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Customers' Preference of Online Marketplace: Trendyol and Hepsiburada Case Study

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A R T I C L E   I N F O

A B S T R A C T

The development of the internet has increased the popularity of e-commerce. There are many different types of an online marketplace, and each of them has its own customer base. Customers develop their preference or choice of the specific online marketplace over the competitors. This research aimed to understand the factors influencing the choice. The research explored online dimensions that influence user experience during shopping. In addition, the research incorporates neuroscientific findings, namely limbic types which are essentially similar to customer persona. Analysis of customer persona of the limbic type used descriptive analysis and dimension of attitude online shopping used regression analysis done with SPSS application. The object of research was the online shopper with marketplace Trendyol and Hepsi Burada. The collection of data by google form used snowballing technique. The total number of respondents was 117. The results showed that Trendyol category of limbic types were Connoisseurs and Hedonists. The limbic map of Trendyol was Fantasy/Pleasure towards Balance System. The dimensions of brand identity that give significant effects were interactivity, information quality, usability, entertainment and personalization on customer preference in shopping using Trendyol and HepsiBurada. Interactivity, usability and entertainment gave a positive and significant effect on brand attitude formation in E-shops Trendyol or Hepsiburada, whereas information quality and personalization resulted in a significantly negative impact. Design and domain name had no significant effect on customer preference in the online marketplace. The model could explain 79.2% of brand attitude formation in E-shops Trendyol or Hepsiburada.

1. INTRODUCTION

The advancement of technology and internet have significantly contributed to changes around the world. It reduces barriers of penetration into new markets, influencing many industries. E-commerce sector continues to grow, and has become more saturated than ever (Tchelidze, 2019). According to analysis by Ozturk (2021), Turkey is the 18th largest market for e-commerce with a revenue of US$16.3 billion in 2021. And projected to reach US$26.10 billion in 2022 (Statista, 2021). Statista (2021) analysis shows that user penetration will be 51.5% in 2022 in Turkey, and expected to hit 66.9% by 2025. Their research forecasted that the number of users in the e-commerce market is expected to amount to 58 million users by 2025.

Online market place is an e-commerce platform that connects sellers and buyers, where products are listed and sold by third-party vendors (Tchelidze, 2019). To date, there are many different types of marketplace such as B2B or B2C, new or second-hand products, commercial or artisan, and many more. Trendyol is ranked number one and is the most visited online marketplace in Turkey in September 2022, according to Similar Web (2022) analysis, followed by Hepsi Burada, Amazon, and Ali Express. Each online marketplace attracts their own customer niche. Customers have their own online marketplace preference that they mostly go to. Sellers, who are already in or want to start in e-commerce industry, need to know which online marketplace their target customers will most probably go to.

This research has two research questions. What is the characteristic of customers online marketplace based on neuromarketing (limbic map) theory? Do marketplace platform's online dimensions affect customer choice of online marketplace? This research aims to understand the factors influencing customer's choice of online marketplace. In the practical side, considering the advancement of technology and the rapid growth of e-commerce market, this research will help sellers in establishing their e-commerce business. Particularly, in determining the best marketplace platform for them to use. In academic side, this research aims to gain deeper understanding on customer behavior, which ultimately extending marketing knowledge. In specific, this research examines online dimensions influence on customer behavior, which also has a practical relevance to e-commerce platform in their user experience research. This research incorporates marketing theories and neuroscientific findings, also known as neuromarketing fields. Although there are numerous neuromarketing studies published, this research intends to bring practicality to the theory. In that sense, this research conducted a comparative test on two largest online marketplaces in Turkey, namely Trendyol and Hepsi Burada.

Literature Review

Neuroscientific studies found that human brain's motivational and emotional systems, which are located in the limbic system, significantly affect development of needs and purchasing decision (Strang 2009). Hausel (2016) developed limbic map and limbic type that could identify emotions, motives and values of an individual that is pertinent in creating a targeted communication strategy. In developing a targeted strategy, defining the target group and aligning consumer's needs and vales are important. He defined emotions as reactions to specific stimuli that reflects individual's behavioural, evaluation and goal framework. On the other hand, motivation is emotion system's actual application and execution in daily life. The

interaction of emotion and motivation systems model the structure of individual personality. Consequently, these systems are significant in classifying target groups, and evaluate relevance of brands and products within their audiences (Hausel 2012). Hausel's (2016) limbic map is a framework that could help marketers in identifying values and emotions that resonates with the relevant target groups. He identified three main motivational and emotional systems that are also referred as the Big 3 including balance system, stimulant system and dominance system. Motivation systems have parallel activities that consequently lead to them being complemented by sub-modules of mixed forms of the Big 3.

Figure 1. Hausel's Limbic Map (2016)

Source: Researcher Data, 2022

The sub-modules include the interaction of stimulant and dominance referred as adventure/thrill, the interaction of dominance and balance referred as discipline/control, and the interaction of balance and stimulant referred as fantasy/pleasure. Furthermore, often-used values in marketing are allocated to the map. Limbic map involves combination of consumer's values and their position, therefore, it gives insights on consumer's personality and facilitates in identifying and practical classifying their emotional focus.

In addition, Hausel (2016) distinguished different limbic types that reflects consumer's personalities based on mix of different categories of the Big 3 and its sub-modules. The classification could be used for target group segmentation and analysis, therefore, helping in developing a communication strategy. The following are the Limbic Types:

• Harmonizer

   The Balance system is combined with care and bonding systems. This type emphasized on low ascent and status orientation, leading to the high importance of home and family. The focus of consumption is products for family and home.

- Connoisseurs

  A mixture of the stimulant system and Balance system. The stimulant system dominance effects on a positive attitude to life and prioritizing known and new pleasures and experiences. The balance system affects on paying attention to a product's origin and quality.

- Hedonist

  Stimulant systems dominance affects on constant in search of new experiences which characterised by high individualism and spontaneity. Target group in this category would consider the product's quality as a less important factor and would prioritize and novelty and uniqueness of a product.

- Adventurer

  Stimulus system supremacy combined with slight of dominance system. This group have a high chance of risk-taking and low impulse control. For this group, consumption is all about fun and excitement, therefore the products for this group must be liberating or performance-enhancing.

- Performer

  Dominance system rules in this category. The group's character centred around high performance and ambition. In choosing product, they focus on quality and perfection.

- Disciplined

  The mixture of supremacy of dominance system with slight of balance system resulting a more pessimistic attitude. The group's personality has a high sense of duty and low consumerism meaning only buying what is necessary. In buying product, they tend to focus on quality, guarantee and thriftiness.

- Traditionalist

  Dominant in balance system meaning the group is more cautious and sceptical of new things. The group's personality surrounded with order and security while having low future minds. In choosing the products, they tend to focus on the brand's security and trust-worthiness because they carefully examine details and have relatively rigid consumer habits (Rüschendorf 2020).

A study done based on Hausel's (2016) Limbic Map and Limbic types aiming to gain insights on brand positioning in the brand by examining four different beer brands. (Rüschendorf, 2020) The study concluded that through Limbic Map and Limbic types model, marketers could define their target group and gain insights on how advertisements can convey specific desired motives of the target group.

Tobias Kollmann and Christina Suckow of University of Essen (2012) developed A model that synthesis of behavioural-based approach and identity-based approach to show what brand identity dimensions significantly affect brand attitude formation in E-shops. The model involves attitude constructs namely affect, cognition and conation dimensions; and online shop dimensions which is formed through content analysis done by online brand experts by grouping

significant expressions into meaningful clusters and label each clusters including interactivity, information quality, usability, design, entertainment, personalization, and name.
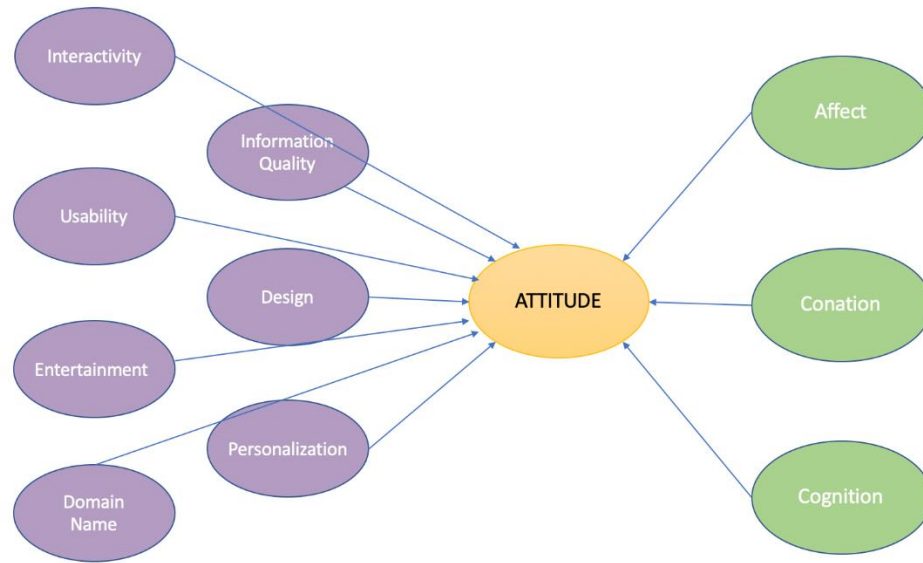

Figure 2. Kollman/Suckow Influencing User Attitude by Managing Brand Communication in E-Shop Model (2012)

Source: Researcher Data, 2022

Kollman and Suckow (2012) found that all brands identity dimension shows significant effect on visitors' attitude. In terms of attitude formation of online shop's first-time visitor, information quality, entertainment and personalization are found to be highly significant, which entertainment have the highest effect between the three dimensions. Entertainment dimension refer to engaging characteristics that motivates visitor to continue exploring the site. In addition to increasing time spent in the site, it increases the flow of information processing with ease and stimulates senses. Therefore, online shops should organize their site not only in functional manner but also emotional manner which will reinforce hedonistic values. Previous studies also found that entertainment have positive effect on user's intention to return to a website (Koufaris 2002), intention to repurchase (Bauer et al. 2006) and intention to suggest the site to others (Sit/Merrilees 2005).

Personalizing information to increase content relevance to each individual is called dimension of personalization which also found to have a positive impact on attitude. Through personalized content, online shops could enhance visitor experience including satisfying their needs and solving tasks. Previous study also shows the impact of personalization on loyalty and consumer behaviour (Ball et al. 2006)

In addition, information quality in terms of intrinsic and contextual aspects found to have effects on attitude. Information quality dimension involves visitors' perceptions of online shop's information richness, quality and quantity, and information organization and architecture. (Kollman/Suckow 2012) Intrinsic information quality refers to the accuracy and credibility of

information. On the other hand, contextual information quality refers to presented information's specificity and how it supports customers' tasks.

The study (Kollman/Suckow 2012) found that interactivity, domain name, usability and design have significant but rather weak effects on attitude. Usability is rather a subjective perception since it is evaluated by individual ability to navigate through online shop's website or platform. A study (Yang et al. 2006) found that perceived design by customer have a positive effect of the overall visual image of online shop on brand perception. Rowley (2004) writes that consistency between brand name and domain name reinforces brand familiarity, therefore, strengthen message links between channels.

Ilyas et al. (2020) lists possible factors influencing Indonesian's online shopping intentions based on previous researches:

- Comfort factor

    Perceived convenience is gained through ability to offer comfort and enable routine needs. Therefore, perceived convenience involves level of comfort in transaction process (Duarte et al. 2018)

- Trust factor

    Trust factor refers to consumer's confidence in an activity or a transaction in terms of reliability and cost-efficiency (Morichi/Takahashi 2016).

- Risk factor

    Perceived risk involves perception of possible loss in terms of time, security, financial, social and performance (Mansur et al. 2019). Consumer's perceived uncertainty is defined as risk. Purchase not made directly in stores including online shopping elicits uncertainty and perceived risk. (Yang et al. 2020)

- Amount of effort factor

    Online shop's usability level (easy or difficult) influences consumer decision to adopt e-commerce (Mansur et al. 2019).

- Habit factor

    Habit is referred as repetition behaviour of an activity. (Mansur et al. 2019) Habit factor involves whether users are accustomed or not to do activities such as browsing, online shopping, etc (Ilyas et al. 2020).

- Social influence

    Social influence factor is related to how by using a system it enhances a user's self-image or individual perception, which in turns affects whether to use a system or not (Yang et al. 2016).

A snap cart research of Indonesia e-commerce sector done in 2018 found that 37% respondents stated that they use Shopee, and Shopee scores 81% in awareness level comparing to Lazada 80% and Tokopedia 78%. Related to these findings, a study done in 2020 try to analyse brand awareness role in repurchase intention and customer satisfaction by using Shopee as a case

study. They developed a model including variables such as recall, purchase and consumption to determine the linkage of brand awareness, customer satisfaction and repurchase intention. (Ilyas et al. 2020)

Ilyas' et al. (2020) study is aligned with neuromarketing findings. There are two systems in relation with behaviour and decision-making including autopilot refers to subconsciousness and pilot refers to consciousness. Felix (2008) concluded that decisions are mostly made subconsciously, in the autopilot system. The autopilot system would have higher tendency towards brands or products which are associated with positive experience.

According to Raab et al. (2009), brands, from neuroscientific standpoint, are neuronal networks involving emotional systems connecting with products characteristics, which inhibit on the Limbic Map. He identifies two effects of strong brands in the brain including (1) providing cortical relief meaning that strong brands activate less brain areas that reduces brain's workload thus producing competitive advantage for a consumer's favourite brand; (2) in terms of neuronal brand ranking, there are only the first place then the rest of it. Brand message's constant and permanent repetition creates strong neural brand networks. Brand message that represents constant brand identity and focuses on consumer's needs stimulated the motivational system (Hausel 2016),

There are others neuromarketing research findings on decision making process such as priming and framing effect (Raab et al. 2009) and mirror neurons (Scheier/Held 2012). Priming effect refers to how association of subtle stimuli in memory triggers certain behaviors, on the other hand, framing effect refers to decision-making framework and decision presentation have influence on consumer's decision. Raab et al. (2009) gives an example of how customers have tendency to prefer dairy product with packaging showing 80% fat free rather than 20% fat products. A more expensive price with discount label compared to cheaper regular price of products are also preferred by customers. Study on priming effects indicates implicit and subtle signals have a great influence which is used in marketing and sales (Raab et al. 2009).

Rüschendorf (2020) investigated brand positioning of four different German beer brands to determine whether the theoretical aspects of neuromarketing can be confirmed in an empirical study. She cited Gentner (2012) four codes that determine long-term storage memory of the customer. These codes play a role in connected the strategy and execution in brand communication (Rüschendorf, 2020).

• Language (words, names, association)

   Language can convey messages both explicitly and implicitly. Therefore, brand managers have to take into consideration linguistic aspects of every decisions related to the brand and the messages intended to be conveyed. The neuroscientific explanation for it is that the unconscious autopilot in the brain reacts to implicit meaning of the linguistic codes. Accordingly, customer purchase decision is based on whether the brand reflects the customer's condition.

• Story (episodes, stories)

   Brand story creates an emotional bond between the customer and the brand. Typically, a story involves a hero's adventure, challenges and how he overcomes it. Through a story,

customers' emotions are aroused while accompanying the hero. The mirror neurons of the brain enables customers to experience the story and empathize with the hero.

- Symbols (faces, protagonists, brand symbols, locations)

Symbols conveys implicit and culturally-learned meanings in an efficient way. Symbols strengthen the emotional arousal in a story even further. But, symbolism or archetype can also convey a story, subsequently, encoded as patterns in the customer's brain. Symbolism of a brand take various form such as logo, shape, packaging, icon, etc.

- Sensorics (colours, shapes, sounds, haptics, lighting, and scents)

Human has six senses including seeing, hearing, smelling, tasting, feeling, and touching. When several senses are addressed simultaneously and the meaning of this multi-sensory pattern is coherent, the effect in the brain is potentiated and the message achieves a stronger effect. For instance, the fizzing sound of and opened beer bottle convey messages that lead the audience to feel thirsty. The design of the sensory impressions appeals to different type of customers.
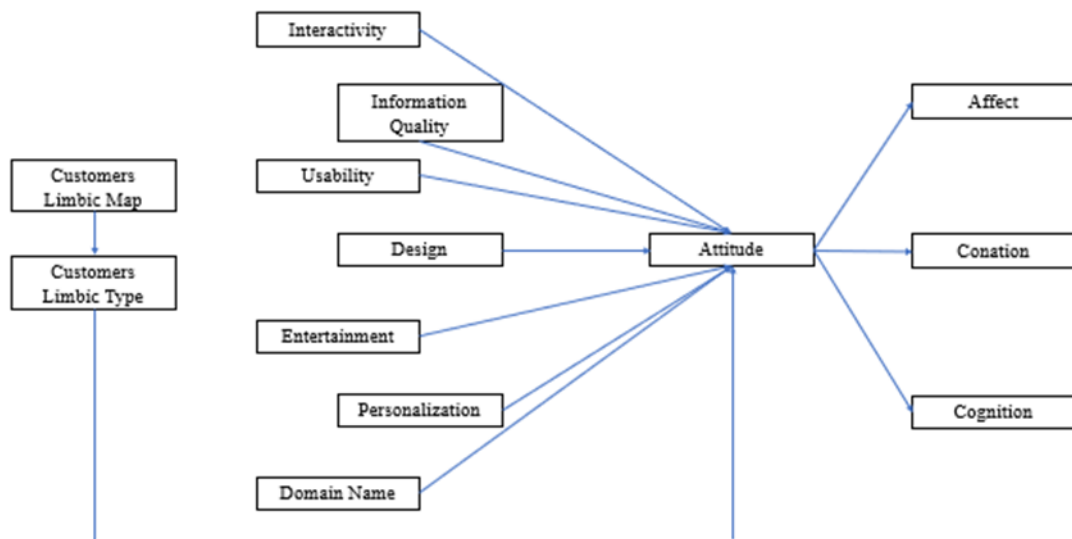
2. RESEARCH FRAMEWORK

Figure 3. Research Framework Consumers' Preference on Market Place

Source: Researcher Data, 2022

The research framework basically is combining the characteristics of consumers based on Limbic Theory on neuromarketing (Hausel, 2016) and Kollman/Suckow Influencing User Attitude by Managing Brand Communication in E-Shop Model (2012). The research question number one is assessing the characteristics of Trendyol and consumers and the second research question is analysing the dimensions of attitude of consumers on shopping in marketplace. Lastly stage is seeing the relationships between the two by assigning customers' limbic type as one of the factors affecting consumers' attitude.

In answering the first research question "Do customer's characteristics influence their choice of online marketplace?" A quantitative survey on the brand perception of HepsiBurada and Trendyol is done. This methodology is a replicate of a study on brand perception and

positioning by Rüschendorf (2020), whereby the main focus is on the implementation of Gentner (2012) four codes of brand positioning, and Hausel (2016) limbic map.

In answering the second question "Do marketplace platform's online dimensions affect customer choice of online marketplace?", a quantitative survey is done. The survey involve replication of Kollman and Suckow (2012) quantitative methodology. This method is chosen to highlight whether the online dimensions also play a role in customer decision making.

The survey consists of three sections. The first section involves general questions to profile the respondents such as age and gender, as well as their online marketplace preference and relationship with online shopping. The second section aims to investigate brand perception and positioning, it consists of practical implications of the four codes and limbic map theories. It consists of questionnaire related to the customer experience and connection to the brand. In particular, the respondent will be assigned to the limbic types queries to shine a light on the most influential aspects of their lifestyle and their prioritization of possible online marketplace features. The third section aims to understand which online dimensions affect customer decision and experience. For that purpose, the respondents are assigned with questions asking which online dimensions affect them.

Variables

A variable is the object of research. Variables are divided into two, namely the independent variable and the dependent variable. The independent variable (X) is the influencing variable, while the dependent variable (Y) is the affected variable. In this research, there are total of seven independent variables which are seven dimensions online shopping and three factor of dependent variable developed by Kollman and Suckow (2012). The seven online dimensions variables are interactivity (X1 with four indicators: X11, X12, X13, X14), information quality (X2 with four indicators: X21, X22, X23, X24), usability (X3 with four indicators: X31,X32, X33, X34), design (X4 with four indicators: X41, X42, X43, X44), entertainment (X5 with three indicators: X51, X52, X53), personalization (X6 with four indicators: X61, X62, X63, X64), and domain name (X7 with four indicators: X71, X72, X73, X74). On the other hand, the dependent variable is customer's choice of online marketplace (Y consist of factor affect Y1 with three indicators (Y11, Y12, Y13), cognition Y2 with six indicators (Y21, Y22, Y23, Y24, Y25, Y26) and conation Y3 with five indicators (Y31, Y32, Y33, Y34, Y35).

Sampling

The sample method used in this study is non-probability random sampling, which is a sample selection technique that is not based on the law of probability. Therefore, it does not require equal opportunities for members of the population to be selected. The selection of the sample is based on certain subjective criteria, but the criteria must remain clear to avoid bias. The use of non-probability random sampling is used because the purpose of the study is to describe the research object, not to draw generalizations to the population. The method of selection of sampling or respondent is purposive sampling method with criteria respondents is an online shopper at marketplace Trendyol or HepsiBurada. The total number of respondents are 117 that are collected from December 2022.

Data Collection

This research uses online questionnaire to collect data in the form of google form. The collection of data using snowballing technique, which means online questionnaire is passed on by respondent to his or her other contacts.

Data Analysis

The data collected is exported from google form to Microsoft Excel. There are two parts of data. First part is data for neuromarketing analysis. This data analyses with descriptive analysis using excel. The second part is customers' attitude dimension on online shopping assesses by regression analyses with the help of SPSS (Statistical Package for Social Sciences) ver. 26.0. Before the data exported to SPSS, firstly the negative indicators on each of variable convert to positive response. The negative indicators are X13, X21, X24, X31, X33, X41, X53, X63, X71, Y23, Y25 and Y34. Converting the value of negative indicators by transpose the value (the value 1 to 5, 2 to 4, 3 remains 3, 4 to 2 and 5 to 1). For dependent variable customers' attitude firstly it analyses by analyses factor to construct the independent variable (Y). Lastly, with regression analysis to find out which dimension is proven has significant impact on customers' attitude (partial analysis) and to investigate all independent variables simultaneously effect the customers' attitude toward online shopping with Trendyol or HepsiBurada.

3. RESULTS AND DISCUSSION
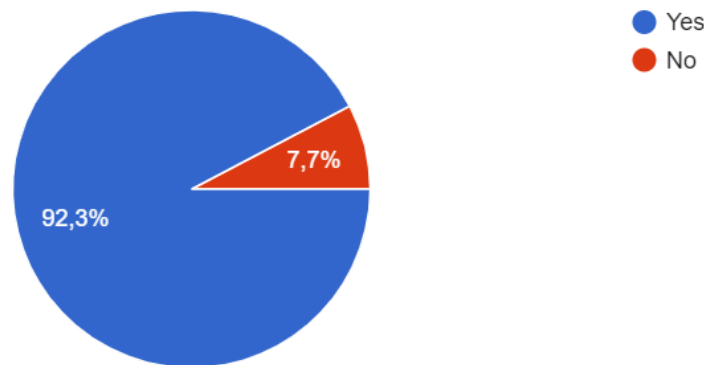
Respondents' Profile

Figure 4. Living in Istanbul
Source: Data Processed, 2022

Figure 4. shows the frequencies of respondent living in Istanbul and outside Istanbul. The majority of respondents are staying at Istanbul and only 7.7% have domicile outside Istanbul.
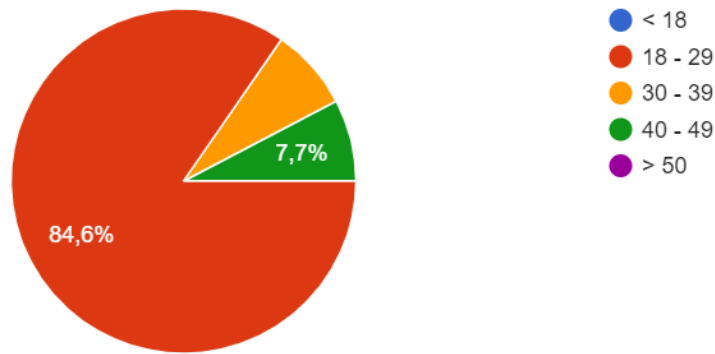
Figure 5. Age of respondents
Source: Data Processed, 2022

The majority of respondents age around 18 years to 29 years with consist of 84.6%. There are 7.7% the age of 30-39 years of old and also 7.7% the age of 40-49 years old (Figure 5).
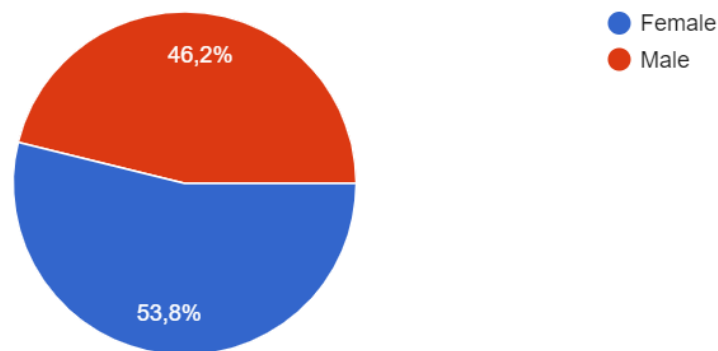

Figure 6. Gender of Respondents
Source: Data Processed, 2022

Figure 6 displays the respondent of this research which is slightly dominated by female with is 53.8%. The male respondent is 46.2%. The respondents are all online shoppers that use Trendyol or HepsiBurada among other marketplace platforms.
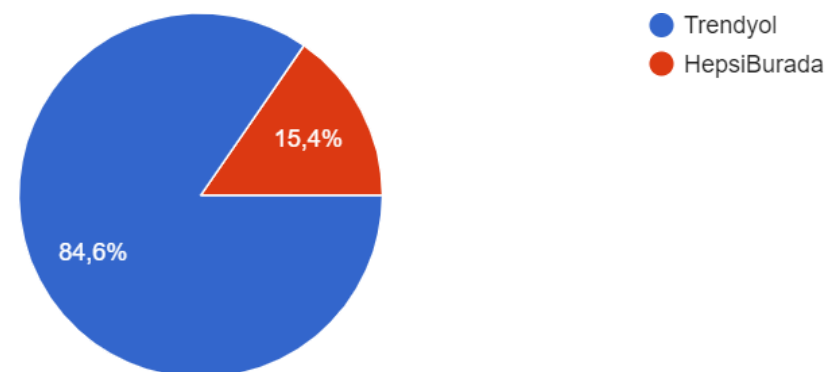

Figure 7. Marketplace Choice
Source: Data Processed, 2022

Figure 7. shows the marketplace choice by respondents. The majority of respondents use Trendyol with 84.6%. Hepsiburada is chosen by 15.4% respondent compare to Trendyol.
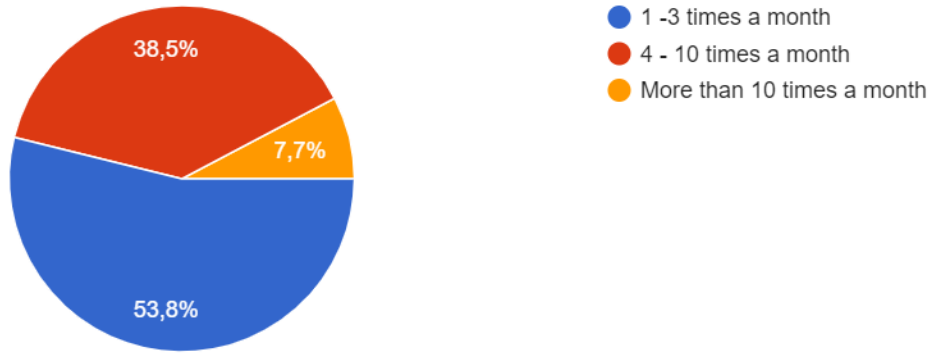
Figure 8. Online Shopping frequencies

Source: Data Processed, 2022

The frequency of online shoppers use marketplace 1-3 times a month is 53.8%. Respondents do online shopping 4-10 times a month os 38.5% and more than 10 times a month is 7.7%.
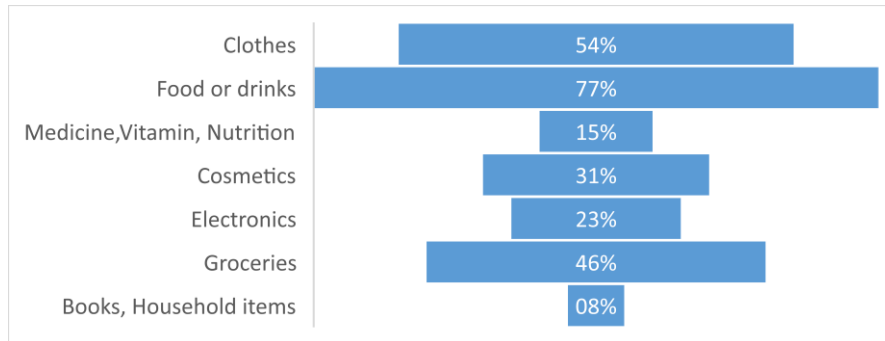

Figure 9. Products usually are bought online

Source: Data Processed (2022)

The majority product category respondents buy is food and drink with the percentage 76.9%, and second place is clothes with 53.85%. The third and forth places are groceries category and cosmetics category.

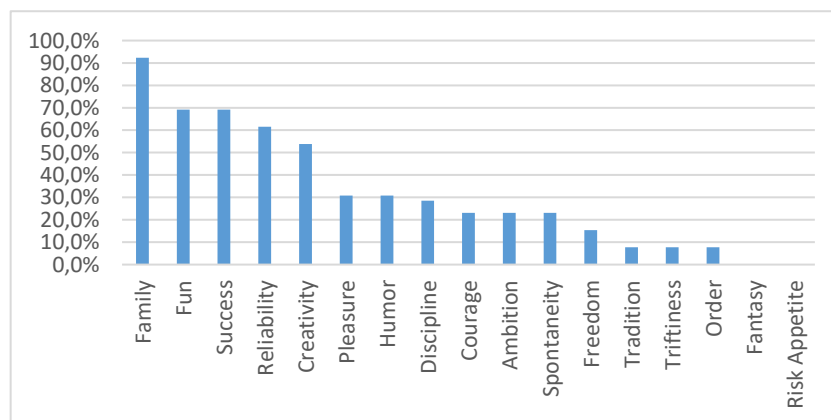**Consumers Characteristics on Online Shopping**

Figure 10. The importance of values in life

Source: Data Processed, 2022

The figure 10 displays the importance of values in the life of online shopper customer based on the characteristic limbic type of neuromarketing by Hausel (2016). As a result, it is evident that

values of the three main systems Balance, Stimulant and Dominance are more important to the respondents than their three mixed forms, as these were selected much more frequently. The most five importance values are family (Balance System), fun (Stimulant System), success (Dominance System), reliability (Balance System), and creativity (Stimulant System). The result of these values categories by importance as shown on Table 11. The least importance are fantasy (mixed form Fantasy Pleasure) and risk appetite (mixed form Adventure Thrill).
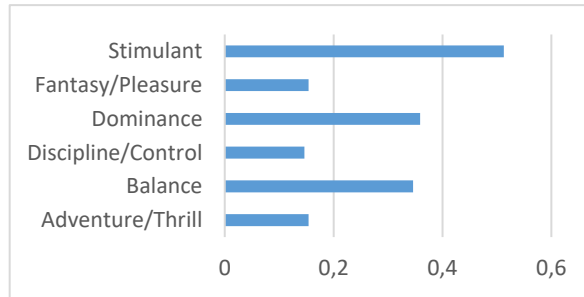
Figure 11. The categories of values based on the Limbic Map
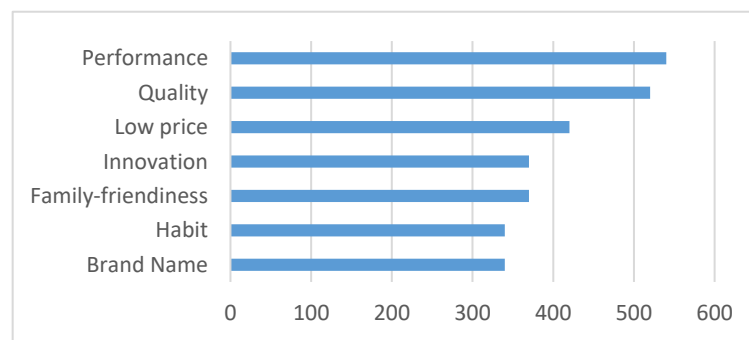*Source: Data Processed, 2022*

Figure 12. The importance of product feature for buying decision
Source: Data Processed, 2022

The value of product features measures by calculating the respondent perception scores. Figure 12 shows the result of the importance of product feature on marketplace. The most importance is performance and the next one is quality. In contrast to the influence of the different values on the lives of the respondents, mainly influenced by the three main systems of Limbic Map, the respondents prioritize motives characteristic of the Limbic Types that are assigned to the mixed forms on the Limbic Map. The product feature performance, ranked on total 540. Motive performance on shopping using Trendyol or HepsiBurada is the type of Adventurer on Limbic Type by Hausel (2016). Adventurer is supremacy of the Stimulus system that is all about fun and excitement, the products must be liberating or performance-enhancing. Quality motives is Open-minded or Connoisseurs in Limbic Type, which is slight supremacy of the Stimulant system where respondent willing to pay for quality and origin of the products. Low price motive is the type of Disciplined Limbic Type in Dominance System. Trendyol and Hepsiburada are not for limbic type of Performer with brand name motive or Traditionalist limbic type with habit motive due to the two least motives chosen by respondents.
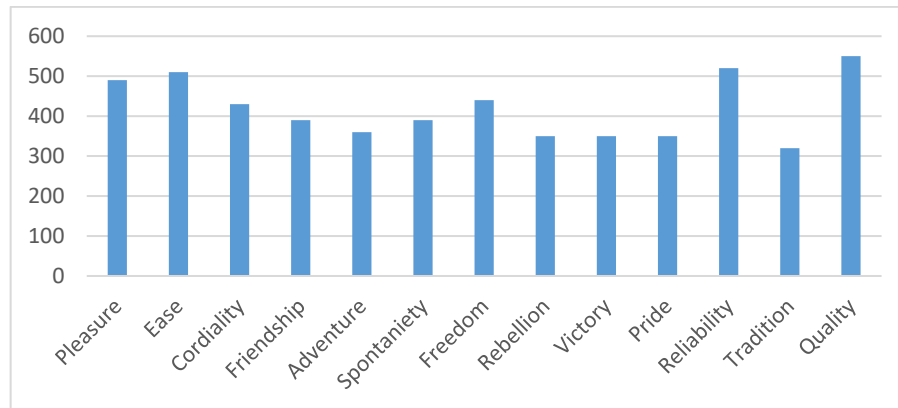
Figure 13. The focus of advertisement of online marketplace
Source: Data Processed, 2022

Figure 13 displays the perception of respondents on the focus of advertisements and promotions of online marketplace. This is the perception of consumers that ones perceived by the commercial communication by advertisement or promotion of marketplace Trendyol and HepsiBurada. Respondent ranks with likert scale unfocused 1 to 5 most focus on the specific value or points presented. The most focus points of advertisement perceived by respondents are quality, reliability and ease. Whereas the most unfocused point of advertisement are rebellion, victory and pride. In its commercial, Trendyol (due the the majority of respondents chosen Trendyol (84,6%) conveys values associated with the Balance System (quality and reliability), the Stimulant System (ease) and the mixed form of Fantasy/Pleasure (pleasure). These motives are associated with the Limbic Types Connoisseurs and Hedonist. Figure 14. shows the final results of marketplace Trendyol positioning based on the analysis of respondents' perspectives using neuromarketing limbic theory by Hausel (2016). Singh and Tanwar (2021) in the research findings conclude that as the basic course of neuromarketing asserts that it associates the perception or preference of customers for an offered set of goods and services, thus Trendyol is perceived as Balance system towards sub-system fantasy pleasure. With this findings, seller on Trendyol marketplace can make a more effective advertisement or promotion as suggest by Wicinski et al. (2022) that at addition to boosting emotional arousal, marketers could also use the value perception of Trendyol's customer and the persona of Trendyol to examine various advertisements to avert undesirable emotions. Furthermore, neuromarketing is essentially valuable in enhancing ads and challenging the goods and services before they are released (Bočková, Škrabánková, and Hanák 2021).
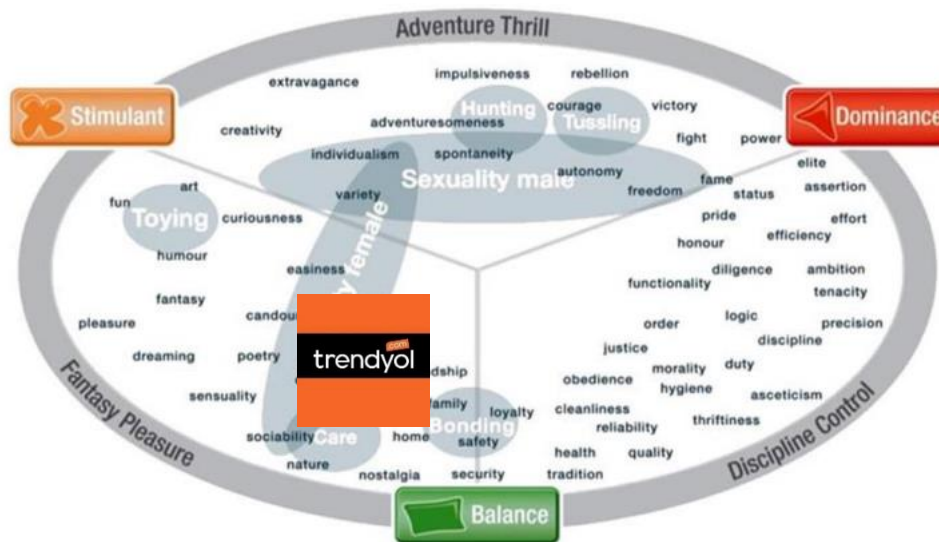
Figure 14. Positioning of Trendyol perceived by consumers based on Limbic Map
Source: Data Processed, 2022

Customer Choice on Online Marketplace

Factor Analysis of Y

Dependent variable which is Y is a construct variable from three components: affect (Y1), cognition (Y2) and conation (Y3). Affect has three indicators, cognition has six and conation has five indicators. There are two stages of factor analysis, first factor analysis for the affect (Table 1), cognition (Table 2) and conation (Table 3) and the second one is on attitude of online marketplace (Trendyol and HepsiBurada) customers (Table 4). Based on the results of SPSS on factor analysis using communalities with the value of extraction above 0.5 gives the decision that all the indicators can explain the respective factor.

Tabel 1. Factor analysis of Y1

Communalities

	Initial	Extraction
y11	1.000	.865
y12	1.000	.667
y13	1.000	.388

Extraction Method: Principal Component Analysis.
Source: Data Processed (2022)

Tabel 2. Factor analysis of Y2
Communalities

	Initial	Extraction
y21	1.000	.550
y22	1.000	.743
y23	1.000	.619
y24	1.000	.845
y25	1.000	.724
y26	1.000	.810

Extraction Method: Principal
Component Analysis.
Source: Data Processed, 2022

Tabel 3. Factor analysis of Y3
Communalities

	Initial	Extraction
y31	1.000	.878
y32	1.000	.833
y33	1.000	.974
y34	1.000	.825
y35	1.000	.440

Extraction Method: Principal
Component Analysis.
Source: Data Processed, 2022

Tabel 4. Factor analysis of Y
Communalities

	Initial	Extraction
Y3	1.000	.713
Y2	1.000	.709
Y1	1.000	.995

Extraction Method: Principal
Component Analysis.
Source: Data Processed, 2022

Regression Analysis

Table 5. Partial t-Test of brand attitude formation in E-shops Trendyol or Hepsiburada
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-45.940	6.395		-7.184	.000
	X1	1.960	.131	.946	14.965	.000
	X2	-1.603	.197	-.778	-8.142	.000
	X3	1.454	.143	.666	10.199	.000
	X4	.131	.104	.070	1.261	.210
	X5	6.980	.543	1.159	12.860	.000
	X6	-.740	.130	-.359	-5.703	.000
	X7	-.238	.171	-.110	-1.396	.165

a. Dependent Variable: Ytot
Source: Data Processed, 2022

Regression analysis for assessing brand attitude formation in E-shops with the equation:

$Y_{tot} = a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5 + b6X6 + b7X7$…………………………..(1)

From Table 5 the equation of the model of dimension affecting brand attitude formation in E-shops is

$Ytot = -45.940 + 1.96X1 – 1.603X2 + 1.454X3 + 0.131X4 + 6.98X5 – 0.74X6 – 0.238X7$..(1)

The dimensions of brand identity that give significant effect with Sig. value below 0.05 are interactivity (X1), information quality (X2), usability (X3), entertainment (X5) and personalization (X6). Interactivity, usability and entertainment gave a positive and significant effect towards brand attitude formation in E-shops Trendyol or Hepsiburada, whereas information quality and personalization resulted on significant negative impact. Design (X4) and domain name (X7) have no significant effect towards dependent variable (Ytot). Factors of Interactivity, Usability and Entertainment is in line with (Arora and Jain 2021) that highlight the nexus between neuromarketing and customer preference or attitude using the online marketplace for shopping.

Table 6. The Anova or f-test of brand attitude formation in E-shops Trendyol or Hepsiburada

ANOVAª

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1232.521	7	176.074	59.274	.000ᵇ
	Residual	323.786	109	2.971		
	Total	1556.308	116			

a. Dependent Variable: Ytot
b. Predictors: (Constant), X7, X1, X4, X5, X3, X6, X2
Source: Data Processed, 2022

The results of f-test or analysis of variance proves that all the dimensions of brand identity simultaneously affect the brand attitude formation in E-shops Trendyol or Hepsiburada with the sig. value below 0.05 (Table 6). Therefore, the coefficient determination or R square is good which is 0.792. It means the model can explain 79.2% of brand attitude formation in E-shops Trendyol or Hepsiburada (Table 7). This finding can be explained by the characteristics of respondents of young age between 18-29-year old or Gen Y and Gen Z, where the research shows that young generation has more preference on shopping online in marketplace (Wahyuningsih et al. 2022).

Table 7. The model summary of brand attitude formation in E-shops Trendyol or Hepsiburada

Model Summary

Model	R	R Square	Adjusted Square	RStd. Error of the Estimate
1	.890ª	.792	.779	1.724

a. Predictors: (Constant), X7, X1, X4, X5, X3, X6, X2
Source: Data Processed, 2022

4. CONCLUSION & RECOMMENDATIONS

The development of internet results in increasing popularity of online shopping, which has become the third most popular internet activity, after email and web browsing. Online marketplace is an e-commerce platform where sellers meet with buyers. There are different types of online marketplace, and each has its own customer niche. Consequently, it is important for sellers to know which online marketplace their customers go to. The first part of the research classifies marketplace of Trendyol and HepsiBurada different type of limbic types, which essentially similar to customer persona and can help with customer analysis, which are Connoisseurs and Hedonist. The limbic map based on consumers' perception on commercial of Trendyol is Fantasy/Pleasure towards Balance System.

The second part of this research aims to understand what the factors are influencing customers choice of online marketplace. The dimensions of brand identity that give significant effect are interactivity, information quality, usability, entertainment and personalization. Interactivity,

usability and entertainment gave a positive and significant effect towards brand attitude formation in E-shops Trendyol or Hepsiburada, whereas information quality and personalization resulted on significantly negative impact. Design and domain name have no significant effect towards dependent variable. The model can explain 79.2% of brand attitude formation in E-shops Trendyol or Hepsiburada.

The results of this research may be used for the merchant who wants to use online marketplace Trendyol and HepsiBurada to capitalize its marketing on approach to the persona or characteristic of consumers which are Connoisseurs and Hedonist. Second recommendation for merchant using marketplace Trendyol and HepsiBurada is strengthening the marketing communication with the feature provided due that interactivity is significantly affecting the attitude of consumers to do online shopping. The limitation of this research is due the sampling technique of snowballing to the contact of author, thus the spread of respondents linked to the universities like students or lecturers therefore for future research expanding the sampling research.

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