Factors Affecting User Satisfaction with Online Food Delivery Service Applications in Indonesia (Gofood, Grabfood, and Shopeefood)

Aurelia Salsabila Putri [*1], Roni Zakaria[2], Yuniaristanto[3]
[1,2,3] Department Industrial Engineering, Faculty of Engineering, Sebelas Maret University
Ir. Sutami No. 36, Kentingan, Jebres, Surakarta, Central Jawa, 57126, Indonesia
Email: aureliasalsabilap@gmail.com[1], ronizakaria@staff.uns.ac.id[2], yuniaristanto@staff.uns.ac.id[3]

Abstract

The growth and development of food delivery service applications in Indonesia has occurred very rapidly in the last 4 years. Digitization in the food and beverage sector in Indonesia is supported by the growth and development of food delivery service applications, namely Gofood and Grabfood, which focus on service providers selling, ordering and delivering food and beverages from places of sale to consumers. Gofood and Grabfood are currently the two largest food delivery application services in Indonesia with quite fierce competition between the two. In the midst of the progress of these two food delivery services, a new phenomenon has emerged where there are new players entering the competition in the food delivery service industry in Indonesia, namely from one of the largest e-commerce platforms in Indonesia and Southeast Asia called Shopee, namely Shopee Food. The emergence of ShopeeFood makes the competition in the food delivery service application industry increasingly tight in Indonesia. Application users have more choices to use the application and choose to be satisfied or dissatisfied with the application for the services provided. Among this fairly tight competition, therefore, identification is needed to find out what factors can increase user satisfaction in Indonesia with food delivery service applications.

Keywords: customer satisfaction, Gofood, Grabfood, online food delivery service, Shopeefood

Abstrak

Pertumbuhan dan perkembangan aplikasi layanan pesan antar makanan di Indonesia terjadi dengan sangat pesat dalam kurun waktu 4 tahun terakhir. Digitalisasi pada sektor makanan dan minuman di Indonesia didukung oleh pertumbuhan dan perkembangan aplikasi layanan pesan antar makanan, yaitu Gofood dan Grabfood yang berfokus pada penyedia jasa penjualan, pemesanan dan pengantaran makanan dan minuman dari tempat berjualan ke konsumen. Gofood dan Grabfood saat ini menjadi dua layanan aplikasi pesan antar makanan terbesar di Indonesia dengan persaingan yang cukup sengit di antara keduanya. Di tengah kemajuan kedua layanan pesan antar makanan ini, fenomena baru muncul dimana terdapat pemain baru yang memasuki persaingan industri layanan pesan antar makanan di Indonesia, yakni dari salah satu platform e-commerce terbesar di Indonesia dan Asia Tenggara bernama Shopee, yaitu Shopee Food. Adanya kemunculan ShopeeFood menjadikan persaingan di industri aplikasi layanan pesan antar makanan semakin ketat di Indonesia. Pengguna aplikasi memiliki pilihan lebih banyak untuk menggunakan aplikasi dan memilih untuk puas atau tidak puas terhadapa aplikasi tersebut atas layanan yang diberikan. Di antara persaingan yang cukup ketat ini, maka dari itu, diperlukan identifikasi untuk mengetahui faktor-faktor apa saja yang dapat meningkatkan kepuasan pengguna di Indonesia terhadap aplikasi layanan pesan antar makanan.

Kata kunci: *kepuasan pengguna, Gofood, Grabfood, aplikasi layanan pesan antar makanan, Shopeefood*

1. Introduction

The growth and development of food delivery service applications in Indonesia has occurred very rapidly in the last 4 years. Digitization in the food and beverage sector in Indonesia is supported by the growth and development of food delivery service applications, namely Gofood and Grabfood, which focus on service providers selling, ordering and delivering food and beverages from places of sale to consumers. Gofood and Grabfood are currently the two largest food delivery application services in Indonesia with quite fierce competition between the two. In 2020, it is known that there are 2 market leaders in the food delivery service application industry in Indonesia, where Grabfood itself is ranked first with a total market share of US$ 1.96 billion and Gofood is ranked second with a total market share of 1.74 billion. US$, each contributing 53% and 47% of the total market share of the delivery service application industry which is at US$ 3.7 billion (Randi Eka, 2021).

In the midst of the progress of these two food delivery services, a new phenomenon emerged where there were new players entering the competition in the food delivery service industry in Indonesia, namely from one of the largest e-commerce platforms in Indonesia and Southeast Asia called Shopee, namely Shopee Food in April 2020 (Desy Setyowati, 2021). The presence of Shopee Food has led to two interpretations that later emerged, namely the potential to be a threat to existing players, especially Gofood and Grabfood as the largest

---

market holders today or an opportunity for new players to emerge in the future.

But on the other hand, while Shopee Food can be a threat to incumbent players like Gofood and Grabfood where in business competition, currently Shopee Food is the last mover advantage while Gofood and Grabfood are first mover disadvantage. Shopee Food as the last mover advantage where Shopeefood as a new player has more advantages than Gofood and Grabfood. This is because Shopee Food has a greater opportunity to find out the weaknesses of the two old players so that they can excel in things that may not be favored by the old players. In addition, new players can produce the latest innovations which are the development of products/services that have been produced by old players. The advantages possessed by new players pose a threat to existing players, although at the same time, Shopee Food also needs to be aware of the significant growth of the two old players as well as the biggest player in this food delivery service application.

Based on research by (Anna Rosaria Firdhiani, 2020), during the Covid-19 pandemic, Grabfood users only increased by 4% in 2020, much different from Gofood users who increased by 20% according to Zhafira(2020) where according to a CLSA analysis , Jonathan Mardjuki, Gofood is considered to have more loyal customers (loyal) compared to Grabfood where 60% of survey respondents believe that big discounts are the main advantage in using services (commercialization), in contrast to Gofood where familiarity with the application,dependence on Gopay, and User friendly application is the reason behind customer satisfaction and loyalty. Similar results were also obtained through an online survey conducted by the Katadata Insight Center (KIC) in June 2021 to find out the use of delivery service applications that are most often used by the public, of which 50% use Grabfood the most, 46% use Gofood, andonly 3% use Shopee Food the most. Of these threeservices, Gofood has the most stable and rapid growth inthe midst of very tight competition. This is supported bythe words of Gojek's Co-CEO, Kevin Aluwi, who statedthat Gofood is one of Gojek's main services that has very solid growth due to the love and loyalty of the Indonesian people towards Gofood which is one of the supporters ofthis long-term business growth (Tri Apriyani, 2020). Where Shopee Food users as new players, are encouraged through discounts and massive promotions toattract users' attention and increase their satisfaction in making purchases, such as free shipping and discount vouchers (Rachel Christiana, 2019).

From this data, it can be seen that the competition isquite tight between food delivery service applications forboth old players, such as Gofood and Grabfood as well as new players, such as Shopee Food in Indonesia, which makes each of these services increasingly committed to continuously improving customer

satisfaction which leads to loyalty. service users are increasing. User satisfaction is considered to have a very important role inmaintaining the sustainability of a business where user satisfaction is closely related to factors directly related toproducts and services, where if user satisfaction is achieved, it will have a positive impact on user retentionand loyalty.

Seeing the very tight competition for incumbent players and new opportunities in the food delivery service industry in Indonesia, it is necessary to know the factors that influence user satisfaction with a food delivery service. These factors need to be reviewed to find out more about what strategy each new and old player should do in increasing user satisfaction so as to be able to keep users loyal in using applications and using services on an ongoing basis.

2. Methodology

This study followerd two directions to answer the research questions. First, descriptive analysis was used tomeasure the level of satisfaction in service based on the research model variables. Second, a relational analysis was conducted to see the relationship and prediction of customer satisfaction using Partial Least Square analysisStructural Equation Modelling.

2.1 Research Model and Hypotheses

For the purpose of this study, the reseach model developed focuses on customer satisfaction only which predicted associated with 9 factors. There are hedonic motivatons, time saving orientation, price saving orientation, prior online purchase experience, convenievemotivation, influence of social networking sites, usability, food quality, and e-service quality. The model shows in Figure 1 hypothesizes that 9 factors that affect customer satisfaction.

H1: Hedonic motivation has a significant impact on customer satisfaction

H2: Time saving orientation has a significant impact oncustomer satisfaction

H3: Price saving orientation has a significant impact oncustomer satisfaction

H4: Prior online purchase experience has a significant impact on customer satisfaction

H5: Convenienve motivation has a significant impact oncustomer satisfaction

H6: Influence of social networking sites has a significant impact on customer satisfaction

H7: Usability has a significant impact on customer satisfaction

H8: Food quality has a significant impact on customer satisfaction

H9: E-service quality has a significant impact on customer satisfaction

2.2 Sample and Sampling Process

This study adopted an online survey to collect customer prceptions regarding the independent variables (hedonic motivatons, time saving orientation, price saving orientation, prior online purchase experience, convenieve motivation, influence of social networking sites, usability, food quality, and e-service quality) and dependent variable (customer satisfaction). The questionnaire was designed and divided into 3 sections, the first section is the screening question to eliminate responden that does not fulfill the qualification, the second part is the sociademographic, and the last part is the questions related to each of the independent variables studied in this research. The factors that formulated in the research model was carefully selected based on the combination on the previous research conducted by Haiyang Liu (2019) on *Factors Positively Influencing Customer Satisfaction of Online Food Delivery Services of Customers in Bangkok And Its Vicinity and Dwi Suhartanto* (2018) *on Loyalty Toward Online Food Delivery Service - The Role Of E-Service Quality And Food Quality*.
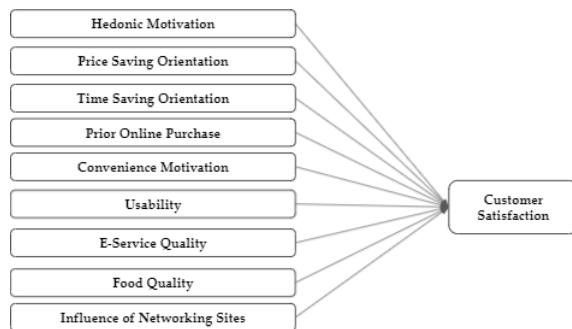

Figure 1. Research Model

This survey was designed in Indonesian language Form" and distributed electronically via a link to all potential respondents across Indonesia. The link was shared through WhatsApp and Instagram to reach all potential respondents. The survey was designed in a way that enable respondent to fill out within 5 up to 7 minutes in total to reduce the nonresponse rate due to time limitation.

Prior to demographic classification, respondents were screened based on their usage towards online food delivery service app. This screening part were asking whether respondent currently a online food delivery app user in minimum 2 out of 3 applications that were studied(Gofood, Grabfood, Shopeefood). Respondens were demographically classified based on their province, age, gender education level, occupation. Post thedemographics section, the survey asked about their agreement or disagreement levels towards each indicators that indicate each of the variables using 5-point likertscale ('1' = stronglydisagree, '2' = somewhatdisagree, '3 '= neutral, '4' = somewhatagree, '5' = stronglyagree). Thesurvey questionnaire used to

collect the primary data for this study is presentedin Appendix A. Because this studyuses SEM-PLS, for the calculation of the number of samples according to Solimum (2002) in (Setiawati, 2015), where the number of samples is equal to 5 to 10 times the number of parameters (variables) available in the model or equal to 5 to 10 times the number of manifest variables (indicators). of all latent variables.

In this study, the number of indicators is 39, so the researcher determines the sample with a total of 39 x 5, which is 195 samples. However, to prevent and minimize the occurrence of errors and data that do not meet the criteria, the researchers set a minimum sample size of 200 respondents.

3. Result & Discussion
3.1 Description of the Respondent

The respondents who participated in this study should ave used online food delivery service application. According to the questionnaire that has been collected, the following figure detal demgraphic from 229 respondets.

Table 1. Respondent Distribution based on Geographic

Provinsi	Frekuensi	Persentase (%)
Aceh	2	0.88%
Bali	2	0.88%
Banten	8	3.52%
Bengkulu	5	2.20%
DI Yogyakarta	4	1.76%
DKI Jakarta	150	66.08%
Jambi	1	0.44%
Jawa Barat	27	11.89%
Jawa Tengah	10	4.41%
Jawa Timur	4	1.76%
Kalimantan Barat	2	0.88%
Kalimantan Timur	1	0.44%
Kepulauan Riau	2	0.88%
Maluku Utara	1	0.44%
Nusa Tenggara Barat	1	0.44%
Sulawesi Selatan	1	0.44%
Sumatera Barat	2	0.88%
Sumatera Selatan	1	0.44%
Sumatera Utara	3	1.32%
Grand Total	**227**	**100.00%**

Table 2. Respondent Distribution based on Age

Rentang Umur	Frekuensi	Persentase (%)
<10	1	0.44%
17-26	92	40.53%
27-40	77	33.92%
41-60	56	24.67%
61-75	1	0.44%
Grand Total	**227**	**100.00%**

Table 3. Respondent Distribution based on Occupation

Jenis Pekerjaan	Frekuensi	Persentase (%)
Pegawai Swasta	87	38.33%
Pelajar/Mahasiswa	66	29.07%
PNS	18	7.93%
Wiraswasta	56	24.67%
Grand Total	**227**	**100.00%**

Table 4. Respondent Distribution based on EducationLevel

Pendidikan Terakhir	Frekuensi	Persentase (%)
Diploma	12	5.29%
S1	135	59.47%
S2	18	7.93%
SD/SMP/SMA/SMK	62	27.31%
Grand Total	**227**	**100.00%**

Table 5. Respondent Distribution based on Online Food Delivery Service App Usage

Pilihan Aplikasi	Frekuensi	Persentase (%)
Go Food, Grab Food	144	63.44%
Go Food, Grab Food, Shopee Food	36	15.86%
Go Food, ShopeeFood	32	14.10%
Grab Food, Shopee Food	15	6.61%
Grand Total	**227**	**100.00%**

3.2 Measurement Model

Validity test (convergent validity and discriminant validity) and reliability test (composite reliability and croncbach' alpha) are the first steps should be donebefore testing the proposed model. The result of validityand reliability test are shown in the table 6 which consist of factor loading, cronbach alpha, composite reliability, and average variance extraction.

On the loading factor calculation, it assessed the value generated by each indicator to measure the variablewhich need to be higher than 0,7. When loading factor largen than 0,7 it indicates that each of the indicators arevalid to measure its independent variable. Cronbach Alpha measures the validation on model been explore if the value larger than 0,7. The Croncbach's Alpha for thisstudy is already larger than 0,7 for each of variables which means this research

model is suitable to be explored. According to experts, the model is said to be feasible for exploratory research if the composite reliability value 0.7. Overall, the model is valid due to istaverage variance extracted (AVE) larger than 0,5 for each of the variables.

3.3 Structural Model

Evaluation on the structural model is conducted to know the association of each of the independent variablestoward the dependent variables. To assess and identify the relationship between each of the independentvariables on the dependent variables, path coefficient is suggested to be using the bootstrao method with 500 repetition procedures. Figure 2 shows the result of bootstrapping on path coefficient.

Table 7. Path Coefficient

Variable	Path Coefficient	T-Statistics	P-Value
CM -> CS	0,106	1,498	0,135
FQ -> CS		5,257	0,000
HM_ -> CS	0,350	2,466	0,014
IS -> CS	0,124	0,789	0,430
PO_ -> CS	0,040	2,066	0,039
PS -> CS	0,107	0,740	0,460
SQ -> CS	-0,037	4,775	0,000
TS_ -> CS	0,315	0,081	0,936
U -> CS	-0,005	1,069	0,286

Table 5 shows the results of nine hypothesis tests in this study. Baesed in the hypothesis test, among eleven independent variables, it is known that convenience motivation, influence of social networking sites, price saving orientation, time saving orientation, and usabilityare considered not significan towards affecting customersatisfaction. It means these variables have no significant influence on customer satisfaction because T-statistic values are smaller than 1.96 and P-value are bigger than 0,05. Then H2, H3, H5, H6, H7 are rejected. On the other hand, the relationship between food quality, hedonic motivation, prior online purchase experience, and service quality are identified significant towards customer satisfaction because significant influence on customer satisfaction because T-statistic values are bigger than 1.96 and P-value are smaller than 0,05. Then H1, H4, H8, and H9 are accepted. Furthermore, between all variable relationships with customer satisfaction, it is identified that food quality and service quality have the most significant impact on the customer satisfaction. Both of the independent variables have T-statistic 5,257 and 4,775, respectively.

4. Discussion

Previous research has been conducted to identify the relationship betweeen certain factors towards customer satisfaction of online food delivery service

app in many countries, but rarely conducted in Indonesia. Therefore, this study wants to deep dive research or conducted a study on influence of certain variables towards customer satisfaction of online food delivery service app (Gofood, Grabfood, and Shopeefood) in Indonesia.

Table 6. Validity & Realiability on Measurement Model

| Construct/Item	Loading	Cronbach alpha	CR	AVE
Convenience Motivation		0,865	0,973	0,881
CM1	0,938			
CM2	0,939			
Customer Satisfaction		0,876	0,915	0,729
CS1	0,868			
CS2	0,867			
CS3	0,845			
CS4	0,835			
Food Quality		0,818	0,880	0,648
FQ2	0,709			
FQ3	0,754			
FQ4	0,889			
FQ5	0,855			
Hedonic Motvation		0,751	0,889	0,801
HM1	0,894			
HM2	0,895			
Influence of Social Network		0,804	0,871	0,630
IS1	0,724			
IS2	0,822			
IS3	0,866			
IS4	0,755			
Prior Online Purchase		0,790	0,904	0,826
PO1	0,926			
PO2	0,891			
Price Saving Orientation		0,796	0,875	0,702
PS1	0,745			
PS3	0,884			
PS4	0,877			
E-Service Quality		0,832	0,882	0,599
SQ4	0,721			
SQ5	0,775			
SQ7	0,784			
SQ8	0,761			
SQ9	0,825			
Time Saving Orientation		0,817	0,890	0,729
TS1	0,832			
TS2	0,862			
TS3	0,867			
Usability		0,812	0,876	0,639
U1	0,868			
U2	0,814			
U3	0,747			
U4	0,763			
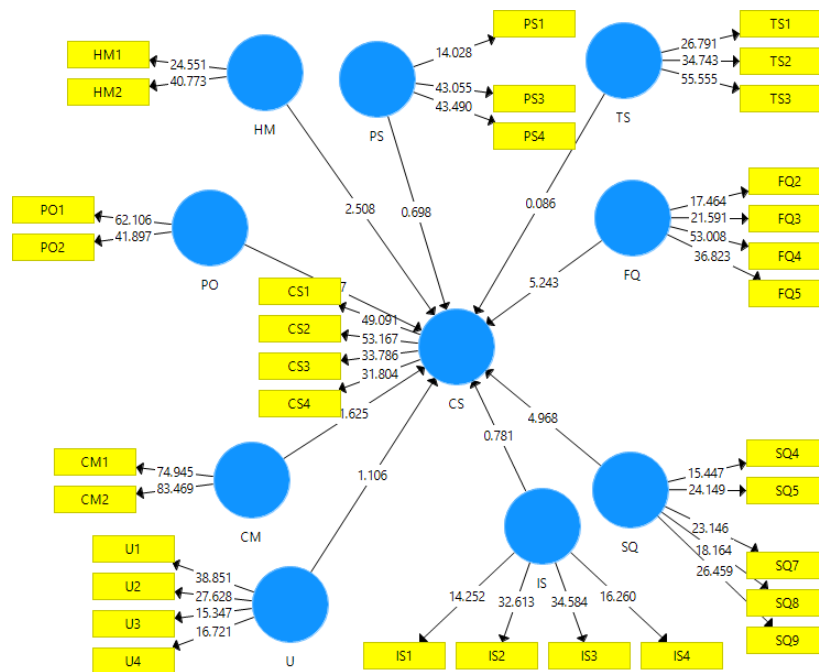
Figure 2. Path Coefficient Diagram based on Bootstrapping Calculation

This study has provded the primary factors that makes customer of online food delivery service app in Indonesia satisfied is not price saving orientation, time saving orientation, convenience motivation, usability. Instead, it is proved that food quality, service quality, hedonic motivation, prior online purchase experience has significant impact to customer satisfaction based on customer perception.

5. Conclusion

The user satisfaction model that was developed and tested has a value of 0.501 where this value is above 0 so it can be said that this value has a good observation value on the research object. In addition, the developed user satisfaction model has a fit value of 70.4% where the existing model is considered good for research. User satisfaction factors that have a significant influence on user satisfaction based on Partial Least Square Structural Equation Modeling analysis, namely that food quality, service quality, hedonic motivation, prior online purchase experience. In addition, the overall factors in the user satisfaction model of 71.2% can affect user satisfaction on food delivery service applications in Indonesia. In this study, food quality and service quality have the highest values as values that affect user satisfaction both positively and significantly, respectively +0.350 and 5.257 for food quality and +0.315 and 4.775 for service quality.

References

Anissa Dea Widiarini. (2020, Desember). (Kompas) Retrieved from Kompas.com: https://money.kompas.com/read/2020/12/24/081400926/menilik-langkah-fast-food-indonesia-kembangkan- bisnis-di-tengah-pandemi

Anissa Dea Widiarini. (2020, Desember). (Kompas) Retrieved from Kompas.com: https://money.kompas.com/read/2020/12/24/081400926/menilik-langkah-fast-food-indonesia-kembangkan-bisnis-di-tengah-pandemi

Anissa Dea Widiarini Kompas, Agung Dwi E. (2020, Desember). Money. Retrieved from Kompas.com.

Annetly Ngabito PWC. (2020, Agustus). PWC. Retrieved from Indonesia.

Aryani, D., & Rosinta, F. (2010). Pengaruh Kualitas Layanan terhadap Kepuasan Pelanggan dalam Membentuk Loyalitas Pelanggan. Jurnal Ilmu Administrasi Dan Organisasi, 17(2), 114–126.

Briliana, L. L. (2018). Pengaruh Customer Satisfaction, Adjusted Expectation, Perceived Value, dan Perceived Usefullness Terhadap Online Repurchase Intention Pada Pelanggan Lazada. Jurnal Wira Ekonomi Mikroskil, 37-48.

Cania, S. C. (2018). Faktor-faktor yang mempengaruhi penggunaan layanan Gopay pada pelanggan maupun pengemudi Gojek. Yogyakarta.

Chen, Minghong, & Qi, X. (2015). Members' Satisfaction and Continuance Intention: A Socio-technical Perspective. Industrial Management & Data Systems.

Cindy Monica, V. B. (2019). Faktor-faktor yang mempengaruhi continuance intention pengguna Gofood di Jakarta. Wira Ekonomi Mikroskil, 1-12.

Darmawan, R. (2013). Pengalaman, Usability, dan Antarmuka Grafis: Sebuah Penelusuran Teoritis. ITB J. Vis. Art Des, 95–102.

Davis, F. (1989). Perceived Usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 319-339.

Davis, F., Bagozzi, R., & Warshaw, P. (1989). User acceptance of computer technology: a comparison of two theoretical model. Management Science.

Desy Setyowati. (2019, September 19). Layanan Pesan-Antar Makanan Jadi Tren, Riset Nielsen: GoFood Pionirnya.

Desy Setyowati. (2021, Januari 28). Peta Persaingan GrabFood dan GoFood di Tengah Kehadiran ShopeeFood.

Eka, R. (2021, January 31). Indonesia's Food Delivery Service GMV Hits 52 Trillion Rupiah, Grab and Gojek Leading the Market.

Fitria Dwi Rahayu. (2021, July 26). Selain GrabFood dan GoFood, Shopee Food Juga Banyak Diskonnya Lho!

Hanadian Nurhayati-Wolff. (2021). Most used food delivery app orders Indonesia 2020. Statista.

Industri. (2020, Juni). Retrieved from GoFood Mempercepat Transformasi Digital UMKM untuk Bangkit dari Pandemi.

Iskandar. (2021, Februari 27). GoFood Vs GrabFood, Mana Yang Paling Banyak Digunakan Orang Indonesia?

Kaushik Das, Michael Gryseels. (2016). Unlocking Indonesia's Digital Opportunity. McKinsey & Company.

Kemp, S. (2020). Digital 2020 Indonesia. DATA REPORTAL.

Larasati Gumilang Kencanawardhani. (2021, Maret 31). Shopee Food Bikin Grab dan Gojek Merinding: Menanti Perang Diskon yang Manjain Konsumen.

Leo Dwi Jatmiko. (2021, Januari 28). RI Jadi Pasar Potensial bagi Bisnis Pesan-Antar Makanan, Kok Bisa?

M Richard. (2019, Februari). Ekonomi. Retrieved from Bisnis.com: https://ekonomi.bisnis.com/read/20190211/12/887488/b isnis-restoran-cepat-saji-berpeluang-tumbuh-15-tahun- ini

Nugroho, S., Dharmesti, M., Septiari, E., & Gitosudarmo, I. (2015). The Impact of E-Satisfaction on E-Loyalty Moderated by Consumer Perceived Risk and Expertise.

Prasetyono, A. P. (2017, November). Retrieved from Ristek-Brin.

Rachel Christiana. (2019, Desember 10). Strategi Shopee dalam Menarik Perhatian Pelanggan.

Ridwan Achmad. (2021, Maret 1). Indonesia dalam Peta Bisnis Persaingan Layanan Pesan-Antar Makanan di Asia Tenggara.

Robetmi Jumpakita Pinem, T. A. (2020). The Relationship of Cashback, Discount, and

Tri Apriyani. (2020, Februari 11). GoFood Terus Memimpin Pasar dengan Utamakan Pengalaman Berkuliner Pelanggan.

Venny Suryanto, N. L. (2020, Agustus). Tiga sektor usaha ini berpeluang tumbuh pesat di masa pandemi, p. 1.

Wahyunanda Kusuma Pertiwi. (2021, Januari 14). Gojek dan Grab Harap Waspada, ShopeeFood Siap Ekspansi di Indonesia.

Wardiana, W. (2002). Perkembangan Teknologi Informasi di Indonesia. Seminar dan Pameran Teknologi Informasi 2002, 6.

Wibowo, R. (2020, Agustus Selasa). Pengguna aktif Gojek capai 20 juta orang . (R. Subekti, Interviewer)

(2021, Januari 28). Indonesia Pasar Layanan Pesan-Antar Makanan Nomor 1 di ASEAN.