

ANALYZING THE EFFECT OF CONSUMPTION VALUES ON CUSTOMER PURCHASE OF VIRTUAL GOODS IN DOTA 2: A CASE AT FEB UNSRAT MANADO*ANALISIS PENGARUH NILAI KONSUMSI TERHADAP PEMBELIAN BARANG VIRTUAL PADA DOTA 2: STUDI KASUS DI FEB UNSRAT MANADO*

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Abstract: Recently, internet-based game businesses and entertainments are growing rapidly. This research was designed to investigate what consumption values that could have effect users' purchase decision on Dota 2 virtual goods in Manado with specific case at the Faculty of Economics and Business Unsrat. A quantitative method was applied to analyse data collected using purposive sampling. Multiple linear regression was employed to analyse the purchase decision model, F_{test} and t_{test} were used to analyse simultaneous and partial effects of consumption values on purchase decision of virtual goods in Dota 2, respectively. It was revealed from this research that simultaneously effect of Functional Value, Social Value, Emotional Value, Satisfaction with The Game and Character Identification was significant on purchase decision of virtual goods in Dota 2, but partially this effect was only significant for values of Satisfaction With The Game and Character Identification. Online game industry of Dota 2 has to maintain and develop their virtual goods related to consumption values used in this research with special attention to items that related to the increase of satisfaction with the game and character identification. The future research may be focused on others indicators of consumption values that did not involve in this research.

Keywords: consumption values, dota 2, purchase decision, virtual good

Abstrak: Saat ini, bisnis dan hiburan terkait game berbasis internet tengah berkembang pesat. Penelitian ini dirancang untuk menginvestigasi pengaruh nilai konsumsi terhadap keputusan pembelian 'virtual good' pada Dota 2, berdasarkan studi kasus di Fakultas Ekonomi dan Bisnis Unsrat. Metode kuantitatif digunakan untuk menganalisis data yang dikumpulkan menggunakan 'purposive sampling'. Pengaruh bersama nilai konsumsi terhadap keputusan pembelian 'virtual good' pada Dota 2 dianalisis menggunakan Uji-F (F_{test}), sedangkan pengaruh secara parsial digunakan Uji-T (t_{test}). Dihasilkan dari penelitian ini bahwa Nilai Fungsional, Nilai Sosial, Nilai Emosional, Kepuasan Terhadap Game dan Identifikasi Karakter secara bersama-sama mempengaruhi keputusan pembelian 'virtual good' pada Dota 2. Secara parsial, variabel kepuasan terhadap game dan identifikasi karakter berpengaruh nyata. Berdasarkan hasil penelitian ini, industri game Dota 2 disarankan untuk terus menjaga dan mengembangkan nilai-nilai konsumsi yang digunakan dalam penelitian ini dengan memperhatikan secara khusus pengembangan nilai kepuasan terhadap game dan identifikasi karakter. Penelitian di masa akan datang dapat dikembangkan dengan mempertimbangkan nilai konsumsi yang tidak dilibatkan dalam penelitian ini.

Kata Kunci: nilai konsumsi, dota 2, keputusan pembelian, virtual good

INTRODUCTION

Research Background

Recently, internet-based game businesses and entertainments are growing rapidly. The global game market report premium published that total global game revenues reached \$ 89.4 billion generated from the top 20 countries in 2016. Asia-Pacific countries shared \$ 46.6 billion out of the total revenues in this year, and the rate of increase between 2015 and 2016 was of 10.7%. Indonesia was at the 17th rank with total revenue was of \$704.4 million in 2016 with 56.7 million online population (Newzoo, 2016). Based on data released by Steam Chart, Dota 2 game players increased gradually since it was released by August 2012. This trend is in line with the phenomenon of Dota 2 game players in Manado. For example, at Oni Net in area of Mega Mas there is usually some approximately 80% of visitors are those plays Dota 2 game. The same phenomenon was observed at others internet cafes. This phenomenon indicates that Manado becomes potential market of Dota 2 game with its virtual goods.

Dota 2 Store uses a micropayment service that allows players to purchase in-game cosmetic items in forms of equipment, couriers, announcers and tournament items. Creators of community-contributed items receive a certain percentage or fee from sold items they created. Micro-transactions are often used in free-to-play games to provide a revenue source for the developers. What factors effect game players to buy virtual goods have been reported in various studies (e.g. Lim and Seng, 2010; Park and Lee, 2011; Li, 2012). Two factors of achievement motivation and discovery motivation, according to Li (2012), has a positive effect on the perceiving virtual goods' functional value, while self-expression motivation and the perceiving of social functional values positively related. In their study, Park and Lee (2011) stresses that enjoyment, character competency, visual authority, monetary values, are appropriate for describing how online game user perceive the value of game items. In this research, the model proposed by Ho and Wu (2012) is adopted to investigate what factors that could have effect users' purchase decision on Dota 2 virtual goods in Manado. A quantitative research approach was employed to answer the research questions described above. Results from this study may contribute to the development of consumption values related to purchase decision on Dota 2 virtual goods, and to some extent may provide information for the game industry development.

Research Objectives

In order to answer the identified problem, the research objectives are designed to determine:

1. The effect of functional value, social value, emotional value, satisfaction with the game and character identification on customer purchase of virtual goods in Dota 2 simultaneously.
2. The effect of functional value on customer purchase of virtual goods in Dota 2 partially.
3. The effect of social value on customer purchase of virtual goods in Dota 2 partially.
4. The effect of emotional value on customer purchase of virtual goods in Dota 2 partially.
5. The effect of satisfaction with the game and character identification on customer purchase of virtual goods in Dota 2 partially.

THEORETICAL REVIEW

Marketing

Today's most business and marketing authors (e.g., Shoemaker *et al*, 2006: 20; Reid and Bojanic 2009: 165) argue that the two primary purposes for being in business are to create customers and then to keep them. The premise in these marketing texts is that marketing is the cornerstone for creating more customers, keeping them, and thus increasing profits. Burns and Bush (1995: 5) define the marketing concept as "a business philosophy that holds that the key to achieving organizational goals consist of determining the needs and wants of target markets and delivering the desired satisfaction more effectively and efficiently than competitors".

Consumer Behavior

Many factors can influence the consumer buying behaviour and these can be complex. Consumer behaviour is influenced by three groups of factors: cultural (culture, subculture, and social class), social (reference groups, family, and social roles and statuses), and personal (age, stage in the life cycle, occupation, economic circumstances, lifestyle, personality, and self-concept) (Kotler and Keller, 2012: 151). The process in the purchase of virtual goods can be predicted by knowing the consumer behaviour in purchasing virtual goods. According to Kotler and Keller (2012: 173) consumer behaviour is the study of how individuals, groups and

organizations select, purchase, use and positioning the goods, services, ideas, or experiences to satisfy their needs and desires.

Consumer Purchase Decision

According to Kotler and Keller (2012: 193), purchasing decision is a process that comes from all of consumers' experiences in learning, selecting, using and even getting rid of a product. Zeithaml (1988) and Levy (1999) propose that consumers are 'value driven'. However, in reality, the customers face a more complex situation in making a choice. They have limited economic resources and ability to seek, store, and process information. For this reason, there is a sceptics regarding on consumer behaviour which hypothesize that consumers seek information until the marginal value gained is equal to, or less than, the cost of securing the information to make a choice (Akpojomare *et al*, 2012).

Purchases can be driven by peers and other game players, or by the attributes of the virtual goods that act as purchase drivers in that they are able to create and communicate social distinctions and bonds (Guo and Barnes, 2009). Consumer's interest to purchase a product or service always depends on the willingness to buy and at the same time ability to pay for the product.

Consumption Value

Sheth *et al* (1991) developed five basic consumption values by studying on models of consumption values which are "functional, emotional, conditional, social and epistemic values". The dimension of functional values is described as the benefits obtained from the performance, quality and price of a product. Social values are described as the social benefits that a person obtains upon using a product. In this research, four consumption values proposed by Ho and Wu (2012) including Functional Value, Social Value, Emotional Value, Satisfaction With The Game And The Character Identification, are all used as the key influencers in consumer purchase decision.

Virtual Goods

Virtual good is a newly developed term which describes an item which is primarily in an online environment with a virtual structure. Li (2012) explains that a new economy has emerged in cyberspace. It has attracted much attention of people so that more people are using real money (cash) to buy virtual goods or often referred to as Real-Money Trade (RMT). Virtual goods is a product that can actually be perceived benefits and acceptable logic although its presence through various media or other mechanisms such as computers and other digital devices. Purchase and sale of virtual goods first appeared in the late 1990s when the swords, armor, and other items traded by Massively Multiplayer Online Role Playing Games (MMORPGs) players on eBay (Lim and Seng, 2010). Virtual goods in Dota 2 are in the form of equipment, couriers, announcers and tournament items, and gifts or gift to their friends.

Previous Research

An empirical research has been conducted into players' purchase behaviour in virtual worlds and for a better understanding of factors influencing purchase behaviour in virtual worlds (Guo and Barnes, 2009). Preliminary empirical evidence suggests that factors including effort expectancy, character competency, the quality of the virtual world system, social influence, virtual item resources, personal real resources, performance expectancy, and self-actualization are important for predicting virtual item purchase behaviour in virtual worlds. Lehdonvirta (2009) conducted research on purchase decision in virtual goods. The results showed that virtual items are valued for many of the same reasons as more tangible commodities. While information goods can deliver the same kinds of emotional and aesthetic sensations as virtual goods, both being computer-mediated, virtual goods are more suited to creating and maintaining social distinctions and bonds because of their built-in rivalry and scarcity. In their research, Lim and Seng (2010) identify that hedonistic factor appears to be the most dominant factor that affects the purchase of virtual goods.

Research Framework

The framework of this research is summarised as in Figure 1. It can be explained from Figure 1 that customer purchase of virtual goods is depending upon the four consumption values, simultaneously or partially.

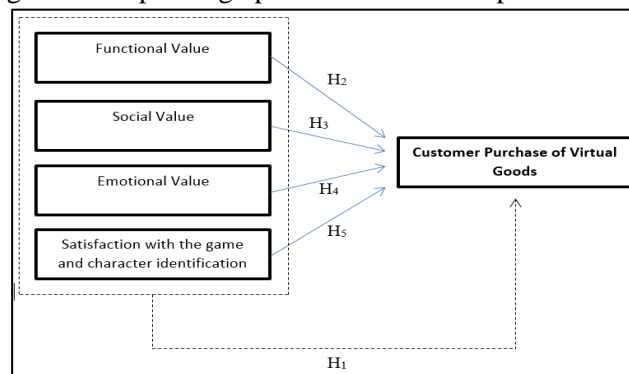


Figure 1. The Research Framework

Source: Empirical Framework

RESEARCH METHOD

Type of Research

A quantitative approach was applied in this research. This approach was used to investigate the theory of consumption value in driving the purchase of virtual goods.

Place and Time of Research

This research was focused on Dota 2 consumers at the Faculty of Economics and Business (FEB) Unsrat. This was started in March 2017 and ended by September 2017.

Research Procedure

This research was organised into the following nine steps: (1) Drafting research proposal, (2) Selecting research location, (3) Constructing a questionnaire based on indicators of variable used, (4) Contacting targeted respondents, (5) Distributing the questionnaire to targeted respondents, (6) Collecting data, (7) Organising/tabulating collected data, (8) Processing tabulated data using SPSS, (9) Analysing and reporting results of the research.

Population and Sample

In this research, the population was of all Dota 2 players at FEB Unsrat who have ever bought virtual goods in Dota 2. Based on rough estimation, Dota 2 players at FEB may be less than 100 players, so that the sample size of 50 is considered of rational for this research.

Purposive sampling approach was applied in this research. The main goal of purposive sampling is that it is focused on particular characteristics of interested population and the sample is chosen for a specific purpose. In this research, respondents were selected based on their characteristics that met the criteria used for this study. Two criteria for selected respondent included: (1) minimum age of 17 years at the time of survey for reason of reliable answers and (2) Dota 2 players who have bought virtual goods in Dota 2.

Data Collection Method

According to Hox and Boeje (2005: 593), primary data is original data that is collected for a specific research goal. In this research, primary data was collected by means of a questionnaire designed specifically to answer the research objectives. This questionnaire was made available in online-based Google Form, so respondents could respond quickly.

Data Analysis

Descriptive analysis was employed to describe characteristics of respondents based on factors of gender, age and marital status. Validity test was conducted to analyse of whether all questions used for variables in the questionnaire were valid or not, based on correlation between each question to the total questions. Pearson Product Moment was used for this test. A question was categorized as valid question if the value of Pearson

correlation was positive and the significance value below 0.05 to the total questions of variables. Reliability test was established by testing for both consistency and stability of the answers of questions. Cronbach's Alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another (Sekaran and Bougie, 2009: 162). A variable is categorized as reliable valuable if value of Cronbach's Alpha is above 0.60.

Classical Assumption Test

Four assumptions including normality, no multicollinearity, homoscedasticity and no auto-correlation were analysed to make multiple linear regression. Normality was checked by plotting residual values on a histogram with a fitted normal curve. No multicollinearity was tested by the Variance Inflation Factor (VIF) statistic. Another way to think of co-linearity is "co-dependence" of variable (Schreiber-Gregory and Jackson, 2017). Intellectus Statistics plot the standardized residuals verses the predicted Y' values can show whether points are equally distributed across all values of the independent variables or not. According to Sekaran (2005: 268), homoscedasticity occurs if the one residual observation to other observation is fixed, otherwise it is called heteroscedasticity. The multiple linear regression model was checked for autocorrelation with the Durbin-Watson test.

Multiple Linear Regression

In this research, multiple regression analysis was employed to analyse the effect of consumption value (Independent Variables: Functional Value, Social Value, Emotional Value, Satisfaction With The Game and Character Identification) on the customer purchase of virtual goods (Dependent Variable). In general, the equation of multiple linear regression is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where, X_1, X_2, X_3, X_4 are independent variables and Y is dependent variable. For practical reason of this research, this general formula can be written as follows:

$$\text{Consumer Purchase Decision (CPD)} = \beta_0 + \beta_1 \text{FV} + \beta_2 \text{SV} + \beta_3 \text{EV} + \beta_4 \text{SC} + e$$

Where, CPD = Consumer purchase decision, β_0 = Constant, FV = Functional Value, SV = Social Value, EV = Emotional Value, SC = Satisfaction With The Game and Character Identification, $\beta_1, \beta_2, \beta_3, \beta_4$ = The regression coefficient of each variable, e = Error.

To test simultaneous effect of independent variables (EV, SC, EV, SC) to dependent variable (CPD) F_{test} was used. A F_{test} as any statistical test in which the test statistical has an F-distribution if the null hypothesis is true. If F_{count} is greater than F_{table} , H_0 is rejected and H_1 is accepted. Accepting H_1 means that all consumption values has an effect on consumer purchase decision at certain significant level used. To test partial effect of each independent variable t_{test} was used (5 %, $\alpha = 0.05$). Statistically, this test has a t distribution if the null hypothesis is true. In this test, t_{count} is compared to t_{table} . If t_{count} is greater than t_{table} H_0 is rejected and H_1 is accepted. Accepting H_1 means that a single independent variable has an effect on dependent variable.

Goodness of Fit Test through Coefficient of Correlation (R) and Coefficient of Determination (R^2) was applied in this research. "Coefficient of determination is used to show the percentage of variability in Y that can be explained by regression equation". Meanwhile, "Coefficient of Multiple Correlation is used to measure the strength of relationship between Y (dependent variables) and X (independent variables)" (Newbold and Thorne, 2003: 432). The following considerations are used to classify the strength of correlation: > 0.70 (very strong positive correlation), 0.50 – 0.69 (substantial positive correlation), 0.30 to 0.49 (moderate positive correlation), 0.10 to 0.29 (low positive correlation), 0.00 (no correlation), - 0.01 to - 0.09 (means a negligible negative correlation), - 0.10 to - 0.29 (low negative correlation), - 0.30 to - 0.49 (moderate negative Correlation), - 0.50 to - 0.69 (substantial negative correlation), < - 0.70 (very strong negative correlation).

RESULT AND DISCUSSION

Result

Questionnaires were distributed using Google Form application with the specific target of Dota 2 Players in the Faculty of Economic and Business. A total of 59 questionnaires were filled out by respondents, and only 50 of these were involved in the analysis because a number of 9 respondents have never purchased products of Dota 2.

Characteristics of Respondent

Based on gender, Dota 2 Players of the targeted respondents were dominated by men. Overall there were 86 % of respondent were categorised as men comparing to 14 % for women. This result indicated that men prefer to play Dota 2 than women. Based on age it was revealed that ages of respondents distributed in the interval between 17 to 24 years old. Respondents in ages between 21 and 22 shared of 28 % and 30 % age composition of respondents respectively, or a total of 58 % of respondents. Respondent in ages 19 and 20 shared of 18 % and 14 % to age composition of respondents. The remaining total of 10 % age competition belonged to ages of 17, 23 and 24. Data of marital status of respondents explained that most of respondent were unmarried compositing by 98 % of the total respondent. Meanwhile, married respondents were only 2 %. Data of respondents' monthly allowance, most of respondents (82 %) had monthly allowance in the range between Rp. 1,000,000 and Rp. 2,000,000. The rest of 18 % was above Rp. 2,000,000.

Validity and Reliability Tests

Results of analysis indicated that values of Pearson Correlation for all questions were in the range between 0.537 and 0.942, or all above 0.5. These indicated that questions for all variables in the questionnaire were valid. They could be used to identify the effect of consumption value on customers' purchase of virtual goods of Dota 2. Meanwhile, results of reliability test resulted in values of Cronbach's Alpha varied from 0.798 to 0.916. Based on data of Cronbach's Alpha of each variables, four variables of Functional Value, Social Value, Emotional Value, Satisfaction With The Game and Character identification, could be categorized in reliable variables. Generally, this results of test indicated that all questions of variables used for the questionnaire were reliable, consistent and stable, and could be used to identify the effect of consumption value on customers' purchase of virtual goods of Dota 2.

Classical Assumptions Analysis

Several assumptions including normality, no multicollinearity, correlation, homoscedasticity, and no autocorrelation, were checked to make the multiple linear regression. Generally, all of these assumptions were fulfilled to run the multiple linear regression. The plot of residual values on a histogram with a fitted normal curve is presented. As can be seen from this histogram, the plot approximately followed the normal curve indicating that the data was normally distributed. Multicollinearity was tested by the Variance Inflation Factor (VIF) and Tolerance statistics. Results of analysis indicated that all VIF values were below than 10 and Tolerance values were above 2, indicating that the research model is free from multicollinearity. Statistics plot of the regression standardized residuals verses regression standardized predicted values indicated that all points scattered around zero, above or below zero. This explained that the model has no heteroscedasticity. Durbin-Watson Test was employed to check the presence of autocorrelation in the multiple linear regression data. Based on d or W-D value of around 2, or in this research was measured at 2.178, indicating that the multiple linear regression data were free from autocorrelation.

Multiple Linear Regression Analysis

In this research analysis of multiple linear regression was employed to analyze the effect of consumption values on the purchase decision of virtual goods in Dota 2 simultaneously and partially. Results of analysis are presented in the following explanations.

Result of regression analysis using independent variables (consumption values) of Functional Value, Social Value, Emotional Value, and Satisfaction With The Game and dependent variable of Consumer Purchase Decision is presented in Table 2.

Table 2. Multiple Linear Analysis Output

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|-----------------------------|------------|---------------------------|--------|-------|
| | B | Std. Error | Beta | | |
| (Constant) | 5.758 | 1.364 | - | 4.222 | 0.000 |
| Functional Value | - 0.100 | 0.060 | - 0.094 | -1.657 | 0.104 |
| Social Value | 0.004 | 0.038 | 0.005 | 0.102 | 0.919 |
| Emotional Value | 0.071 | 0.072 | 0.067 | 0.979 | 0.333 |
| Satisfaction With The Game and Character Identification | 0.645 | 0.045 | 0.975 | 14.424 | 0.000 |

Source: SPSS output, 2017

Based on data in Table 2, the regeneration model can be performed as the following equation:

$$\text{Consumer Purchase Decision (CPD)} = 5.758 + (- 0.100 \text{ FV}) + (0.004 \text{ SV} + (0.071 \text{ EV}) + (0.645 \text{ SC}))$$

Where: FV = Functional Value, SV = Social Value, EV = Emotional Value, SC = Satisfaction With The Game and Character Identification. The following interpretations can be made from the model of multiple linear regression:

1. Constant value of 5.758, meaning that if values of independent variables (Functional Value, Social Value, Emotional Value, and Satisfaction With The Game and Character Identification) are zero (0), the Purchase Decision (Y) value would be 5.758;
2. Standardized Coefficient Value of - 0.100 for Functional Value indicates that if all others independent variables are constant and this independent variable increased by one scale or unit, the dependent variable of Purchase Decision would decrease by 0.100;
3. Standardized Coefficient Value of 0.004 for Social Value indicates that if all others independent variables are constant and this independent variable increased by one scale or unit, the dependent variable would increase by 0.004;
4. Standardized Coefficient Value of Emotional Value of 0.071 indicated that if all others independent variables are constant and this independent variable increased by one scale or unit, the dependent variable would increase by 0.071;
5. Standardized Coefficient Value of 0.645 for Satisfaction With The Game and Character Identification indicated that if all others independent variables are constant and this independent variable increased by one scale or unit, the dependent variable would increase by 0.645.

Goodness of Fit Test of The Model

It was resulted from the analysis that the consumption values (Functional Value, Social Value, Emotional Value, and Satisfaction With The Game and Character Identification) were correlated with Purchase Decision (Coefficient Correlation, $R = 0.967$). This level of correlation could be categorized in very strong positive correlation. Result of analysis of Coefficient Determination ($R^2 = 0.936$) indicated that some 93.6 % of purchase decision might be cause by variables of consumption values used in this research. The rest cause of 6.4 % came from other factors.

Significance Test of The Model

In this research, significance of the model was tested through Analysis of Variance (ANOVA). To analyse the simultaneously effect of consumption values on purchase decision, F_{test} was used, meanwhile t_{test} was used to analyse partially effect of each consumption value to purchase decision. As can be seen from result of analysis in Table 3, the multiple linear regression model of purchase decision was of significant (Sig. = 0.000). This indicated that this model could be used to predict purchase decision.

Table 3. Analysis of Variance (ANOVA)

| Model | Sum of Squares | DF | Mean Square | F | Sig. |
|------------|----------------|----|-------------|---------|--------------------|
| Regression | 949.961 | 4 | 237.490 | 163.612 | 0.000 ^b |
| Residual | 65.319 | 45 | 1.452 | | |
| Total | 1015.280 | 49 | | | |

Source: SPSS output, 2017

Simultaneously Test of Regression Coefficient (F_{test})

This test was conducted by means of F_{test} , to analyse simultaneous effect of consumption values (Functional Value, Social Value, Emotional Value, Satisfaction with The Game and Character Identification) on purchase decision. The result of test indicated that simultaneously effect of consumption values was of significant on purchase decision, F_{count} (163.612) > F_{table} (2.97 for $\alpha = 0.05$, 4, 45).

Partially Test of Regression Coefficient (t_{test})

To analyse partial effect of consumption values of consumption values (Functional Value, Social Value, Emotional Value, Satisfaction with the game and Character Identification) on purchase decision, t_{test} was conducted by comparing value of t_{count} to value of t_{table} . Overall, results of t_{test} can be explained as follow:

1. H_2 was rejected ($t_{count} = -1.657$ compared to $t_{table} = -2.014$, felt in area of accepting H_0 in the curve; or significance value 0.104 bigger than 0.05), meaning that Functional Value has no significant effect on Purchase Decision;
2. H_3 was rejected ($t_{count} = 0.102 < t_{table} = 2.014$; or significant value 0.919 bigger than significant value 0.05), meaning that Social Value has no significant effect on Purchase Decision;
3. H_4 was rejected ($t_{count} = 0.979 < t_{table} = 2.014$; or significant value 0.333 bigger than significant value 0.05), meaning that Emotional Value has no significant effect on Purchase Decision;
4. H_5 was accepted ($t_{count} = 14.424 > t_{table} = 2.014$; or significant value 0.000 less than significant value 0.05), meaning Satisfaction With The Game and Character Identification (X_4) has significant effect on Purchase Decision. This means H_5 is accepted.

Respondents' Purchase Decision Degree

General trend was that purchase decision degree was the highest for the three consumption values of Functional Value (37 %), Social Value (27 %) and Emotional Value (35%). Strongly Agree varied from 12 % (Functional Value) to 35 % (Emotional Value), comparing to 19 % (Emotional Value) to 33 % (Functional Value) for Slightly Agree. Disagree and Slightly Disagree seemed relatively comparable, varying from 6 % (Functional Value) to 15 % (Satisfaction With The Game and Character Identification) and from 5 % (Emotional Value) to 14 % (Social Value) respectively. Strongly Disagree was the lowest for all consumption values.

Discussion

Simultaneous effect of Functional Value, Social Value, Emotional Value, Satisfaction with The Game and Character Identification was significant on purchase decision of virtual goods in Dota 2 for the study case. This was supported by the result of F_{test} that confirmed F_{count} . This result of analysis supports the proposed concept of Ho and Wu (2012) who argue that consumption values of Functional Value (price utility and quality), Emotional Value (aesthetics and playfulness), Social Value (social self-image expression and social relationship), satisfaction With The Game and Character Identification, are all key influencers in consumer purchase decision.

Partially, effect of consumption values could only be significant for variable of Satisfaction with The Game and Character Identification. In this research, Satisfaction with The Game was related to satisfaction as a player of the game, satisfaction in term of decision to play the game, and satisfaction in term of the wise choice of the game. Meanwhile, Character Identification was related to understanding of characters in the game, suitable and happy with the gameplay, and feeling the same as the characters in the game.

The multiple regression model of purchase decision investigated in this research clearly indicated that consumers of virtual goods of Dota 2 players at the case study used all information of virtual goods' attributes in making purchase decision, and the decision was made based on their experiences. Kotler and Keller (2012: 195) explains that purchasing decisions is a process that comes from all of their experiences in learning, selecting,

using and even get rid of a product. Consumer, who would buy a product, will try to find as much information as possible before making a purchase decision.

Based on the result of partial regression analyses, the business industry of Dota 2 has to develop any items that support of the increase of consumers' satisfaction and character identification. If it is so and it is put together with the increase of the quality of any items related to other consumption values, then the purchase decision of virtual goods in Dota 2 would be improved. It is explained by UK Essay (2013) that consumer's interest to purchase a product or service always depends on the willingness to buy and at the same time ability to pay for the product.

Overall, virtual goods in forms of equipment, couriers, announcers and tournament items, and gifts or gift to their friends of Dota 2 are promising online-based industry or described by Li (2012) as a new economy in cyberspace. These virtual goods of Dota 2 has attracted students at the Faculty of Economics and Business, Unsrat as they actually perceived benefits and acceptable logic although its presence through various media or other mechanisms such as computers and other digital devices.

CONCLUSION AND RECOMMENDATION

Conclusion

After examining the findings and discussing the result, the conclusions can be formulated as follows:

1. The independent variables which are functional value, social value, emotional value, and satisfaction with the game and character identification have a simultaneous effect on customers' purchase decision of virtual goods in Dota 2.
2. Functional value as one of the independent variable does not have an effect on customers' purchase decision of virtual goods in Dota 2.
3. Social value as one of the independent variable does not have an effect on customers' purchase decision of virtual goods in Dota 2.
4. Emotional value as one of the independent variable does not have an effect on customers' purchase decision of virtual goods in Dota 2.
5. Satisfaction of the game and character identification as one of the independent variable does not have a significant effect on customers' purchase decision of virtual goods in Dota 2.

Recommendation

The following are recommendations from this research:

1. Online game industry of Dota 2 has to maintain and develop their virtual goods related to consumption value of Functional Value, Social Value, Emotional Value, Satisfaction with The Game and Character Identification as these might have simultaneous effect on consumer purchase decision; and special attention is needed to develop items that related to the increase of Satisfaction with The Game and Character Identification as this might have partial effect on consumer purchase decision at significant level.
2. In regarding to theory of consumption value, the future research may be focused on others indicators of consumption values that did not involve in this research.

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