

# SELECTION OF FACTORS AFFECTING WOMEN'S LOYALTY IN BUYING GOODS IN INDONESIAN E-MARKETPLACES USING THE PROFILE MACHINE METHOD

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## ABSTRACT

The use of social media in the field of online marketing has been used by female consumers. In its use found uncomfortable transactions even though vendors have provided good features to reduce risk. This study investigates web site factors that affect consumer loyalty online shopping through social media namely Buyer Loyalty (Business View, Market Service View, Third Party B2B EM Performance, Transaction View, and Infrastructure View) and its attributes Trust (Quality of information, Customer loyalty, Volume trading, Product promotion, Reduction of transaction costs, Consumer characteristics (Free Shipping Costs, Trust in Marketing Makers), Firms characteristics (Functionality and value-added, Reputation, Privacy), Brand Recognition (Likability, Customer satisfaction, Attitude towards online shopping), Quality of Service (Transaction security, Use of the website, Reliability of the website). This study uses an IT-based platform for data collection and collects data from female consumers using the profile machine method. Data analysis by grouping female consumers using online shopping websites based on the attributes they like.

**Keywords:** *Factors Shopping, Social media, Consumer trust, B2B electronic marketplaces, Multi Criteria attribute, profile machine method, Women's*

## 1. INTRODUCTION

Online shopping is the activity of buying goods and services through internet media. This online shopping activity is a new form of communication that does not support face-to-face communication directly. Through the internet, buyers can see the goods and services that can be used by sellers[1]. The loyal customer or customer loyalty shows regular buying behavior or various conditions which require customers to buy at most twice a certain time. Efforts to provide satisfaction are carried out to influence customer attitudes, while the concept of customer loyalty is more than the attitude of the customer[2].

At present, there are still many buyers who invest and see goods directly and bargain against the price of the desired item at the best low price[3]. There are still many customers who are afraid of being fooled by transacting online shopping either from

items sold in online shopping activities that can only provide a description of the goods through specification details or product photos, financial transactions of computer transactions and payment transactions that fail and goods or money does not return[4].

To increase consumer participation in online sales in the marketplace it must be considered consumer trust, only customers who have the ability to use the web and have a market orientation can give confidence in online transactions, and must also pay attention to ethics, transaction security and data privacy consumer[5].

Many common factors that influence customer satisfaction when shopping in marketplaces include adaptation, interaction (interactivity), commitment (commitment), network (network), diversity (assortment), ease of transaction (transaction ease), engagement agreements and alternative factors those who attended included: Business view,

Market service view, Third party B2B EM performance, Transaction view and Infrastructure view[6][7][8].

## 2. THEORETICAL REVIEW

### 2.1 Buyer Loyalty[9].

Customer loyalty is an attitude that becomes a behavioral impulse to purchase products/services from a company that includes feelings in it, especially those who buy regularly and repeatedly with high consistency, but not only buy back goods and services, but also have a positive commitment and attitude towards the company that offers the product / service [10][11][12]. E-Marketplace provides great opportunities for female consumers who want to buy goods or services using internet technology. The number of criteria provided by e-marketplace can cause buyers to choose a trustworthy e-marketplace and provide maximum security of transactions. Multi-criteria for business e-marketplace, as follows:

1. **Business View**[13] the business model of e-marketplace in Indonesia is based on classifieds/listings and C2C is a model that displays websites with online sales, not using joint account facilities or escrow[14]. Transactions that occur directly between the seller and the buyer use the cash on delivery or COD method. The seller will receive payment money after the item is received by the buyer. If the goods ordered by the buyer have not arrived, then the money will be deposited in a third party account. If an order transaction fails, then the money will be returned to the buyer[15][16].
2. **Market Service View** [13][17], The display of the homepage design and layout that can make website visitors believe about the product they want to buy, with some features with attractive logos, images or videos, and availability of discount places, freebies, promo at the top of the home page of an online store. The availability of the latest news services and popular products that can provide information to buyers about their best products[18]. Providing Product Brands at the home page at the beginning that can be seen by the buyer. The availability of shopping cart, login box, and search box facilities, every customer who registers can choose a personal login and password for further access and the account owner can receive special discount offers from online shop owners. The features of payment methods are prepayment, credit and debit

cards, Social Media Links and Telephone services as well as online chats and trust marks, which are thumbnails or logos that show security guarantees in transactions.

3. **Third Party B2B EM Performance** [19][13], Emarketplace provides website maintenance, search engine optimization, Google Adwords, statistical data, content management, displaying business information, such as business name, address, rating and review, view details, numbers telephone, e-mail, URL, seller's business description contained in the marketplace company website.
4. **Transaction View**[20], security of payment technology for shopping from the marketplace must be given convenience to buyers in a flexible manner on cash on delivery, ATM transfers, internet banking until payment by Paypal[21].
5. **Infrastructure View** [22][15][17], There is a user registration service containing valid e-mail and cellphone data because the verification code will be sent to the e-mail of the buyer who will transact[23]. Buyers can see discounts, best-selling product galleries, highest rated products in the Grid format. Testimonial services and product ratings describe customer satisfaction with the products they buy. Live Support service, a feature that contains the resolution of conflict problems between buyer sellers[24]. Service The Dashboard page owned by the buyer after logging in contains a menu to add products or view daily transaction records can integrate with SMS / Email so that every time a purchase transaction takes place, a notification is sent. specifically, the user lists the items that have been purchased, the list of items that have not been sent and the service for complaints and refunds. The availability of HTTPS security services and website security certificates[25].

The chosen alternative consists of:

- a. Trust[6][15][26][27], Trust factor is a very important factor in shopping online with conditions of uncertainty and risk compared to traditional shopping[28]. Consumers do not see the physical quality of a product before making a purchase, and cannot check the condition of the product being sold, there is no guarantee of the safety of consumer financial data during payment transactions by sending information online[29]. Consumer trust in buying goods online at the marketplace is very influential on the company's business activities in electronic media in general. Consumer trust has an

element of integrity, ability, and virtue. Online transactions on e-marketplaces can affect the trust of online traders and the trust of intermediaries and the buyer's trust[30]. Getting trust in the online market is easier because the business view model involves two categories of service providers: intermediaries and the seller community. Consumers have to deal with trust in the seller community, that is, one-to-many relationships between buyers and many sellers and trust in intermediaries that contain intermediaries as intermediaries, seller trust reflects the perception of trust in transaction partners[25]. online trust helps consumers reduce the security and privacy violations associated with online commercial transactions and reduces the perceived risk in the online transaction process including has sub-alternatives:

- Quality of information (x1)[31], Quality information includes characteristics such as relevance, adequacy, accuracy, and timeliness. Information quality greatly determines the level of influence between the technologies used[32]. The quality information produced will bring satisfaction and consumer confidence in current technology. The importance of information quality will improve operations and overcome all the difficulties encountered. Quality information technology that is not good can reduce the level of customer satisfaction in shopping online[33].
- Customer loyalty (x2), in the B2B model is a concept of behavior and loyalty to a trademark, including the habit of buying products from service providers and maintaining relationships with service providers/suppliers, and attitude loyalty as a level of customer psychological attachment and attitude advocacy[34]. Customer loyalty is the main capital for the company and is a business goal that produces long-term profits in the marketplace[35]. Behavioral concepts that involve repeated purchases of products or services that are measured as series or parts of purchases, references, the magnitude of relationships or all of the above that blend together[36]. Loyalty to repurchasing or duplicating products or services that are consistently selected in the future, which results in purchases of the same brand or the same set of brands[17], regardless of any situational and marketing influences. loyalty as attitudes and behaviors with emotional bonds formed with service providers that lead to conditions that are consistent in the relationships between buyers and sellers[37].
- Trading volume (x3), The number and volume of sales and purchase transactions in the marketplace as a parameter of the success of trading[15]. Trading volume and number of transactions can evaluate the success of an e-marketplace performance. An increase in the number and growth of sales revenue in e-marketplace is used by a number of traders as an objective parameter of comparison of trade income through traditional markets[37].
- Product promotion (x4), communication techniques that deliver using electronic media and print media can attract consumers' buying interest in the production or goods of a company[38]. Consumer decisions in buying a product are based on their perception of the value of the product which is described as the exchange between the relative quality of the product perceived by sacrifice in the form of money or price[39]. Promotion is a marketing effort that provides various short-term intensive efforts to encourage the desire to try or buy a product or service[21]. The optimal combination of promotion of goods or products can take place effectively, namely the optimal combination of various types of activities or the selection of the most effective types of promotional activities in increasing sales[40].
- Reduction of transaction costs (x5)  
Price is a value that is exchanged by consumers to get profit from ownership of an item. the price appraiser of a product or item not of nominal value, the marketplace must set the price appropriately in order to be successful in marketing goods or services. Price perception uses prices in giving an assessment of the suitability of product benefits. Price assessment indicators of the suitability of the consumer's assessment of the value received. Companies usually adjust basic prices to consumers, including giving discounts. price adjustments to make a

- difference between customers, products, and locations according to psychological prices, geographical prices, and international prices and prices for traditional markets. factors that influence pricing precisely including products, distribution, and promotion. A good price has a value that can be perceived when the transaction is carried out. B2B or sales promotions that are more intended for producers.
- b. Consumer characteristics [13][17][15], has sub-alternatives:
- Free Shipping Costs (x6), One of the factors that attract consumers in making online purchases is by offering free shipping. Actually, free shipping is not 100% free of shipping, but the shipping price that has been included in the offer price, which affects the presentation of profit margins. For exclusive products with high profits, free shipping is still feasible to attract consumers, especially women. With free shipping, it is easier for buyers in the calculation process. So there is no need to think much about prices. Just one number in the head to get the desired item to arrive at the destination. Depending on the shipping destination, shipping costs may vary.
  - Relative Advantage (x7), Search navigation can be arranged, Results from very helpful and informative searches, discount promos, Estimated send prices are clear and easier. Methods of payment and transfer on the market are quite complete and many choices. the website in the marketplace is stable and anti-lag. the number of goods and sellers and the variations are more and varied at attractive prices. There is no discussion to find out info about goods or shipping and must ask the seller. On the website, the product description is based on the image so the prospective buyer can see and read the description.
  - Trust In Marketing Makers (x8). The costs needed by marketing in e-marketplace are higher than traditional marketing. Consumers who are loyal to a product or service from the e-commerce industry tend to do more buying and selling transactions than before and indirectly recommending the product or service to others. so it is very important for e-commerce businesses
- to have loyal customers. Customer loyalty is characterized by repurchase intention and word of mouth. Customer loyalty becomes very important for the marketplace business strategy so that it can continue to survive amid increasingly fierce competition by improving transaction quality and the quality of relationships with consumers. The largest C2C online marketplace in Indonesia including Tokopedia, Bukalapak, Elevenia, Shopee, Blanja, and Qoo10 always upgrade the site services they have to obtain loyal customers.
- c. Firms characteristics, Trade in the marketplace, online transactions involve trust in the relationship between buyers and sellers one by one. Confidence in the buyer buying the product will be formed from the belief that the vendor deals in a good way, even though online purchases can result in certain risks. Different merchant vendors may have different views and online trust requirements. In the case of internet shopping, the company's reputation can increase the sense of consumer trust in vendors. Consumers are faced with the reality in choosing their attitudes and beliefs about the brand of goods or products provided by the seller. The better the reputation of the company, the more loyal customers will be to buy and use these products. has sub-alternatives:
- Functionality and value added (x9), Selling at low prices and promos is certainly different. If you sell at low prices without promos, even prices far from the market, and aim to get a lot of customers, consumers doubt the quality of the goods sold. price competition in the marketplace is very high. promo offers will attract many consumers because of lower prices
  - Reputation (x10), A seller's reputation on a good marketplace can increase the credibility of consumer confidence to buy the product or item they want to buy, consumers can trust to get the goods they promised. For buyers, transacting online is very easy, by performing existing procedures, the items purchased can be processed immediately. seller's track record can build consumer interest to buy by providing fast and friendly response services, delivering goods on time, providing prices that tend to be cheaper, and providing convenience in accessing

- the store. The seller's reputation can reduce consumer concerns about purchases and will increase consumer buying interest. Threats in damaging online reputation are customer complaints including unsatisfactory services, the quality of goods received is not in accordance with the price paid, the goods received do not match what is displayed.
- Privacy (x11)[9], The ability of individuals to control, manage information privately and selectively. Consumer privacy protection is very important in online transactions in the marketplace[1][2]. privacy can increase the trust of electronic vendors so that they enhance consumer data security policies, including vendors providing privacy statements, vendors request approval from consumers to distribute personal data information[5].
- d. Brand Recognition, has sub-alternatives:
- Likability (x12), a web that is preferred by customers is a web that is easy to use and can be understood by customers including basic functions, an efficiency of site design and product description[41]. browsing the web and transacting safely can affect the satisfaction and trust of consumers to like the website[39]. a website environment that does not have privacy or security can result in a high risk, negative consequences may occur, which explains the lack of integrity, privacy, and security, all of which negatively affect consumers' intention to transact with web-based vendors[42].
  - Customer satisfaction (x13)[43], Customer satisfaction is very important in the marketplace when customers think about the actual service performance will result in disconfirmation that has positive Disconfirmation, high satisfaction. Negative disconfirmation: high dissatisfaction. Zero disconfirmation[44]. a positive response will give satisfaction to a product or service feature, product, and vendor itself. Customer satisfaction can influence important factors of a relationship in the marketplace and is responsible for long-term relationships between suppliers and buyers. the influence component of satisfaction can stimulate customers to make transactions.
  - Attitude towards online shopping (x14)
- e. Quality of Service[12][21], is a condition that affects products, services, people, processes and environments that meet or exceed expectations that can meet the needs and desires of consumers. e-service quality is a website that includes shopping, purchasing, and shipping of good products, services efficiently that have complete information and ease in making transactions for customers. customers can be more efficient than time and costs when making a purchase transaction. Currently there are still consumers who are afraid to shop online because crime in a transaction is fraud, credit card hijacking, transferring illegal funds from an account if the security system is still weak so some websites have implemented e-security seals (symbol symbols or logos that give credibility to the guarantee of the website to consumers whose impact on purchase intentions online) to reduce the risk of cybercrime. online websites provide privacy guarantee seals issued from third parties, online consumers have higher satisfaction and intend to repurchase.
- has sub-alternatives:
- Transaction security (x15) Consumer satisfaction is influenced by the level of security facilities (e-security seals)[21]. Good security facilities (e-security seals) create trust and stability for buyers so they don't hesitate to make purchases. So from a sense of security and trust that will arise a sense of satisfaction (e-satisfaction) to consumers. indicators that influence the level of purchasing decisions in this case e-service quality and e-security seals are good, then the level of customer satisfaction (e-satisfaction) will be high. Security and privacy can protect personal information and related transactions from users, especially credit card users[39]. Security and privacy are very important for online trading.
  - Use of the website (x16)[15], One of the most influential factors in determining purchasing decisions for consumers is the use of Online Customer Review, an electronic word of mouth (eWOM) that refers to user-generated content posted on online sites and third party websites[37]. the relationship between OCR and the buying trust and interest in the online marketplace in Indonesia by adding a new variable, namely rating[17]. Rating is a part of a review that uses a star symbol



- rather than text in expressing the opinions of customers[45]. The assessment of users on a product's preference for their experience refers to the psychological and emotional state that they live when interacting with virtual products in a mediated environment. And reviews are one of the factors that determine the decisions of buyers of goods and can be used as an indicator of product popularity[46]. An online review can be a powerful promotional tool for marketing communication to influence potential buyers' buying behavior[47].
- Reability of the website (x17)[25], the quality of information is the completeness and accuracy of website information regarding the services offered and the procedure for conducting online purchase transactions[48]. the greater the consumer's perception that the online seller's website contains high-quality information, the more likely they are to think that the online seller's website can be trusted. consumer trust related to integrity, virtue and the ability of others can reduce the level of risk in online transactions. Consumer trust is one of the factors in the process of making product purchase decisions and customers will trust the vendor[31]. Trust in security protection, privacy protection, and the quality of information provided on the website. Website quality components, based on information quality, service quality, and service quality can influence customer purchase intentions through perceived value and perceived trust[49].

**2.2 Profil Machnice Metode**

Profile matching is a decision-making mechanism by assuming an ideal predictor variable that must be possessed by employees, rather than the minimum level that must be met or bypassed [14]. In matching profiles, identification of good and bad employees is identified. Consumers in buying products will find several criteria and alternatives that are multicriteria assessments. If there is a different score between each alternative factor and the criteria for assessing the loyalty of female consumers in buying the product the best value will be chosen [15]. Once several variables that distinguish between good and bad implementers have been identified, the ideal profile may have average intelligence, good social

sensitivity, low need to dominate other consumers, and a high level of planning ability [16]. In matching profiles, alternatives that approach the ideal profile are the best alternative choices.

The steps in profile matching are:

1. Determine mapping competency variables determine the aspects that will be used in processing the value of the selected loyalty factor [9] [10].
2. Calculating the results of the competency gap mapping referred to as Gap here is the different profile between alternatives with the expected standard profile [8] [15].
3. Calculation and Classification of Core and Secondary Factor
4. After determining the gap value weights for the three aspects of business view, market view and view transactions. in the same way, each aspect is grouped into two groups, namely the core factor group and secondary factor.

Calculation of core factors is shown using the formula below:

$$NCF = \frac{\sum NC+(i,s,p)}{\sum IC} \tag{1}$$

$$NCF = \frac{\sum NC+(i,s,p)}{\sum IC} \tag{2}$$

Information :

NCF : Core factor average value

NC (I,s,p): Total number of core factor values (business view, market view, transaction view)

IC: Number of core factor items

1. The calculation of the secondary factor bias is indicated by the following formula

$$NSF = \frac{\sum NS+(i,s,p)}{\sum IS} \tag{3}$$

$$NSF = \frac{\sum NS+(i,s,p)}{\sum IS} \tag{4}$$

NSF : Average value of the second factor

NS (i,s,p) : The total value of the second factor (business view, market view, transaction view)

IS : Number of secondary factor items

2. Calculation of Total Values

From the results of the calculation of each aspect above, the next total value is calculated based on percentages from the core and secondary which are estimated to affect the alternative of each profile [17]. The calculation example can be seen below

$$(x)\%NCF(i,s,p) + (x)\%NSF(i,s,p) = N(i,s,p) \quad (5)$$

$$(x)\%NCF(i,s,p) + (x)\%NSF(i,s,p) \quad (6)$$

NCF(i, s, p) : Core factor average value (business view, market view, transaction view)

NSF(i, s, p) : Average value of secondary factor (business view, market view, transaction view)

N(i, s, p) : Total value of aspects (business view, market view, transaction view)

(x)% : The percent value entered

### 3. Calculation of Ranking Determination

The final result of profile matching is the candidate's ranking submitted to fill a selected factor. These calculations can be shown by the formula below:

$$\text{Ranking} = (x)\%Ni + (x)\%Ns + (x)\%Np \quad (7)$$

$$(x)\%Ni : (x)\%Ns + (x)\%Np \quad (8)$$

Ni : Value of Business View capacity

Ns : Market view value

Np : Transaction view value

(x)%: Percent value entered

### 2.3 Multi Criteria Decision Making (MCDM)

MCDM is the Multi-Criteria Decision Making (MCDM) is a decision-making technique based on several existing alternatives or theories that explain the decision-making process by considering many criteria. The implementation of the MCDM method in selecting factors that influence buyer loyalty in Indonesian e-marketplaces must be systematically explored. This method explains several system contributions that involve several MCDM methods [50]. This system has many domain applications. On the other hand, a comprehensive analysis will facilitate the understanding and development of systems that can identify dimensions that differentiate, explain, and categorize recommender multi-criteria systems, based on taxonomy and existing categorization used in the analysis and classification of sample purchasing decisions online[51].

### III. RESEARCH METHODOLOGY

This study was conducted to find the main factors that influence the loyalty of female buyers in e-marketplace using the profile machine method, consisting of several criteria and alternatives: Criteria for selecting from selected e-marketplace:

- a. Business view
- b. Market service view
- c. Third party B2B EM performance
- d. Transaction view
- e. Infrastructure view.

The chosen alternative consists of:

- a. Trust, has sub-alternatives: Quality of information (x1), Customer loyalty (x2), Trading volume (x3), Product promotion (x4), and Reduction of transaction costs (x5)
- b. Consumer characteristics, has sub-alternatives: Functionality and value added (x6), EM reputation (x7), Attitude towards online (x8)
- c. Firms characteristics, has sub-alternatives: Free shipping costs (x9), Relative advantage (x10), and Trust in marketing makers (x11)
- d. Brand Recognition, has sub-alternatives: Likability (x12), Customer satisfaction (x13), and Attitude towards online shopping (x14)
- e. Quality of Service, has sub-alternatives: Transaction security (x15), Use of the website (x16), and Reability of the website (x17)

With the concept of a research model, as shown below:

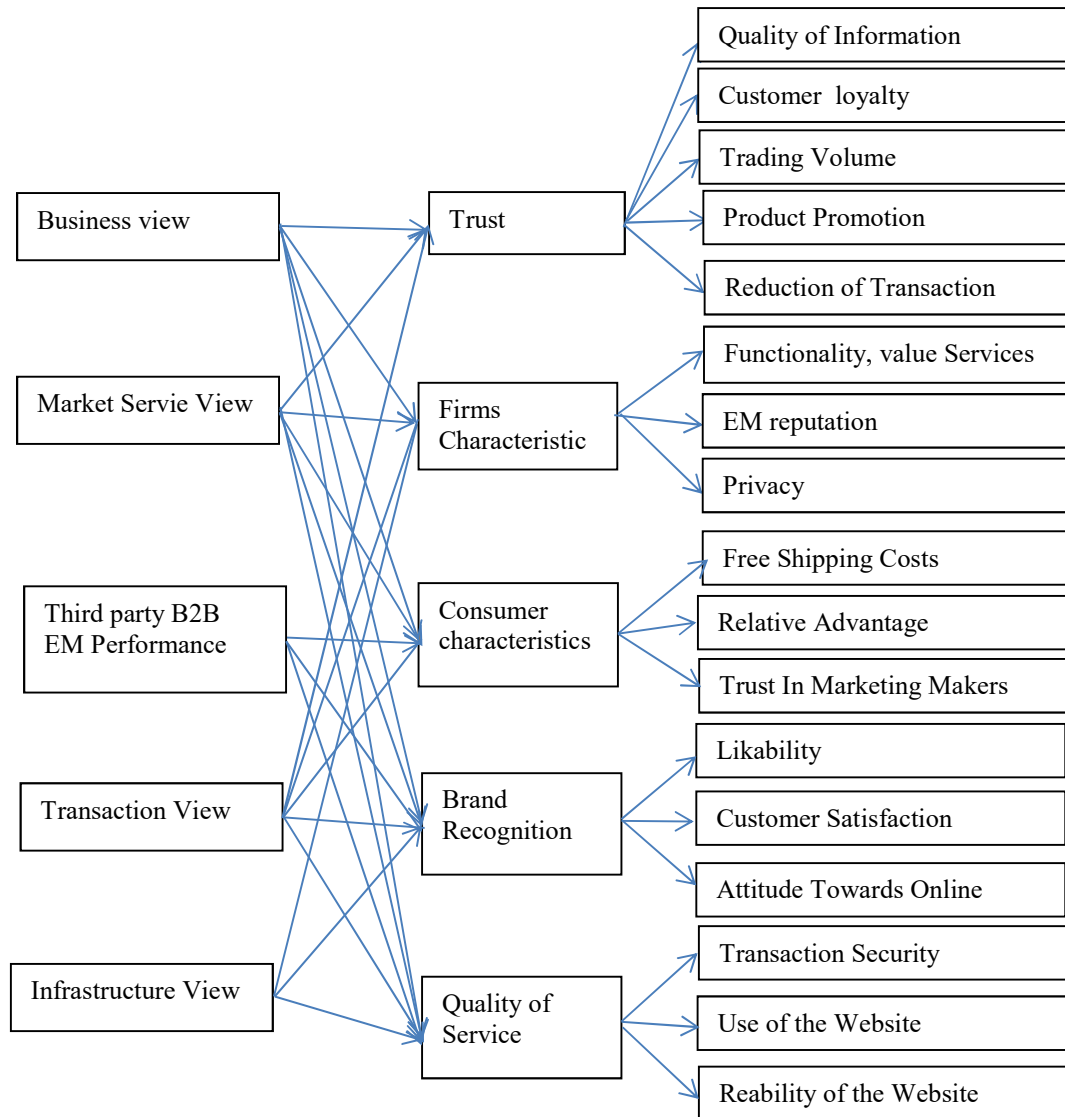


Figure 1: Relationship criteria with alternative buyer loyalty

**4. IMPLEMENTATION AND RESULTS**

**Data collection**

The initial step is to survey respondents' surveys and disseminate questionnaires and look for relevant research literature on female buyer loyalty in carrying out transactions on Indonesian e-marketplace. A total of 115 respondents answered the survey. This group is divided into 3 criteria for women aged 15-25 years, women aged 26-40 years and women aged 40-60 years.

**Analysis**

In the analysis stage, determining the selected criteria are E-Marketplace reputation in the community, customer loyalty, promotion, trading volume, reduction of transaction costs, reliability and usability of the website, infrastructure security, and privacy. The e-business that is run requires supporting alternatives so that e-markets can be used including e-market business that is marketed, product marketing services, IT e-marketplace



maintenance on third parties and security of marketing transactions and payments.

This system provides an assessment to get recommendations that are in accordance with the assessments of women buyers and each criterion value in each alternative with the following final results:

Table 1: Value Of Core Factor And Secondary Factor Aspect Of Trust

VM	Variabel					CF	SF	NT rus t
	X1	X2	X3	X4	X5			
A1	3,00	3,00	4,00	4,00	3,00	3,33	3,50	3,40
A2	3,00	4,00	4,00	4,00	3,00	3,67	3,50	3,60
A3	3,00	4,00	4,00	3,00	3,00	3,67	3,00	3,40
A4	4,00	4,00	4,00	5,00	4,00	4,00	4,50	4,20
A5	4,00	4,00	4,00	4,00	4,00	4,00	4,00	4,00

Table 2: Value Of Core Factor And Secondary Factor Aspect Of Consumer characteristics

VM	Variabel			CF	SF	N Consumer characteristics
	X6	X7	X8			
A1	3,00	4,00	3,00	4,50	5,00	4,70
A2	4,00	4,00	3,00	4,50	4,00	4,30
A3	4,00	4,00	3,00	4,50	4,00	4,30
A4	4,00	3,00	3,00	4,00	5,00	4,40
A5	3,00	3,00	3,00	4,00	4,00	4,00

Table 3 Value Of Core Factor And Secondary Factor Aspect Of Firms characteristics

VM	Variabel			CF	SF	NBrand Recognition
	X9	X10	X11			
A1	4,00	5,00	5,00	3,50	4,00	3,70
A2	4,00	5,00	4,00	3,50	4,00	3,70
A3	4,00	5,00	4,00	3,50	4,00	3,70
A4	4,00	4,00	5,00	3,50	4,00	3,70
A5	4,00	4,00	4,00	3,50	4,00	3,70

Table 4 Value Of Core Factor And Secondary Factor Aspect Of Brand Recognition

VM	Variabel			CF	SF	NBrand Recognition
	X12	X13	X14			
A1	3,00	4,00	4,00	3,50	3,00	3,30
A2	4,00	4,00	4,00	4,00	3,00	3,60
A3	3,00	4,00	4,00	4,00	3,00	3,60
A4	5,00	5,00	4,00	3,50	3,00	3,30
A5	5,00	4,00	4,00	3,00	3,00	3,00

Table 5 Value Of Core Factor And Secondary Factor Aspect Of Quality of Service

VM	Variabel			CF	SF	NQuality of Service
	X15	X16	X17			
A1	3,00	4,00	4,00	3,50	4,00	3,70
A2	3,00	4,00	4,00	4,00	4,00	4,00
A3	3,00	4,00	4,00	3,50	4,00	3,70
A4	4,00	3,00	4,00	5,00	4,00	4,60
A5	4,00	3,00	4,00	4,50	4,00	4,30

Perception survey results from respondents who answered similar questions and combined or obtained results:

1. Adaptation, the highest transaction view criteria (4.64) is generated from the selected criteria
2. interaction (interactivity), the highest criteria for IT performance view (4,56) are generated from the selected criteria
3. Customer loyalty, resulting in the highest criteria for Market service view (5) and Transaction view (5) of the selected criteria
4. commitment (commitment) produced the highest criteria of IT performance and infrastructure (4.43) from the selected criteria
5. network (network), produced the highest criteria Infrastructure view (4.71) of the selected criteria
6. diversity (assortment), produced the highest criteria for the Business view and Market service view (4.5) from the selected criteria
7. Security and Privacy, the highest criteria for Market service view (4.3) are generated from the selected criteria.

Table 6 Calculation of determining end or rank results

view model	Ntrust	N Consumer characteristics	N Firms characteristics	N Brand Recognition	N Quality of Service	Skor
Business view	3,40	3,30	4,70	3,70	3,70	3,60
Market Servie View	3,60	3,60	4,30	4,00	3,70	3,76
Third Party Performance	3,40	3,60	4,30	3,70	3,70	3,62
Transaction View	4,20	3,30	4,40	4,60	3,70	4,07
Infrastructure View	4,00	3,00	4,00	4,30	3,70	3,83

Perception survey results from respondents who answered similar questions and combined or obtained results:

1. Trust, the highest transaction view criteria (4,20) is generated from the selected criteria
2. Consumer characteristics, the highest criteria for Market Servie View and Third Party Performance (3,60) are generated from the selected criteria
3. Firms characteristics, resulting in the highest criteria for Business view (4,70) of the selected criteria
4. Brand Recognition, the highest criteria of Transaction View (4.60) from the selected criteria
5. Quality of Service, the highest criteria Business view, Market Servie View, Third Party Performance, Transaction View and Infrastructure View (3,70) of the selected criteria

Table 7 Final score and rating results

view model	Skor	Peringkat
Business view	4,07	1
Market Servie View	3,83	2
Third Party Performance	3,76	3
Transaction View	3,62	4
Infrastructure View	3,60	5

## V. CONCLUSION

The results show the highest level of choice found in transaction views (4.07) which is preferred by female buyers in Indonesia and is expected to provide security and comfort in carrying out all online payment and freight transactions to improve shipping market services to maintain buyer loyalty.

Other criteria obtained were Market Servie View (3.83), Third Party Performance (3.78), Transaction View (3, 62), and Infrastructure View (3.60). Then It Can Be Said That Its Performance Quality Is Not In Line With Hope. The attributes that have the lowest value show that the service performance is not satisfactory on the view of the attribute transaction (3.60) that must be considered to get buyer's confidence, especially women in the business marketplace.

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