KnE Social Sciences

Knowledge E
enriching | engaging | empowering

Conference Paper

The Effect of Perceived Ease of Use, Perceived Enjoyment, Perceived Cohesion, Social Norm and Customer Preference to Customer Loyalty Online Game Community First Person Shooter in Surabaya

Citragosa Naradipa

Faculty of Economics and Business, University of Airlangga

Corresponding Author:
Citragosa Naradipa
gosaaa777@gmail.com

Abstract

Purpose of this study was to determine the effect of perceived ease of use, perceived enjoyment, perceived cohesion, social norm and customer preference on customer loyalty online game community First Person Shooter (FPS) in Surabaya. This research using Structural Equation Modeling (SEM) with Lisrel 8.70 software. Sampling techniques used in this research are non probability sampling with this type of convenience sampling. Data collected directly from respondents who meet the specified characteristics of the population by distributing questionnaires. The samples used in this study was 160 respondents. The results of this study showed the influence of customer preference on customer loyalty, perceived ease of use on perceived enjoyment, perceived enjoyment on customer preference, perceived cohession on customer preference, perceived enjoyment on customer preference, social norm on customer loyalty online game community First Person Shooter (FPS) in Surabaya. While, perceived ease of use on customer preference, perceived enjoyment on customer loyalty online game community First Person Shooter (FPS) in Surabaya rejected.

Keywords: Perceived Of Use, Perceived Enjoyment, Perceived Cohesion, Social Norm, Customer Preference, Customer Loyalty

1. Introduction

The development of science and technology that is increasingly fast turns out to bring changes in all walks of life. Human creativity is increasingly developing so as to encourage the acquisition of new findings in technology that can be used as a means of improving the welfare of mankind. One such human product is the internet. Today's internet technology is growing rapidly, one of its benefits is as a means of entertainment, for example to play. Online games today have become a new trend that is in great demand by all circles, because someone no longer plays alone, but someone

can play together with tens or even hundreds of people at once from various locations used by players connected by a network, generally the network used is the Internet. The Indonesian Internet Service Providers Association (APJII) recently conducted a survey of internet users in Indonesia. The result is that the number of active internet users in Indonesia has reached 63 million people, or around 24% of Indonesia's total population. This number increased by around 8% compared to last year, where at that time there were only around 55 million users. Every year Indonesian game players are estimated to increase by around 5% - 10%. Along with the increasingly rapid internet infrastructure in Indonesia, it seems that the online game industry is still very promising. Citing data from Frost & Sullivan, Indra revealed, the online mobile game market in Indonesia continues to grow. In 2012, the business value of US $ 50 million in 2013 was estimated at US $ 55 million. Then in 2014 at US $ 70 million and 2015 at US $ 86 million.

The most played online game now is the MMOFPS (*Massively Multiplayer Online First-Person Shooter*) genre. It is estimated that 50% - 60% of online gamers play this game. The rest is filled with MMORPG and Casual games.There are many types of MMOFPS such as the Alliance of Valiant Arms (AVA), Brick Force Online, Counter-Strike Online, Cross Fire, Point Blank, Shadow Company, Special Force, Sudden Attack, Warrock, and Xshot. The phenomenon of Online Games that is increasingly widespread, makes researchers feel interested in conducting research by taking Point Blank game objects. To support the researchers' allegations about the variables examined by researchers.

Based on previous research and the relationship between variables can be seen an indication of the tendency of a positive relationship between the variables to be studied. Thus it can be identified that there are indications of a positive relationship between Perceived Ease Of Use, Perceived Enjoyment, Perceived Cohesion, Social Norm and Customer Preference and online Customer Loyalty Games.

2. Literature Review

2.1. Online community

An online community is defined as groups of people who communicate with each other via electronic media, such as the Internet, share goals and ideas, and no any geographical location nor ethnic origin constraints are imposed. (Kardaras et al., 2003; Romm, Pliskin, Clarke, 1997). Preece (2000) indicates that an online community consists of (1) people, who interact with each other in the community; (2) purpose, to provide a reason for users to participate in communities; (3) policies, to make rules, protocols,

and laws to guide user s behavior; and (4) computer systems, to support and mediate social interaction and facilitate a sense of togetherness.

2.2. Perceived Ease Of Use

Davis et al. (1989) in C.-L. Hsu, H.-P. Lu (2007) revealed that ease of use is: "Refers to the degree to which people believe that using a particular system would he free of effort" that can be interpreted as a level where someone believes that the use of a particular system can reduce one's effort in doing something. According to Goodwin (1987) in Rahadi (2007); Silver (1988) in Rahadi (2007) the use and interaction between users (users) and the system can also show ease of use. Systems that are more frequently used indicate that the system is better known, easier to operate and easier to use by users.

2.3. Customer Preference

According to Kotler (2009: 25), consumer preferences show consumers' preferences for various existing products. This preference theory is used to analyze the level of satisfaction for consumers. This consumer preference is also closely related to the choice and relationship of preference

2.4. Perceived Enjoyment

Pikkarainen et al. in Davis (1989) in C.-L. Hsu, H.-P. Lu (2007) explained that perceived enjoyment is a very good place to live, apart from any performance that may be anticipated, on this basis, perceived enjoyment is intrinsic motivation and emphasizes on the pleasure and inherent satisfaction derivated from the specific activity. They found that the perceived usefulness had a large significant effect on the intention. It was complementary by the perceived enjoyment. Venkatesh (2000) in Edward (2011) explains perceived enjoyment as "as a degree to which performing activity is perceived as providing pleasure and joy in its own right, aside from performance consequences".

2.5. Perceived Cohession

According to Chin and David (2008) Perceived Cohesion is defined as follows perceived cohesion encompassing individual's sense of belonging to a particular group and his

or her feelings of morale associated with membership in the group. Them, perceived cohesion reflects the individual's appraisal of their relationship to the group. Belonging is viewed as a comprise of both cognitive and affective elements developed through experiences with groups while moral is primarily a global affective response associated with belonging to the group.

2.6. Social Norm

According to Peter and Olson (2008: 150), social norms reflect consumer perceptions of what they perceive that other people want them to do. According to Schiffman and Kanuk (2007) social norms are trends learned from consumers through the belief that referents think about something that consumers will do. Referrers are groups around consumers (other people) when consumers identify themselves with the group, so consumers take a lot of values, attitudes or behaviors because members can be family members, friends, colleagues and so on and the person's motivation to obey referrals. the referent.

2.7. Customer Loyalty

Kotler (2009: 46) added that loyalty as the long term success of a particular brand that is not based on consumer who purchases it only once, but on the number who became repeat purchase. According to Griffin (2007: 113) loyalty is when a customer is loyal, the purchase behavior is defined as non-random purchase expressed over time by some decision-making units, meaning loyalty is someone's willingness to a company's product or service.

2.7.1. Theoretical framework

Based on the theoretical study above, the following framework for this study.

This study is quantitative research conducted using survey methods through filling out questionnaires with the object of research is every game online player *First Person Shooter (FPS)* in Surabaya, at least 1 year experience in related game and plays 1 hour per day. the sampling technique used is non probability sampling. The type of non probability sampling chosen is convenience sampling, which is the sampling technique by determining the easiest elements. A statement given a weight using a Five Point Likert Scale, with "1" refers to "Strongly Disagree" and "5" to "Strongly Agree". Data
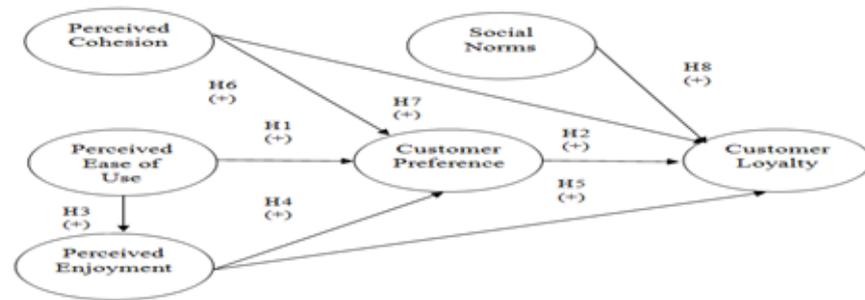
Figure 1: Theoretical framework.

collection is done by distributing questionnaires to the respondents in Warung Internet (Warnet), where players are gather in the same place to play online game and by online questionnaires in the game.

2.8. Data Analysis Method

Processing data in this study using SEM (Structural Equation Model) using SPSS software. According to, Ferdinand (2005) sample size depends on the number of indicators estimated. The guideline is 5-10 times the number of indicators estimated. Thus the minimum sample for this study with 16 indicators is 10x16 = 160 respondents. The minimum number of samples met the minimum SEM sample requirements because according to Hair et al. (1998) in Ferdinand (2005) a minimum sample size of 100 and no more than 400. Ferdinand (2005) provides several conformity indices used to test models accepted or rejected: RMSEA can be accepted at a value of 0.05 to 0.08 (Heir et al., 1998, p.656). GFI is a non-statistical measurement that has values from 0 (poor fit) to 1 (perfect fit) (Hair et al., 1998, p. 555). AGFI is an extension of GFI, adjusted to the ratio of model freedom degrees. Acceptable value is AGFI $\geq$ 0.90 (Hair et al., 1998, p. 657). CMIN / DF is the chi-square statistic ($\chi2$) divided by the DF model so that it is called $\chi2$ relative. CMIN / DF which has a value of $\leq$ 2 or even sometimes $\leq$ 3 shows that there is an indication of acceptable fit between the model and data (Arbuckle, 1997). CFI was found to be suitable for small sample sizes. Acceptable values are between 0 and 1 (Hair et al., 1998, p.657). The recommended value is CFI $\geq$ 0.95.

3. Results and Discussion

All respondents in this study were male, as many as 160 people, there were no female respondents in this study. Most of them play game FPS for more than 3 hours (56,88%) and they're at their productive age 17-25 years old (70,62%). In our study, the software

Lisrel 8.7 was used in order to assess the measurement and the structure model. The test results of the measurement model are presented in Figure 2 and 3

Variabel	(Σstd.loading)	(Σstd.loading)^2	Σerror	Composite Reliability
PEU	2,57	6,6049	0,7853	0,8937
CP	1,83	3,3489	0,3243	0,9117
PE	2,38	5,6644	1,1084	0,8363
PC	2,09	4,3681	1,4899	0,7456
SC	2,43	5,9049	1,0195	0,8528
CL	1,65	2,7225	0,6327	0,8114

Figure 2: Composite reliability.

Variabel	(Σstd.loading)	Σstd.loading^2	Σerror	Variance Extracted
PEU	2,57	2,2147	0,7853	0,7382
CP	1,83	1,6757	0,3243	0,8379
PE	2,38	1,8916	1,1084	0,6305
PC	2,09	1,5101	1,4899	0,5034
SC	2,43	1,9805	1,0195	0,6602
CL	1,65	1,3673	0,6327	0,6837

Figure 3: Variance Extracted.

Data show that composite reliability ranges from 0.74 to 0.91, which exceeds the acceptable value of 0.70 (Hair *et al.* 1998, p.612). all variables have an extracted variance value $\geq$ 0.5 (Hair *et al.* 1998). So, all variables used are reliable.

The fitness measures for the measurement models are shown in Figure 4. All the fitness measures are acceptable. Consequently, all the measures taken in this work show that the model provides a good fit to the data.

No	Uji Kecocokan	Kriteria Kecocokan	Hasil	Keterangan
1	RMSEA	RMSEA $\leq$ 0,08	0,054	Good fit
2	GFI	GFI $\geq$ 0,90	0,90	Good fit
3	AGFI	AGFI $\geq$ 0,90	0,86	Marginal fit
4	CMIN/DF	CMIN/DF $\leq$ 2	1,55	Good fit
5	TLI/NNFI	TLI $\geq$ 0,90	0,96	Good fit
6	CFI	CFI $\geq$ 0,95	0,97	Good fit

Figure 4: Fit indices for the measurement.

3.1. Testing Hypothesis

We examined the structural equation model by testing the hypothesized relationships among various constructs, as shown in Figure 5 by examined the value of t (T-value) for each coefficient. T-value is significant if $\geq$ 1.96 which means the hypothesis can be accepted. If, the value of t <1.96 is not significant and the hypothesis is rejected.

The results not support the influence of perceived ease of use on customer preference (t = 0.95), rejected H1. The hypothesized paths from customer preference are significant in the prediction of online game loyalty (t = 4.04), supporting H2. The effect of perceived ease of use on enjoyment was significant (t=2.61), supporting H3. Perceived
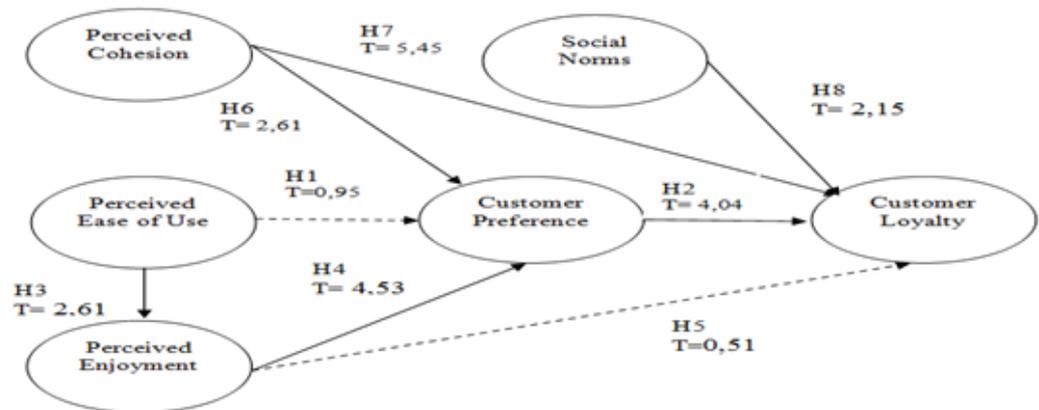
Figure 5: Result of Testing Hypothesis.

enjoyment only influence preference (t= 4.53) but not online game loyalty (t=0.51), supporting H4, rejected H5. Perceived cohesion influences both preference and loyalty toward online game FPS (t= 2.61 and t= 5.45), supporting H6 and H7.Lastly, social norm as expected, influences loyalty online game player (t= 2.15).

This study reveals that perceived ease of use and perceived enjoyment not significantly and directly influence loyalty to online game community. This result can be caused by users prefer the convenience of becoming an expert player in the game played. So to get into a community, the ease of entering is less a favorite determinant of the game because users see the process of becoming an expert player and a sense of comfort and liking arises because of their expertise while in the community. The desire to remain in a community is not only limited to the pleasure of being able to join the community, but someone must be able to mingle with that community.

4. Conclusions

This research is a replication of the research model proposed by C.-L. Hsu, H.-P. Lu (2007), who developed a research model on the online gaming community and the research was conducted in Taiwan. The results of this study are slightly different from the results of the research conducted by C.-L. Hsu, H.-P. Lu (2007). This is due to differences in the object of research. In addition, consumer characteristics and information obtained in Indonesia and Taiwan are also different.Perceived Ease Of Use as a perception of ease in doing something or joining a community does not affect Customer Preference which is the willingness to participate in the activities carried out. However, Customer Preference has an effect on perceived enjoyment. The convenience has an influence on the pleasure felt by members who join a community. In contrast to the influence of the Perceived Cohession on Customer Preference with the ability of members to

adapt to the ability to make members of the community comfortable joining the community. In addition, Customer Preference also affects Customer Loyalty, it shows that the willingness of respondents to enter the community will make respondents will remain in that community. The Perceived Enjoyment has an effect on Customer Preference. It shows that respondents who feel happy to be in a community will easily adapt to the community while Perceived Enjoyment does not affect the Customer Loyalty, indicating that respondents' preference in joining a community does not necessarily make the respondent permanent survive in the community for a long time. As with the Perceived Cohession which influences Customer Loyalty where respondents can adapt well to the community and are able to work well with other members, they will be loyal and persevering in the community and Social Norm influences the Customer Loyalty, indicating that the desire to survive in a community influenced by external factors such as friends and the environment.

References

[1] Chin, Lung Hsu and Hsi Peng Lu. 2007. *Consumer behavior in online game communities: A motivational factor perspective*. Computers in Human Behavior 23 (2007) 1642–1659

[2] Chin, Wyne and David Salisbury. 2008. Perceived Cohesion in Groups: A Confirmatory Factor Analysis. *Small Group Research 30(6),* 751-766 of the Dimensions of Belonging and Morale

[3] Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. Management Science, 35(8), 982–1003.

[4] Griffin 2007, *Customer Loyalty*, Erlangga, Jakarta

[5] Hair et al., (1998), Multivariate Data Analysis, Fifth Edition, Prentice Hall, Upper Saddle River: New Jersey

[6] Husain Umar, 2008. *Metode Riset Bisnis*. Jakarta: PT Gramadia Utama

[7] Kardaras, D., Karakostas, B., & Papathanassiou, E. (2003). The potential of virtual communities in the insurance industry in the UK and Greece. International Journal of Information Management, 23, 41–53.

[8] Kotler, Philip & Kevin Lane Keller, 2009. *Manajemen Pemasaran, Edisi Ketiga Belas*,Jilid 2, PT. Gelora Aksara Pratama, Jakarta.

[9] Peter, Paul J. dan Jerry C. Olson. 2008. *Consumer Behavior and Marketing Strategy,* Eighth Edition. Jakarta: Erlangga

[10] Preece, J. (2000). Online communities: designing usability, support sociability. Chichester, UK: Wiley.

[11] Romm, C., Pliskin, N., & Clarke, R. (1997). Virtual communities and society: toward and integrative three phase model. International Journal of Information Management, 17(4), 261–270.

[12] Schiffman, Leon. G dan Kanuk Leslie. 2007. *Consumer Behavior,* Nineth Edition. Jakarta: PT Indeks

[13] Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. Information Systems Research, 11(4), 342–365.