

# The Influence of Efficiency, Reliability, and Responsiveness towards E-Customer Satisfaction on Redkendi Application

Faishal Haq Junaidi  
 Master of Management, Mercu Buana University  
 Jakarta, Indonesia

Mudji Sabar  
 Lecturer of Postgraduate, Mercu Buana University  
 Jakarta, Indonesia

**Abstract:-** This research aims to analyze and evaluate the influence of efficiency, reliability, and responsiveness on E-Satisfaction in users of application redkendi. The population in this research is 33 companies that have made transactions through the online platform of PT Redkendi Andalan Mitra with 99 respondents. The data analysis technique used is multiple linear regression analysis using SPSS 25. The results showed that all X variables (efficiency, reliability and responsiveness partially had a positive and significant effect on the Y variable (e-satisfaction) and all X variables (efficiency, reliability, and responsiveness) simultaneously have a positive and significant effect on the variable y (e-satisfaction) The results of this research could be considered by companies to determine policies that can be taken to increase customer satisfaction.

**Keywords:-** Efficiency, Reliability, Responsiveness, e-Satisfaction.

## I. INTRODUCTION

PT. Redkendi Andalan Mitra (Redkendi) is a B2B E-Catering Marketplace, a company that aims to help catering SMEs to gathering both catering and customers who need catering services. Redkendi committed to always partnering with catering companies that promote hygiene, quality standards, timeliness, and training of waiter services so could provide satisfaction to the customer. PT Redkendi Andalan Mitra as the first B2B E-Catering market place in Indonesia, has a caterer partner with a production capacity of 60,000 servings per day. With its current production capacity, PT Redkendi Andalan Mitra is the first B2B E-Catering market place market leader in Indonesia. However, in reality the company has a lot of challenges and constraints faced problem to achieved the target portion of the active portion of the Redkendi application and also target achievement of using the Redkendi application. At present the achievement of the Redkendi application can be said to be very far from what has been set by the company. Following the recapitulation of Target Achievement set by the company, namely Active Users and Portion on Service in the Redkendi application.

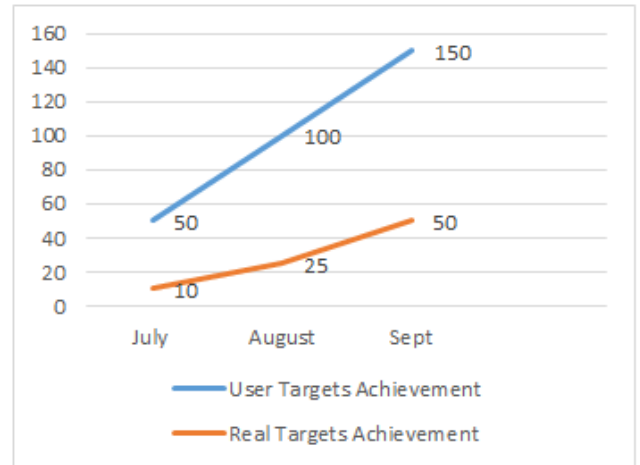


Fig 1:- Redkendi Active User Target Achievement  
 Source: Secondary Data (2019)

From Figure 1 shows that overall in the second quarter (Q2) active users of the RedKendi application can be said to be far from the expected target despite an increase. There was a gap of > 30% from the expected target in the second quarter (Q2).

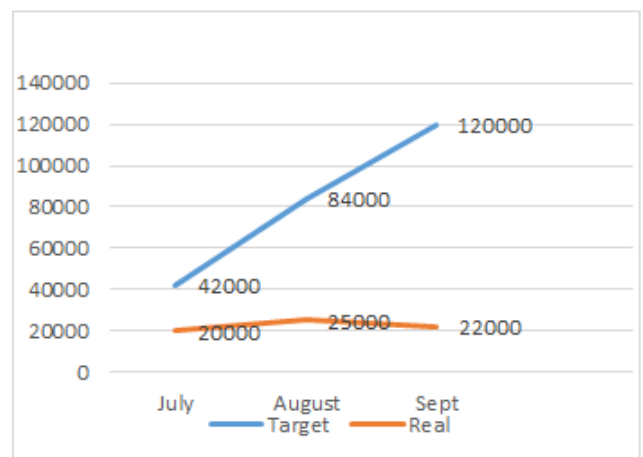


Fig 2:- Recapitulation of Target Achievement of Portions on Service  
 Source: Secondary Data (2019)

From Figure 2 above it can be seen that the target achievement of portions on service Redkendi partners has decreased every month in the Second Quarter (Q2). In July the real achievement was around 48% of the targeted portion. and in August the real achievement was around

30% of the target, so there was a decreased of around 18% from July while in September the real achievement was around 18% from the target where there was a decrease of around 12% from August and around 30% from July. It can be said that the actual amount of portions on service of Redkendi partners does not reach the target every month. From the results of the company data in Q2 it shows that the company is facing problems in achieving the marketing targets. This is certainly not fits with the company's marketing target to increase portions on service with Daily active users. It could be concluded that there is a gap between the achievement of the application and the achievement of the portion of the expected target.

This phenomenon clearly shows that the customer satisfaction whom conducted the transactions through the

Redkendi platform is very low and far from the the company expectation. To find out more about this satisfaction in conducting online transactions, as a first step of this research, the researchers has to conduct a preliminary research of the factors that allegedly influenced the satisfaction of Redkendi application users, such as: application systems, trust, vendor quality, social and cultural environment, efficiency, reliability, responsive, safety and quality. From all these factors the efficiency becomes the main factor that makes customers feeling not fully satisfied with theirs expectations in doing transactions through platforms with a percentage of 80.6% then sequencely there has reliability (77.4%) and Responsive with a percentage of 71%.

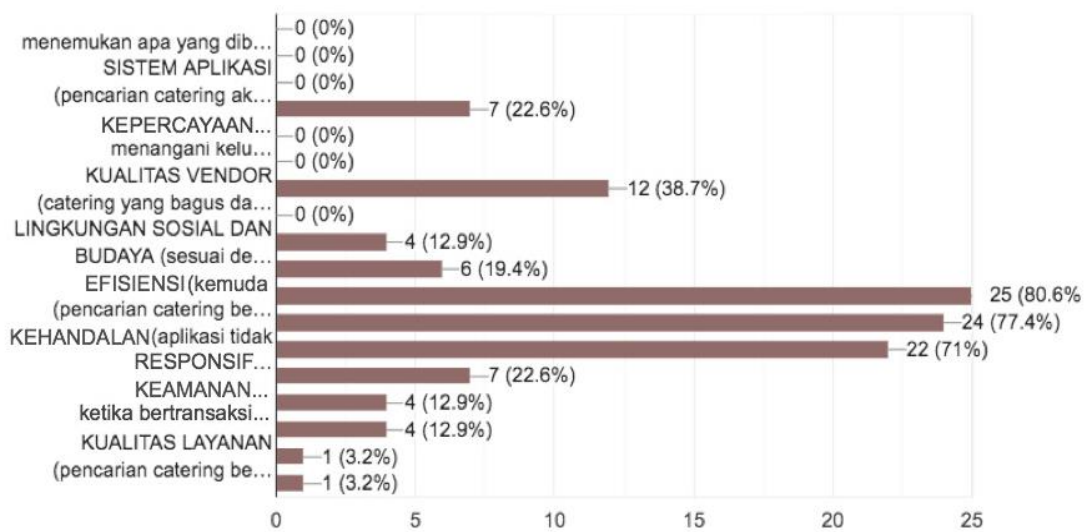


Fig 3:- The Factors that Influence user Satisfaction Redkendi Application  
Source: Pre-survey Results (2019)

The results obtained in pre-survey show the three main variables selected by the customer which are the main factors that influence customer satisfaction in any kind of transactions using the Redkendi application. So the researchers conducted a research entitled to "The Influence of Efficiency, Reliability, and Responsiveness Towards E-Customer Satisfaction on Redkendi Application".

## II. THEORITICAL REVIEW

### A. Efficiency

Zeithaml (2002) states that efficiency is the ability of customers to be able to access a website and can easily find the desired product and able to log in or log out very easily without requiring a lot of effort. Parasuraman, et.al. (2005) conceptualized the service quality as an ESERVQUAL model that includes seven dimensions, one of which is Efficiency which relates to how easily users find information on a website without interaction with customers, online customers need to find any information about the product or service that they're looking for. In addition beside those convenience factor, the speed factor is also very influential to attracting customer interest in using

the site, the better performance of a website in providing the data, the more often customer would use the online site.

### B. Reliability

Zeithaml (2002) stated that Reliability technically has influences to the functions of an application or website where it can be function as it should consistently and reliably. According to Tjiptono and Chandra (2016: 137) Reliability relates to the ability to provide an accurate services from the first time without giving any errors and delivering services according to the agreed time. Furthermore Tjiptono and Chandra (2016: 178) state that Reliability relates to the technical functionalist of the site, especially the extent to which the site is available and functioning as it should without the constraints or attacks from a virus.

### C. Responsiveness

Zeithaml (2002) states that Responsiveness is the ability of a website or application to provide appropriate information exactly when there is a problem in its use. According to Tjiptono (2012: 174) Responsiveness is the ability to help customers quickly to meet their needs.

While Parasuraman and Barry (2005) state that Responsiveness is a fast response and the ability to help if there are problems or questions. The responsiveness of an online site is needed to increase the number of users, several ways that can be maintained by providing an online customer service with an automated system without A human assistance. A site is also expected to handle complaints quickly and appropriately so that users do not have other reasons to access other sites and there would be no similiar complaints that occur repeatedly in future

**D. E-Satisfaction**

According to Zeithaml (2002) identified seven dimensions that make up the scale of "core online service" and scale of "recovery online service". The three main dimensions (efficiency, Reliability, and fulfillment) are the core e-service quality scales used to measure customer perceptions of the quality of services delivered by online retailers. Meanwhile, the other 4 dimensions (privacy, responsiveness, compensation, and contact) are the scale of e-service quality recovery. According to Kotler and Keller

(2006) states that "Customer Satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectations". The quality of electronic services / e-service is defined as "the extent to which the website facilitates shopping, purchasing and shipping of products and services effectively and efficiently" (Bressolles & Durrieu, 2011, p.4). Anderson and Srinivasan (2003) further state that e-satisfaction is described as gratification from customers that comes from previous real buying experiences with certain electronic trading companies (in Ting et al, 2016, p. 4). According to Ranjbarian et al (2012, p. 1502-1504), there are 4 (four) main dimensions that affect e-satisfaction: Convenience, Merchandising, Site Design, and Security.

**E. Conceptual Framework**

From the explanation previously stated, Efficiency, Reliability, and Responsiveness to E-Satisfaction in theory and support of the results of previous research, the framework of thought in this research as it follows:

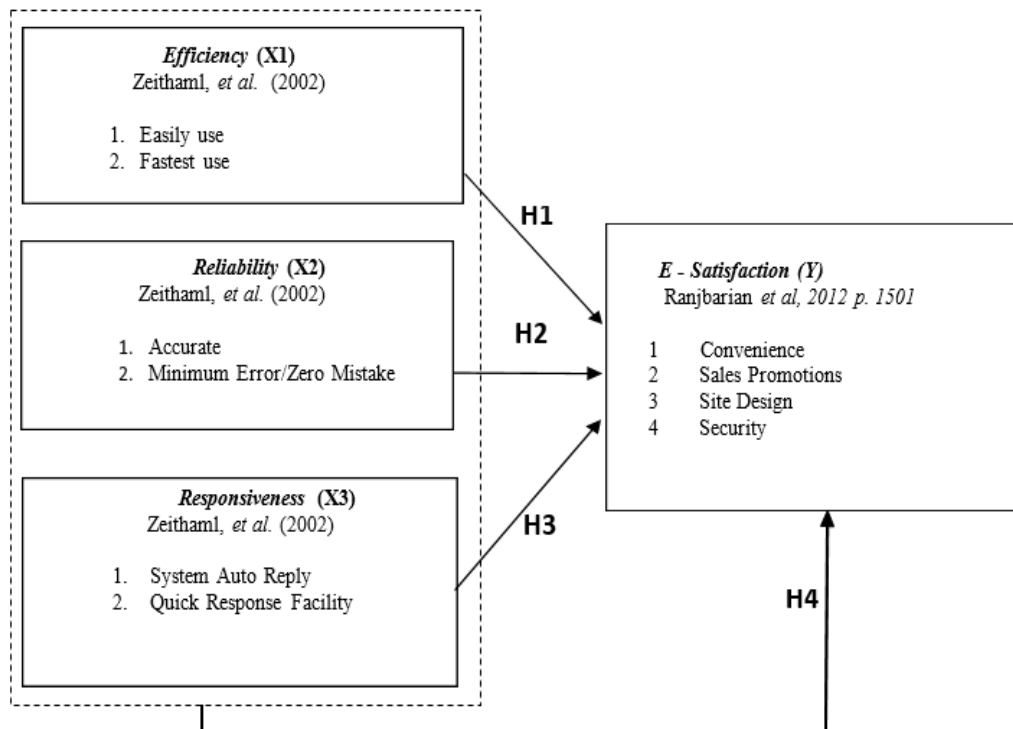


Fig 1:- Conceptual Framework  
Source: Theoretical Review

**F. Hypothesis**

Based on the research background, literature review and the research framework that has been described above, the research hypothesis is as follows:

H1: Efficiency affects E-Customer Satisfaction in the Redkendi Application

H2: Reliability affects the E-Customer Satisfaction in the Redkendi application

H3: Responsiveness influences E-Customer Satisfaction on the Redkendi application

H4: Efficiency, Reliability, Responsiveness simultaneously influences E-Customer Satisfaction in the Redkendi Application

**III. METHODOLOGY**

This research is a qualitative verification with a survey explanatory research method conducted to examine a particular population or sample. Data obtained through questionnaire surveys and structured interviews. The method of data analysis uses multiple linear regression analysis with the help of SPSS version 25 to test

hypotheses. The variables in this research are efficiency (X1), reliability (X2), responsiveness (X3), and e-satisfaction (Y). The population in this research is 33 companies that have made transactions through the online platform PT Redkendi Andalan Mitra. The sample in this research amounted to 99 respondents from 33 companies that are currently actively using the Redkendi application.

**IV. RESULT AND DISCUSSION**

*A. Validity and Reliability Test*

The results of validity test for all items of the questionnaire statement on the variables efficiency (X1), reliability (X2), responsiveness (X3), and e-customer satisfaction (Y) have the value of  $r_{count} > r_{table}$  (0.198) at the level of  $\alpha = 0.05$ , so that it can be concluded that all statement items are declared valid.

| Num. | $r_{count}$ X <sub>1</sub> | $r_{table}$ | Info  | $r_{count}$ X <sub>2</sub> | $r_{table}$ | Info  | $r_{count}$ X <sub>3</sub> | $r_{table}$ | Info  | $r_{count}$ Y | $r_{table}$ | Info  |
|------|----------------------------|-------------|-------|----------------------------|-------------|-------|----------------------------|-------------|-------|---------------|-------------|-------|
| 1    | .496**                     | 0.198       | Valid | .765**                     | 0.198       | Valid | .707**                     | 0.198       | Valid | .592**        | 0.198       | Valid |
| 2    | .506**                     | 0.198       | Valid | .714**                     | 0.198       | Valid | .755**                     | 0.198       | Valid | .641**        | 0.198       | Valid |
| 3    | .679**                     | 0.198       | Valid | .780**                     | 0.198       | Valid | .831**                     | 0.198       | Valid | .568**        | 0.198       | Valid |
| 4    | .656**                     | 0.198       | Valid | .795**                     | 0.198       | Valid | .832**                     | 0.198       | Valid | .570**        | 0.198       | Valid |
| 5    | .505**                     | 0.198       | Valid | .759**                     | 0.198       | Valid | .828**                     | 0.198       | Valid | .556**        | 0.198       | Valid |
| 6    |                            |             |       |                            |             |       |                            |             |       | .636**        | 0.198       | Valid |
| 7    |                            |             |       |                            |             |       |                            |             |       | .425**        | 0.198       | Valid |
| 8    |                            |             |       |                            |             |       |                            |             |       | .357**        | 0.198       | Valid |
| 9    |                            |             |       |                            |             |       |                            |             |       | .346**        | 0.198       | Valid |
| 10   |                            |             |       |                            |             |       |                            |             |       | .447**        | 0.198       | Valid |
| 11   |                            |             |       |                            |             |       |                            |             |       | .423**        | 0.198       | Valid |
| 12   |                            |             |       |                            |             |       |                            |             |       | .370**        | 0.198       | Valid |
| 13   |                            |             |       |                            |             |       |                            |             |       | .499**        | 0.198       | Valid |
| 14   |                            |             |       |                            |             |       |                            |             |       | .411**        | 0.198       | Valid |
| 15   |                            |             |       |                            |             |       |                            |             |       | .361**        | 0.198       | Valid |

Table 1:- Validity Test  
Source: Analysis Results Using SPSS version 25

Reliability test results of variable efficiency (X1), reliability (X2), responsiveness (X3), and e-customer satisfaction (Y) have a Cronbach's Alpha value > the specified conditions are 0.6. Thus could be means that all variables in this research were declared reliable.

| Variable                | Cronbach's Alpha | Term  | Info     |
|-------------------------|------------------|-------|----------|
| Efficiency              | 0.714            | > 0.6 | Reliable |
| Reliability             | 0.797            | > 0.6 | Reliable |
| Responsiveness          | 0.803            | > 0.6 | Reliable |
| E-Customer Satisfaction | 0.715            | > 0.6 | Reliable |

Table 2:- Reliability Test  
Source: Analysis Results Using SPSS version 25

*B. Classic Assumption Test*

The normality test results using the Kolmogorov-Smirnov Test, then get results obtained Sig of the four variables above more than the value of  $\alpha = 0.05$ , and the calculated KS value < KS value of the table ( $1.35 / \sqrt{99} = 0.136$ ). This can be concluded that the data tested has a normal data distribution.

| One-Sample Kolmogorov-Smirnov Test |                |                   |                   |                   |                         |
|------------------------------------|----------------|-------------------|-------------------|-------------------|-------------------------|
|                                    |                | Efficiency        | Reliability       | Responsiveness    | E-Customer Satisfaction |
| N                                  |                | 99                | 99                | 99                | 99                      |
| Normal Parameters <sup>a,b</sup>   | Mean           | 3.368             | 3.218             | 3.335             | 3.599                   |
|                                    | Std. Deviation | 0.472             | 0.655             | 0.732             | 0.371                   |
| Test Statistic                     |                | 0.089             | 0.084             | 0.081             | 0.065                   |
| Asymp. Sig. (2-tailed)             |                | .051 <sup>c</sup> | .081 <sup>c</sup> | .108 <sup>c</sup> | .200 <sup>c,d</sup>     |

Table 3:- Normality Test  
Source: Analysis Results Using SPSS version 25

The multicollinearity test results showed that all VIF values of each variable had a value <10, so it can be concluded that the tested data did not occur multicollinearity.

| Coefficients <sup>a</sup> |                         |       |
|---------------------------|-------------------------|-------|
| Model                     | Collinearity Statistics |       |
|                           | Tolerance               | VIF   |
| (Constant)                |                         |       |
| <i>Efficiency</i>         | 0.785                   | 1.274 |
| <i>Reliability</i>        | 0.691                   | 1.446 |
| <i>Responsiveness</i>     | 0.677                   | 1.476 |

Table 4:- Multicollinearity Test  
Source: Analysis Results Using SPSS version 25

Heteroscedasticity test results using scatterplot diagrams show that the points spread up and down the number 0 on the Y axis, and do not form certain patterns. So it could be concluded that the data tested are free from heteroscedasticity symptoms.

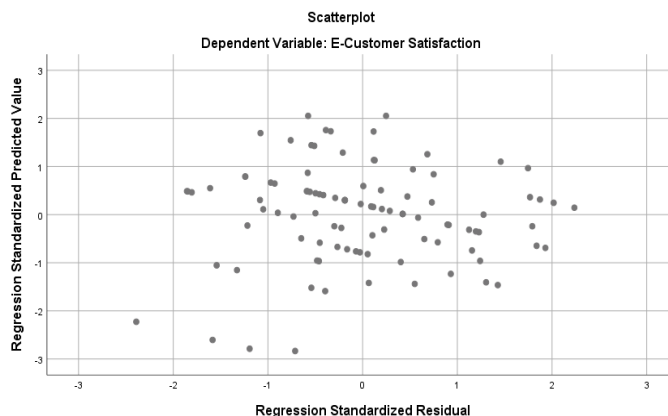


Fig 2:- Heteroscedasticity Test  
Source: Analysis Results Using SPSS version 25

**C. Hypothesis Test**

The results of hypothesis test in this research used the t test, F test and the determination coefficient test. The results of hypothesis test in this research can be seen in table 5 below.

| Coefficients <sup>a</sup>      |                             |            |         |                   |
|--------------------------------|-----------------------------|------------|---------|-------------------|
| Model                          | Unstandardized Coefficients |            | t       | Sig.              |
|                                | B                           | Std. Error |         |                   |
| (Constant)                     | 1.271                       | 0.121      | 10.469  | 0.000             |
| <i>Efficiency</i>              | 0.302                       | 0.038      | 7.906   | 0.000             |
| <i>Reliability</i>             | 0.154                       | 0.029      | 5.274   | 0.000             |
| <i>Responsiveness</i>          | 0.244                       | 0.026      | 9.240   | 0.000             |
| F                              |                             |            | 149.169 | .000 <sup>b</sup> |
| Adjusted R <sup>2</sup> Square |                             |            | 0.819   |                   |

Table 5: - Hypothesis Test  
Source: Analysis Results Using SPSS version 25

From Table 5 above, it can be seen that all t count values of the independent variables has t count values > t table (1.98) and Sig. = 0,000, so it could be concluded that H1, H2, and H3 in this research were accepted and tested. The regression equation is

$$Y = 1,271 + 0,302 X1 + 0,154 X2 + 0,244 X3 + e$$

In F test shows that the calculated F value > F table (2.7) with an Adjusted R2 Square value of 0.819, thus the H4 in this research was tested, therefore the Efficiency variable (X1), Reliability variable (X2), and the Responsiveness variable (X3) ) has simultaneously significant effect on the variable E-Customer Satisfaction (Y) of 81.9%.



D. Correlation between Dimensions

The level of relationship between variables in this research can be seen as in Table 6 below.

| Correlations        |                                 |                    |                      |                 |              |
|---------------------|---------------------------------|--------------------|----------------------|-----------------|--------------|
| Variable            | Dimension                       | E-Satisfaction (Y) |                      |                 |              |
|                     |                                 | Y.1 Convenience    | Y.2 Sales Promotions | Y.3 Site Design | Y.4 Security |
| Efficiency (X1)     | X1.1 Easy use                   | .522**             | .420**               | .377**          | .401**       |
|                     | X1.2 Fastest use                | .515**             | .259**               | .331**          | .412**       |
| Reliability (X2)    | X2.1 Accurate                   | .621**             | .350**               | .475**          | .490**       |
|                     | X2.2 Minimum Error/Zero Mistake | .522**             | .312**               | .443**          | .307**       |
| Responsiveness (X3) | X3.1 Auto Reply System          | .707**             | .479**               | .514**          | .559**       |
|                     | X3.2 Quick Response Facility    | .654**             | .469**               | .426**          | .552**       |

Table 6:- Correlation between Dimensions  
Source: Analysis Results Using SPSS version 25

Based on Table 6 above, it is known that the greatest correlation value between the dimensions in the Efficiency (X1) variable and the E-Satisfaction (Y) variable is the X1.1 Easily use with the Y.1 Convenience dimension, 0.522, and included in the level category moderate influence. This explains that the dimension X1.1 Easily Use in the Efficiency variable is required for every increase in E-Satisfaction (Y) especially in the Y.1 Convenience dimension.

Based on Table 6 above, it is known that the greatest correlation value between the dimensions in Reliability (X2) variable and the E-Satisfaction (Y) variable is the X2.1 Accurate dimension with Y.1 convenience dimension namely 0.621 and could be said the strong one. This explains that the accurate dimension X2.1 in the Reliability variable is indispensable for any increase in E-Satisfaction (Y) especially in the Y.1 dimension of Convenience.

Based on Table 6 above it is known that the greatest correlation value between the dimensions in Responsiveness (X3) variable against the E-Satisfaction (Y) variable is the X3.1 Autoreply System dimension with the Y.1 Convenience dimension which is 0.707, and belongs to the level strong influence category. This explains that the dimension X X3.1 Autoreply System in the Efficiency variable is indispensable for any increase in E-Satisfaction (Y) especially in the Y.1 dimension of Convenience.

E. Priority Scale

The results of the calculation of this priority scale will be very helpful in developing the Redkendi application especially to increase customer satisfaction. Calculation of the priority scale dimension of variable X as it follows:

| Dimensions        | Correlation coefficient x Regression coefficient | Score |
|-------------------|--|-------|
| Easy use          | 0.522 x 0.302                                    | 0.157 |
| Accurate          | 0.621 x 0.154                                    | 0.095 |
| Auto Reply System | 0.707 x 0.244                                    | 0.172 |

Table 7: Priority Scale Calculation  
Source: Analysis Results Using SPSS version 25

Based on Table 7 above, the results can be obtained that the variable dimension (X3), which is the auto reply system has the highest score when compared to the other variable dimension (X1), ease and variable dimensions (X2) accuracy. This shows that the auto reply system can be used as the main development priority in the application or the Redkendi website.

F. Discussion

Hypothesis results show that H1 is accepted and concluded that Efficiency has a positive and significant effect on E-Satisfaction, meaning that the better Efficiency in redkendi applications will increase the E-Satisfaction customers of PT Redkendi Andalan Mitra. This shows that the ease and speed of the redkendi application will increase online customer satisfaction. From the results of the correlation between dimensions obtained the highest value of the most dominant is the user convenience dimension. Eating catering easily in the application, finding a suitable food menu and the availability of complaint assistance is the main focus in creating convenience for customers in using the Redkendi application so as to increase customer satisfaction. This result is in line with previous research conducted by Sepni Lorena (2018) which states that the quality of e-service quality, one of which is Efficiency influences online consumer satisfaction.

Hypothesis results show that H2 is accepted and concluded that Reliability has a positive and significant effect on E-Satisfaction, meaning that the better reliability given to the customer, the higher E-Satisfaction of the customers PT Redkendi Andalan Mitra. From the results of correlation between dimensions has obtained the highest value and the most dominant is the accurate dimension. The accuracy of the available information on the RedKendi application is the main focus in efforts to increase customer satisfaction. With adding any information about the nutritional value of food accurately will makes customers easily know the intake of food obtained and also has a positive impact on the performance of employees in companies that are predominantly factory workers. Accurate information on applications must be maintained even better so that online customer satisfaction

can be increased. The results of this research had support previous research conducted by Riand et al (2016) which proves that Reliability influences e-satisfaction. This result is also in line with the most recent research conducted by Faruq Ulum and Rinaldi Muchtar (2018) which states that there is a positive influence of Reliability on e-customer satisfaction.

Hypothesis results show that H3 is accepted and concluded that Responsiveness has a positive and significant effect on E-Satisfaction, meaning that the better Responsiveness in the application will increase the E-Satisfaction customers of PT Redkendi Andalan Mitra. From the results of correlation between dimensions obtained the highest value of the most dominant is Autoreply system dimension. Responsiveness or fast response to the application is the main focus that needs to be maintained or even improved. The existence of a 24-hour online customer service is very helpful to meet customer needs in redkendi application. Food services carried out by catering in the company can run 24 hours with work system of employees per shift, thus catering services must be in accordance with the order on the redkendi application. The existence of standby customer service in the RedKendi application can help the work of the customers so that increasing responsiveness in this application will increase customer e-satisfaction. The results of this research has support previous research conducted by Puspa Chairunnisa Chesanti and Retno Setyorini (2016) which proves that e-service quality is one of the Responsiveness dimension which has a significant effect on online customer satisfaction.

Hypothesis results show that H4 is accepted and concluded that Efficiency, Reliability, and Responsiveness have a significant effect together on E-Satisfaction, meaning that the better Efficiency, Reliability, and Responsiveness will increase E-Satisfaction customers of PT Redkendi Andalan Mitra. Easily use of the application is very helpful in process of running the steps in the application. Menu information and nutritional values listed in the application are important in supporting the implementation of food in the company's canteen so that the accuracy of the information presented in the application must be appropriate and constantly updated. In addition, fast responsiveness with the implementation of an automated customer service system that functions for 24 hours will become the main focus in increasing customer satisfaction. So that the application development features ease, accuracy and fast response will increase e-satisfaction in the Redkendi application. The results of this research are in line with previous research conducted by Shinta Sekaring Wijjutami and Damayanti Octavia (2017) which states that there is a direct influence between electronic service quality variables on electronic satisfaction with Efficiency, Reliability and Responsiveness variables.

## V. CONCLUSIONS AND SUGGESTIONS

### A. Conclusions

Based on the results of the analysis and discussion which described in the previous chapter, then following conclusions can be drawn:

- Efficiency has a positive and significant effect on E-Customer Satisfaction at PT. Redkendi Andalan Mitra. This means that the better Efficiency owned by the Redkendi application platform, it will increase the customer E-Satisfaction of PT. Redkendi Andalan Mitra. To increase customer satisfaction using the application can built by increasing performance application quickly and easily.
- Reliability has a positive and significant effect on E-Satisfaction customers of PT. Redkendi Andalan Mitra. This can be means that the better reliability given to the customer, the higher E-Satisfaction to PT.Redkendi Andalan Mitra.To increase customer satisfaction in using applications can be realized by increasing the accuracy of the application and could carry out of its functions without errors or minimal errors.
- Responsiveness has a positive and significant effect on E-Satisfaction customers of PT. Redkendi Andalan Mitra. It means that the better Responsiveness, it will increase the E-Satisfaction of PT. Redkendi Andalan Mitra. To increase customer satisfaction in using the application could be achieved by maximizing the use of auto reply and quick response facilities that could help customers to respond to orders or handling complaints that occur quickly.
- Efficiency, Reliability and Responsiveness simultaneously have a significant effect on E-Satisfaction PT. Redkendi Andalan Mitra. This means that the better Efficiency, Reliability and Responsiveness, it will increase the E-Satisfaction of PT. Redkendi Andalan Mitra.

### B. Suggestions

Based on the results of research and discussion also conclusions that have been described above, the researchers put forward some suggestions that can be used as an advice as follows:

- Correlation between dimensions test results show that the dimensions of user convenience on the efficiency variable has the highest correlation to the convenience dimension on the e-satisfaction variable, it can be improved through application development to facilitate customers, such as: catering features search take precedence spot in applications, food menus are summarized, methods payment and complaint assistance is provided.
- Correlation between dimensions test results show that the accurate dimensions of the user on the reliability variable has the highest correlation with the convenience dimension on the e-satisfaction variable it could be develop by increasing the actual information such as nutritional intake value of food in a professional way by weighing the food and used as a standard. A special team is needed to provide the actual calculate of nutritional content in food.

- Correlation between dimensions test results show that the dimensions of the user autoreply system on responsiveness variables have the highest correlation to the convenience dimension on e-satisfaction variables, it can be improved through the development of a feature in Redkendi applications such as customer service auto reply feature that could be handling all kinds of complaints from customers in the application quickly, precisely and automatically 24 hours without any manpower handling or standby within 24 hours.
- To support the improvement of this knowledge also to improving this research, it is recommended for the next researchers to conduct this research with other variables such as vendor catering quality and safety or security to obtain better research results. Future research could use the additional Y variables, namely Customer Loyalty so that research will be better with an increased level of E-Satisfaction.

### REFERENCES

- [1]. Anderson, R. E., dan Srinivasan, S. S. (2003). *E-Satisfaction and E-Loyalty: A Contingency Framework*. *Psychology & Marketing*, Vol. 20, No. 2, 123-137.
- [2]. Bressolles, Gregory and Durrieu Francois. (2011). *Service Quality, Customer Value and Satisfaction Relationship Revisited for Online Wine Websites*. AWBR International Conference 9 – 10 June 2011. Bordeaux Management School – BEM – France.
- [3]. Chesanti, Puspa Chairunnisa, dan Retno Setyorini. (2016). “Pengaruh E-Service Quality Terhadap Kepuasan Pelanggan sebagai Pengguna Aplikasi PLN Mobile”. *Jurnal Penelitian Pendidikan*, ISSN: 1412-565X.
- [4]. Kotler, Philip dan Kevin L. Keller. (2006). *Manajemen Pemasaran edisi ke 12 Jilid ke 1*. New Jersey, Indeks.
- [5]. Lorena, Sepni (2018). “Pengaruh E-SERVICE Quality terhadap E-Satisfaction yang berdampak pada E-Loyalty”. Digital Repository Unila. Fakultas Ekonomi dan Bisnis. Universitas Lampung.
- [6]. Parasuraman, dkk. (2005). *E-S-QUAL A MultipleItem Scale for Assessing Electronic Service Quality*. Volume 7, No. X. Hal 1- 21.
- [7]. Parasuraman and L. Berry. (2005). *Delivering Quality Service: balancing customer perceptuons and expectations*, The Free Press, New York.
- [8]. Ranjbarian, Bahram et al. (2012). *An Analysis Of Brand Image, Perceived Quality, Customer Satisfaction and Re-Purchase Intention in Iranian Department Stores*. *Journal of Business and Management* Vol. 7, No. 6; March 2012 ISSN 1833-3850 E-ISSN 1833-8119.
- [9]. Riand et al. (2016). “Pengaruh E-Service Quality Aplikasi Garuda Indonesia Terhadap Customer Satisfaction Garuda Indonesia”. Vol.3, No.3 December 2016 ISSN 2355-9375.
- [10]. Ting. O.S, et.al. (2016). *E-Service Quality, E-Satisfaction and E-Loyalty of Online Shoppers in Business to Consumer Market; Evidence form Malaysia*. IOP Conf. Series: Materials Science and Engineering.
- [11]. Tjiptono, Fandy dan Gregorius Chandra. (2016). *Service, Quality & satisfaction*. Yogyakarta. Andi.
- [12]. Tjiptono, Fandy dan Gregorius Chandra. (2012). *Service, Quality Satisfaction*. Jogjakarta: Andi Offset.
- [13]. Ulum, Faruq dan Rinaldi Muchtar. (2018). “Pengaruh E-Service Quality terhadap E-Customer Satisfaction Website Start-Up Kaosyay”. Vol. 12, No. 2, 2018 ISSN 1412-9663.
- [14]. Wijiutami, Shinta Sekaring dan Damayanti Octavia. (2017). “Pengaruh E-Service Quality terhadap E-Satisfaction serta dampaknya pada E-Loyalty pelanggan E-Commerce C2C Di Kota Jakarta dan Bandung”. *E-Prociding of Management: Vo.4, No.3*, pp 2212.
- [15]. Zeithaml V. (2002). *Service Excellence in Electronic Channels, Managing Service Quality*, 12, 3, 135-139.