reliabel

Source: Data processed, 2024

Based on the table data above, it can be concluded that the two research variables can be said to be reliable. This is because each variable has a Cronbach's Alpha value that is greater than the set value. Based on the results of simple linear regression test calculations for the male group, the results of the regression equation show $Y = 6,740 + 0,266X$.

Table 4. Results of Simple Linear Regression Test

Model	Unstandardized		Standardized	t	Sig.	Correlations		
	Coefficients					Zero-order		Part
	B	Std. Error	Beta					
1	(Constant)	6,740	3,393		1,986	,050		
	MDA Framework	,266	,046	,507	5,827	,000	,507	,507

Source: Primary Data Processed, 2024

In other words, if the MDA Framework variable is considered constant, then the male gamer loyalty level in the marketplace is 6,740. If the MDA Framework increases by one

unit then Loyalty will increase by 0,266. From the table above it can also be seen that the results of the test for the individual effect of the MDA Framework variable on loyalty are 25,71%. The results of the hypothesis test show that the MDA Framework variable partially has a positive and significant influence on the Loyalty variable for male game players in the marketplace by 25,71%.

Based on the results of simple linear regression test calculations for the female group, the results of the regression equation show $Y = 2,136 + 0,335X$.

Table 5. Results of Simple Linear Regression Test

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations		
	B	Std. Error				Zero-order	Partial	Part
1 (Constant)	2,136	4,350		,491	,624			
MDA Framework	,335	,057	,510	5,873	,000	,510	,510	,510

Source: Primary Data Processed, 2024

The degree of loyalty among female gamers in the market is 2,136 if the MDA Framework variable is taken as constant. However, if the MDA Framework increases by one unit, loyalty will rise by 0.335. The test findings for the individual effect of the MDA Framework variable on loyalty are 26,01%, as can be seen in the above table. The results of the hypothesis test show that the MDA Framework variable partially has a positive and significant influence on the Loyalty variable of game players in the marketplace.

Based on the results of data processing on the MDA Framework variable questionnaire with 18 statements distributed to 100 male and 100 female respondents who are all players in the marketplace game, a recapitulation of the comparison results is obtained as below:

Table 6. Mechanics, Dynamics and Aesthetics Recapitulation of Male and Female Respondents Answers

Variables	Indicators	Average	Average
Mechanics	Interesting game's title	3,92	4,16
	There are clear rules for obtaining points in the games.	4,22	4,32
	Each player can clearly see their position on the leaderboard in the games.	4,16	4,17
	Clear games rules for each level or games route.	4,28	4,39
	Challenges in games are interesting to play.	4,27	4,33
	There are different badges for each player's position in the game	4,01	4,16
Dynamics	Gameplay attracts player's attention.	4,23	4,26
	The characters in the game are diverse and interesting.	4,20	4,26
	Challenges with a time limit make games more interesting.	3,99	4,20
	Simple rules make the game easier to understand.	4,34	4,59
	There are features that can show players' expressions while playing	3,77	3,92
Aesthetics	Gives a different game sensation when playing.	4,08	4,14
	Bring up the feeling of being challenged to complete the game.	4,11	4,24
	Players feel immersed in the world of the games they're play.	3,74	3,91
	The gameplay raises curiosity about the game that will be played until it's finished	4,14	4,27
	There are new things that players find in games.	4,10	4,19

The specified time limits make games feel tense.	3,87	4,25
Players freely choose the route that will be played to complete the game.	3,98	4,08

Source: Primary Data Processed, 2024

The above summary table makes it apparent that the player can become a part of the marketplace's mechanics by clearly understanding the regulations of each level or game path. It received great reviews from both male and female users. This demonstrates that all players enjoy games with explicit rules and stages or paths they must follow in order to receive rewards. These indicators, which have the best average ratings for both genders, also have straightforward regulations that simplify games. This is due to the fact that the games on the marketplace cater to a variety of demographics, including age, educational level, and mentality. Therefore, the more straightforward the rules are, the more user-friendly the games offered by the marketplace will be.

The recapitulation table above makes it clear that the dynamics variables have the power to elicit a sense of attachment and replayability in players, as evidenced by the processing results in both men and women. Simple rules that make a game easier to grasp are preferred by both men and women, in order for them to enjoy themselves while playing the game. This may cause them to get disoriented and concentrate solely on the rewards or points they have acquired.

Meanwhile the Aesthetic variable recapitulation shows that the gameplay raises curiosity about the game that will be played until it's finished. Curiosity about the next stage makes it difficult for players to stop playing, they are challenged to immediately find out what is waiting for them in the next stage. This is where the greatness of the game design team from the marketplace can be seen in engaging consumers, not only tying them up with prizes but also tying up their time with curiosity.

The indicator that gets the lowest average value according to both male and female is that players feel immersed in the world of the games they're play. This is because the games are very simple, which do not require serious thought so players only know that they enjoy playing them, running their tasks without having to deeply serious and explore the characters in them.

Furthermore, based on the results of data processing on the customer loyalty variable questionnaire with 18 statements distributed to 100 male respondents and 100 female respondents who are all players in the marketplace game, a summary of the comparison results is obtained as bellow:

Table 7. Loyalty Recapitulation of Male and Female Respondent's Answers

Statement	Average	Average
Willing to play games on the marketplace again because I often open the marketplace application when shopping.	3,71	3,80
Willing to continuously collecting points from the games because the points can be used to shop at the marketplace.	3,95	4,12
More interested in playing games on the marketplace than in other applications because it provides profitable points	3,57	3,84
More interested to collecting points from games in the marketplace than points in other games because the points earned can be used to shop at the marketplace.	3,84	4,09
Willing to play other games in the same marketplace because the coins can both be used for shopping.	3,98	4,13

Willing to recommend the games in the marketplace to friends.	3,69	3,80
Willing to recommend the games in the marketplace to family.	3,52	3,73

Source: Primary Data Processed, 2024

The loyalty variable, which is based on the above recapitulation table, reveals that there are similarities between the male and female groups in the results of the indicator that receives the highest average score that is, the willingness to play additional games in the same marketplace because both groups can use the rewards for shopping. They want to keep winning that prize by playing games on the market place since the prize they receive from winning a game makes them joyful.

The indicator that gets the lowest average score based on the assessment of female and male is the willingness to recommend games in the marketplace to families. This shows unusual behavior, but if we examine closer this behavior is because there are some respondents who are afraid of being found out by their families, especially their parents, that they often do online shopping. Younger players have little trouble grasping the regulations, while less educated players do not need to strain to understand the game's rules. Therefore, playing it makes players happier and eliminates the need for a complex mindset. A few basic guidelines can elicit happiness, which is the foundation for the development of a like emotion.

Furthermore, from the mechanics, dynamics and aesthetics recapitulation table above it can be seen that there are 3 indicators that differ in the results of the assessment between male and female, for female the game's title and time limits on games in completing challenges are felt to be interesting and tense. However, even though the range of the assessment isn't too significant with the results of the female's assessment, for the male, both the title and the time limit in the games have not met their standards regarding interest and tension of completing challenges with a limited time. This could be because male are used to playing games that are more tense and more complicated challenges with shorter time limits, such as Mobile Legend, PUBG Mobile and other online games that are more complicated to conquer. Games in the marketplace tend to be light games so that all players feel fun and relaxed when playing it. This is also what marketplace visitors like, playing with a feeling of fun and relaxation but getting interesting rewards to use.

Based on the Islamic perspective as long as the components in the game in the marketplace do not violate the limits or norms prohibited by MUI, for example, the clarity of the rules of the game, the appearance of characters in the game that do not show sexiness, and the clarity of the rewards that players will receive which indicates the absence of gambling elements and other obscurities. The importance of rules and clarity to avoid gharar and maysir as well as online games in the marketplace, so that no one is deceived or harmed. The more games they play and win, the more coin rewards they can get, in other words, the more discounts they can get by buying goods on the marketplace. Some marketplaces also provide rewards in the form of free shipping, regardless of the discount for consumers, it's still a happy thing because they feel it's not a waste to play games on the marketplace. This shows that indeed their loyalty to games in the marketplace is because the games provide benefits, which are rewards in short-term incentives in the form of coins or discount vouchers that can be used as discounts when they shop at the marketplace.

This online shopping behavior is often seen negatively because of the tendency to show consumptive behavior, where a person buys a product just because he wants, not based on needs. Most men don't want their partners or relatives to know that they like to online shopping, because online shopping has become a characteristic of women. If women who online shopping will be considered normal, but if men who like to online shopping will be considered flirtatious or like women. That's the stereotype that exists in most people's minds today, shopping is a woman's job and men have to work seriously to earn money. So it can be said that they are not willing to tell their families because they are afraid of being scolded by their parents or men who are fear of being labeled as shopkeepers, which is identical with women's habits.

The theoretical implication in this research is the belief that binding consumers not only by giving discounts or free gifts, but giving gifts through games is also liked by male and female consumers. This shows that they also like challenges, especially if these challenges provide useful prizes. Through playing games, their two needs are met. the needs of their inner child and the need for satisfaction from shopping at low prices.

The managerial implication based on this research is that it is very appropriate to create and provide in the marketplace games that have clear and simple rules, games that have clear stages. So that the two consumer needs can be met. For future researchers, this MDA framework can be used to measure games in other business industries that also use games as an attraction that can bind consumers to become loyal consumers.

E. CONCLUSION

Both men and women felt that the games in the marketplace had simple rules, which made them fun to play and win. For the female group, the games in the marketplace have met the standards of games that are fun for them, have been interesting and are quite tense and challenging in completing each mission. This shows that women do not like online games that have complicated tasks and require serious strategizing. They prefer to play simple games with light challenges, one of which is the games provided in the marketplace they subscribe to. They get refreshing and rewards that benefit them, as they can be used to shop for the products they want.

In contrast to the men's group, playing on the marketplace is not stressful although it is still fun so it becomes light entertainment for men, so they often play it because the rewards provided are very profitable. Nonetheless, men tend to be unwilling to recommend the game to their family, friends and other relatives for fear of being labeled as online shopping enthusiasts, which is synonymous with women's habits. Overall, all test results show that both men and women show the influence of gamification through the MDA framework on marketplace consumer loyalty.

Hypothesis testing results show that the MDA Framework variable partially has a positive and significant influence on the Loyalty variable for both male and female gamers in the marketplace. This result strongly suggests that women really like shopping and become more attached to continue playing games continuously because the rewards they get fulfill their need to shop.

This study has limitations in using more comprehensive variables, especially on other aspects that are directly related to marketplace conditions. Therefore, further research is needed to determine the impact of other variables on marketplace gamification strategies such as technical innovation, aesthetics, and the story behind the game. Future research also needs to expand the sample by using a longer observation period.

F. BIBLIOGRAPHY

Amin, S. M., Ahmad, U. N. U., & Hui, L. S. (2012). Factors Contributing to Customer Loyalty Towards Telecommunication Service Provider. *Procedia - Social and Behavioral Sciences*, 40(6), 282–286. <https://doi.org/10.1016/j.sbspro.2012.03.192>

Budianto, A. (2019). Customer Loyalty: Quality of Service. *Journal of Management Review*, 3(1), 299. <https://doi.org/10.25157/jmr.v3i1.1808>

Deterding S, Dixon D, Khaleed R, N. L. (2011). *From game design elements to gamefullness: Defining "Gamification"* Proceedings of the 15th International Academic Mindtrek Conference. Envisioning Futuree Media.

Gupta, S., Upta, T., & Gupta, S. (2018). *Navigating From Program Loyalty to Company Loyalty*. IIMB Management Review.

Humlung, O., & Haddara, M. (2019). The Hero's Journey to Innovation: Gamification in Enterprise Systems. *Procedia Computer Science*, 164, 86–95. <https://doi.org/10.1016/j.procs.2019.12.158>

Kianoosh, K., & Nickpayam, J. (2017). Gamification from the Viewpoint of Motivational Theory. *Italian Journal of Science & Engineering*, 1(1), 34–42.

KPPA dan BPS. (2018). *Profil Generasi Milenial Indonesia*.

Kusuma, G. P., Wigati, E. K., Utomo, Y., & Putera Suryapranata, L. K. (2018). Analysis of Gamification Models in Education Using MDA Framework. *Procedia Computer Science*, 135, 385–392. <https://doi.org/10.1016/j.procs.2018.08.187>

Lu, H. P., & Ho, H. C. (2020). Exploring the impact of gamification on users' engagement for sustainable development: A case study in brand applications. *Sustainability (Switzerland)*, 12(10). <https://doi.org/10.3390/su12104169>

Magatef, S. G., & Tomalieh, E. F. (2015). The Impact of Customer Loyalty Programs on Customer Retention. *International Journal of Business and Social Science*, 6(5), 78–93. <https://doi.org/10.1615/HeatTransRes.2013005645>

Martí-Parreño, J., Seguí-Mas, D., & Seguí-Mas, E. (2016). Teachers' Attitude towards and Actual Use of Gamification. *Procedia - Social and Behavioral Sciences*, 228(June), 682–688. <https://doi.org/10.1016/j.sbspro.2016.07.104>

Matsumoto, T. (2016). Motivation Strategy Using Gamification. *Creative Education*, 07(10), 1480–1485. <https://doi.org/10.4236/ce.2016.710153>

Moniaga JV, Astriani MS, Hambali S, Wijaya Y, C. Y. (2017). *The Implementation Of MDA Framework In a Game Based Learning in Security Studies*. international Coference on Remote Engineering and Virtual Instrumantation.

Ngo Vu, M., & Nguyen Huan, H. (2016). The relationship between service quality, customer satisfaction and customer loyalty: An investigation in Vietnamese retail banking sector. *Journal of Competitiveness*, 8(2), 103–116. <https://doi.org/10.7441/joc.2016.02.08>

Q.S. Al-An'Am:32. (n.d.). *Q.S. Al-An'Am:32* (p. 32).

R Hunicke, M. LeBlanc, R. Z. (2004). MDA : A Formal Approach to Game Design and Game Research. *In Proceedings of the Chalange in Game AI Workshop*.

Rashid, M. H. U., Nurunnabi, M., Rahman, M., & Masud, M. A. K. (2020). Exploring the relationship between customer loyalty and financial performance of banks: Customer open innovation perspective. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4), 1–19. <https://doi.org/10.3390/joitmc6040108>

Rizki Dwi A. (2023). *11 Bank Terbesar di Indonesia Berdasarkan Asetnya*. Tempo.

Robson, K., Plangger, K., Kietzmann, J. H., McCarthy, I., & Pitt, L. (2015). Is it all a game? Understanding the principles of gamification. *Business Horizons*, 58(4), 411–420. <https://doi.org/10.1016/j.bushor.2015.03.006>

Rodrigues, L. F., Oliveira, A., & Rodrigues, H. (2019). Main gamification concepts: A systematic mapping study. *Heliyon*, 5(7), e01993. <https://doi.org/10.1016/j.heliyon.2019.e01993>

Roopa Singh, K. I. (2012). An Approach to increase customer retention and loyalty in B3C World. *International Jurnal of Scientific and Research Publication*, 2(6).

Ruhi, U. (2015). Level Up Your Strategy: Towards a Descriptive Framework for Meaningful Enterprise Gamification. *Technology Innovation Management Review*, 5(8), 5–16. <https://doi.org/10.22215/timreview/918>

SINDOnews.com pages on Tuesday. (2022).

Tang, J., Zhang, P., & Jia, Y. (2020). Using gamification to support users' adoption of contextual achievement goals. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 2020-Janua, 1216–1225. <https://doi.org/10.24251/hicss.2020.151>

Taspinar, B., Schmidt, W., & Schuhbauer, H. (2016). Gamification in education: A board game approach to knowledge acquisition. *Procedia Computer Science*, 99(October), 101–116. <https://doi.org/10.1016/j.procs.2016.09.104>

Winn, B. M. (2016). The Design, Play, and Experience Framework. *Communication Arts & Sciences Building*, 5497, 1–23.