

THE EFFECTIVENESS OF THE TUMBASIN.ID APPLICATION DURING THE COVID-19 PANDEMIC IN SEMARANG CITY

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Abstract. *The use of marketplace mobile applications for buying and selling goods online is widespread and growing. Some reviews have found that most of these apps do not present evidence of their effectiveness and the research that exists is mainly done by individuals and institutions that have ties to the app being tested. As a result, different research methods are required to be considered. Where by researching the effectiveness of marketplace applications for customers during the covid-19 pandemic. Marketplace applications have been able to provide convenience for sellers and buyers of goods online, but have not played a significant role in the success of long-lasting marketplace applications used by buyers and sellers of goods. Many factors play a role in this case. To overcome the inability of the marketplace application to last a long time to be used by its customers, research is proposed on the effectiveness of the tumbasin.id application during the COVID-19 pandemic in Semarang City. The purpose of the study is to produce factors or variables that affect the effectiveness of the tumbasin.id application during the covid-19 pandemic in Semarang City.*

This type of research is descriptive and quantitative. The research design is cross-sectional. Place of research in the city of Semarang. The research time was from January-December 2022. The population and sample of this study were all users of the tumbasin.id application in Semarang City from 2020 to 2022 as many as 644 people. The sampling technique used was total sampling. The primary data source is a questionnaire. The secondary data source is the tumbasin.id application data. The research instrument used a questionnaire in the form of a Google Form. The method of collecting questionnaire data is using the google form questionnaire application. Secondary data collection using documentation. Data analysis using Net Promoter Score (NPS).

The results of the research on the factors that affect the effectiveness of the tumbasin.id application during the covid-19 pandemic in the city of Semarang, namely customer satisfaction and customer recommendations with the results of NPS customer satisfaction scores in 2020 of 11.65%, in 2021 of 10.25%, 2020. 2022 is 12.58% with a total NPS customer satisfaction score for 2020-2022 of 34.47%. NPS customer recommendation score in 2020 is 12.42%, in 2021 it is 12.11%, in 2022 it is 13.51% with a total NPS score for customer recommendation during 2020-2022 is 38.04%.

Keywords: *customer; effectiveness; marketplace application.*

Abstraksi. *Penggunaan aplikasi seluler marketplace untuk jual beli barang secara online tersebar luas dan berkembang. Beberapa ulasan menemukan bahwa sebagian besar aplikasi ini tidak menampilkan bukti keefektifannya dan penelitian yang ada terutama dilakukan oleh individu dan institusi yang memiliki hubungan dengan aplikasi yang sedang diuji. Akibatnya, diperlukan metode penelitian yang berbeda untuk dipertimbangkan. Di mana dengan penelitian efektivitas aplikasi marketplace untuk pelanggan pada masa pandemi covid-19. Aplikasi marketplace telah mampu memberikan kemudahan bagi penjual dan pembeli barang secara online, namun tidak berperan signifikan dalam kesuksesan aplikasi marketplace bertahan lama*

dipakai oleh pembeli dan penjual barang. Banyak faktor yang berperan dalam kasus tersebut. Dalam usaha mengatasi ketidak mampuan aplikasi marketplace bertahan lama dipakai oleh pelanggannya, maka diusulkan penelitian mengenai efektivitas aplikasi tumbasin.id pada masa pandemi covid-19 di Kota Semarang. Tujuan penelitian adalah menghasilkan faktor-faktor atau variabel-variabel yang mempengaruhi efektivitas aplikasi tumbasin.id pada masa pandemi covid-19 di Kota Semarang.

Jenis penelitian ini adalah deskriptif kuantitatif. Desain penelitian *cross sectional*. Tempat penelitian di Kota Semarang. Waktu penelitian pada bulan Januari-Desember 2022. Populasi dan sampel penelitian ini adalah seluruh pengguna aplikasi tumbasin.id di Kota Semarang pada tahun 2020 sampai dengan 2022 sebanyak 644 orang. Teknik pengambilan sampel menggunakan *total sampling*. Sumber data primer yaitu kuesioner. Sumber data sekunder yaitu data aplikasi tumbasin.id. Instrumen penelitian menggunakan kuesioner dalam bentuk Google Form. Metode pengumpulan data kuesioner dengan menggunakan aplikasi kuesioner google form. Pengumpulan data sekunder dengan menggunakan dokumentasi. Analisis data menggunakan Net Promoter Score (NPS).

Hasil penelitian faktor-faktor yang mempengaruhi efektivitas aplikasi tumbasin.id pada masa pandemi covid-19 di Kota Semarang yaitu kepuasan pelanggan dan rekomendasi pelanggan dengan hasil NPS skor kepuasan pelanggan tahun 2020 sebesar 11,65%, tahun 2021 sebesar 10,25%, tahun 2022 sebesar 12,58% dengan total NPS skor kepuasan pelanggan selama tahun 2020-2022 sebesar 34,47%. NPS skor rekomendasi pelanggan tahun 2020 sebesar 12,42%, tahun 2021 sebesar 12,11%, tahun 2022 sebesar 13,51% dengan total NPS skor rekomendasi pelanggan selama tahun 2020-2022 sebesar 38,04%.

Kata kunci: efektivitas; aplikasi marketplace; pelanggan

INTRODUCTION

Mobile marketplace applications for smartphones and tablet devices have become a lucrative business, with worldwide spending estimated at over US\$92 billion (Marshall, Dunstan, & Bartik, 2020). Applications are increasingly being used to monitor, assess and increase sales. There are now more than 10,000 marketplace-specific applications available to the public (Torous et al., 2018). Most of these applications have no published evidence for their effectiveness, making it difficult for sellers and consumers to know which application is the most appropriate (Marshall, Dunstan, & Bartik, 2019). Currently, choices are made using reviews and ratings available on app stores (Huang & Bashir, 2017), but this can lead to unreliable results (Xie & Zhu, 2015). Although effective sales to their customers exist, many people do not access them for various reasons (Abda,

2019). With smartphone ownership reaching 70% of the global population and increasing (Marshall et al., 2020), application marketplaces have the potential to offer a partial solution to limitations in service availability and acceptability.

Mapping using this application produces an overview of research topics that are correlated with the marketplace application. Another limitation of previous research is that most of it has been carried out by individuals who have developed the application, who have stood to gain financially from its sale, and/or associated with it (Marshall et al., 2019). Increasing MSME actors by applying marketplace tools can be a driver of economic growth (Santoso, 2020). The use of internet technology in supporting MSME businesses is able to increase national economic growth (Dianari, 2018). Furthermore, in a systematic literature review of 68 research articles

targeting to find what aspects/variables have an impact on the success of marketplace applications (Lasalewo, 2020) and in a review targeting marketplace tools supported by digital marketing (Santoso, 2020). Existing research targets the effectiveness of mental health applications as antidepressants (Marshall et al., 2020) and the effectiveness of stress management program applications (Hwang & Jo, 2019), and none involves research or replication of the effectiveness of marketplace applications for their customers during the COVID-19 pandemic. 19.

The purpose of this study was to analyze the effectiveness of the tumbasin.id application for its customers during the covid-19 pandemic in Semarang City. The effectiveness of the tumbasin.id application for its customers during the covid-19 pandemic in Semarang City will be a good choice and very important, because it is expected to increase sales. The Tumbasin.id application using android technology will undoubtedly become the leading green technology in the traditional marketing industry.

THEORETICAL REVIEW

1. Information System

Information technology was created to facilitate every human job. Technology is a way or method to process data or information in order to create cost and time efficiency so as to produce higher quality products. The basics of creating technology are market needs, finding solutions to problems, applying various scientific fields, improving product effectiveness and efficiency and modernization. Information is a collection of data that has been processed in such a way as to be important for its users and has a real influence that can be felt directly or indirectly in life now and in the future (Yustiani & Yunanto, 2017).

2. Sales System

The system is a collection or group of subsystems or any part or component, both

physical and non-physical that are interconnected with each other and work together in harmony to achieve a certain goal. Sales is the gathering of a buyer and seller with the aim of exchanging goods and services based on valuable considerations, such as money considerations (Yustiani & Yunanto, 2017).

3. E-Commerce

E-commerce is a trade that utilizes information technology infrastructure and the internet which has an important role in business activities, in the current information age there are many offline companies that are actively developing internet technology for their company operations. E-commerce is a tool that can be used to share business information, maintain business relationships and conduct transactions through communication media (Strzębicki, 2015).

4. Marketplace

Marketplace is a new business model that is developing along with the rapid development of information technology infrastructure. This marketplace is designed to minimize complex business processes so as to create efficiency and effectiveness. With the Marketplace, everyone can do buying and selling activities easily, quickly and cheaply because there are no boundaries of space, distance and time. Conventionally, the market has several roles including facilitating transactions and providing infrastructure. If the conventional market requires a physical market as a meeting place for sellers and buyers, the marketplace requires virtual facilities as a place for transactions to occur. Marketplace is an online business transaction platform that provides an electric method to facilitate commercial transactions such as selling goods, services or information online between buyers and sellers (Yustiani & Yunanto, 2017).

5. Effectiveness

Effectiveness is the relationship between output and goals or can also be said to be a measure of how far the level of output,

policies and procedures of the organization. Effectiveness is also related to the degree of success of an operation in the public sector so that an activity is said to be effective if the activity has a major influence on the ability to provide public services which is a predetermined target (Pekei, 2016). Effectiveness is a measure of the success or failure of achieving the goals of an organization in achieving its goals (Mardiasmo, 2017). If an organization achieves its goals, then the organization has been running effectively. Indicators of effectiveness describe the range of effects and impacts (outcomes) of the program's outputs in achieving program objectives. The greater the contribution of the resulting output to the achievement of the specified goals or objectives, the more effective the work process of an organizational unit.

RESEARCH METHODS

1. Type of Research

This type of research is descriptive quantitative. The research design is cross sectional.

2. Research Place and Time

Place of research in the city of Semarang. Research time in January-December 2022.

3. Population, Sample, and Sampling Technique

The population of this study were all users of the tumbasin.id application in the city of Semarang. The sample of this research is all users of the tumbasin.id application in Semarang City from 2020 to 2022 as many as 644 people. The sampling technique used was total sampling.

4. Data Source

The primary data source is a questionnaire. The secondary data source is the tumbasin.id application data.

5. Research Instruments

The research instrument used a questionnaire in the form of a Google Form about the Tumbasin.id application, namely:

1. How did you know the Tumbasin.id application?

2. Are you satisfied with the Tumbasin.id application service?

3. Do you recommend the Tumbasin.id application service to your friends/relatives?

4. Did you last buy Tumbasin.id at the market?

Filling out the satisfaction and recommendations of the Tumbasin.id application uses a score scale of 0-10.

6. Data Collection Method

The method of collecting questionnaire data is using the google form questionnaire application. Secondary data collection using documentation.

7. Data Processing Method

Data processing methods include collecting, classifying, entering, tabulating, editing, verifying, and presenting data.

8. Data Analysis Method

Data analysis using Net Promoter Score (NPS). NPS is an effective method to measure and control the level of customer satisfaction and calculate the level of customer loyalty in a brand or company. NPS is measured on a scale of 0-10 where: Promoter (9-10), Passive (7-8), Detractor (0-6). The NPS percentage is calculated by the Promoter percentage and minus the Detractor percentage. Respondents in the Passive category are not taken into account in the formula. The result is a Net Promoter score (Helmi, 2016; Situmorang, Annisa, & Hadian, 2016).

Based on the NPS assessment, the types of customers are divided into 3, namely: (Asmara & Ratnasari, 2016)

a. Promoters, these customers are enthusiastic about the products offered and are also willing to recommend these products to others. Promoters are customers who choose a value of 9-10.

b. Passives, the type of customers who are satisfied with the product but are not willing to recommend it to others and have the potential to move to another product. Passive is a customer who chooses a value of 7 or 8.

c. Detractors, customers have a bad experience with a product and have the potential to give negative recommendations about the product. This type of customer will choose values 0-6.

After the respondent data is collected, the NPS obtained is calculated using the equation: (Asmara & Ratnasari, 2016)

$$NPS = \%Promoters - \%Detractors$$

RESULTS AND DISCUSSION

1. How did you know the Tumbasin.id application?

Table 1
 How did you know the Tumbasin.id application?

Keterangan	2020		2021		2022		Total	
	Jumlah	%	Jumlah	%	Jumlah	%	Jumlah	%
Aplikasi Playstore	1	0,16%	3	0,47%	0	0,00%	4	0,62%
TV Indihome	1	0,16%	0	0,00%	0	0,00%	1	0,16%
Demo Masak	1	0,16%	0	0,00%	0	0,00%	1	0,16%
Detik.com	0	0,00%	1	0,16%	0	0,00%	1	0,16%
Facebook	11	1,71%	5	0,78%	6	0,93%	22	3,42%
Founder	0	0,00%	1	0,16%	0	0,00%	1	0,16%
Google	17	2,64%	10	1,55%	2	0,31%	29	4,50%
Iklan	0	0,00%	1	0,16%	0	0,00%	1	0,16%
Instagram	92	14,29%	70	10,87%	70	10,87%	232	36,02%
Promosi Walikota	2	0,31%	1	0,16%	0	0,00%	3	0,47%
Sendiri	1	0,16%	0	0,00%	0	0,00%	1	0,16%
Teman/Saudara/Kerabat	75	11,65%	60	9,32%	77	11,96%	212	32,92%
Twitter	2	0,31%	1	0,16%	0	0,00%	3	0,47%
Whatsapp	4	0,62%	8	1,24%	3	0,47%	15	2,33%
Youtube	1	0,16%	0	0,00%	0	0,00%	1	0,16%
Tidak Menjawab	14	2,17%	42	6,52%	61	9,47%	117	18,17%
Jumlah	222		203		219		644	

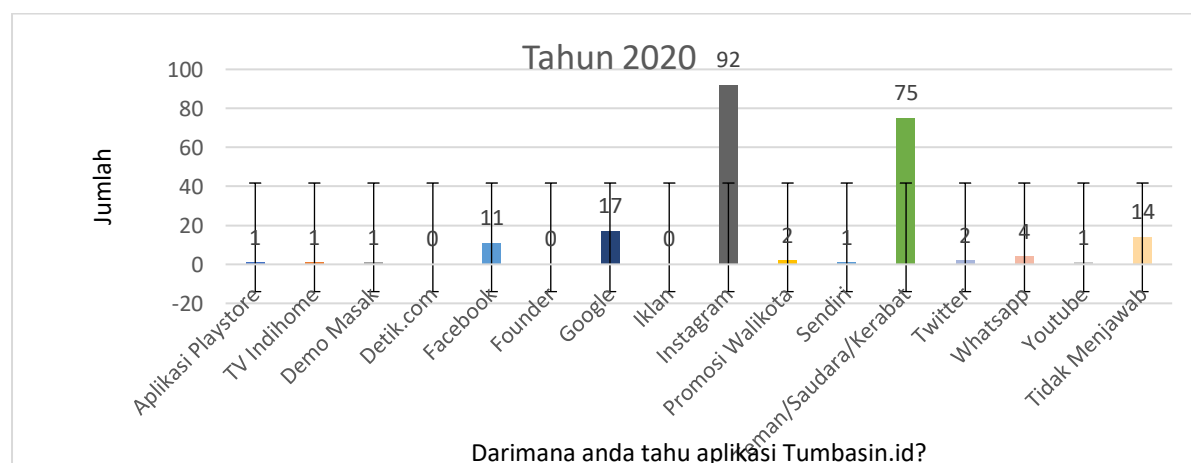


Figure 1
 How did you know the Tumbasin.Id 2020 application?

Based on the picture above, in 2020 customers know about the Tumbasin.Id application from the Playstore Application, Indihome TV, Cooking Demo, Alone, and Youtube, each with 1 respondent (0.16%). Mayor and Twitter promotions each as many as 2 respondents (0.31%). Whatsapp as many as 4 respondents (0.62%). Facebook as many

as 11 respondents (1.71%). No answer as many as 14 respondents (2.17%). Google as many as 17 respondents (2.64%). Friends/relatives/relatives as many as 75 respondents (11.65%). Instagram as many as 92 respondents (14.29%). There are no respondents who answered from Detik.com, Founder, and Ads (0.00%).

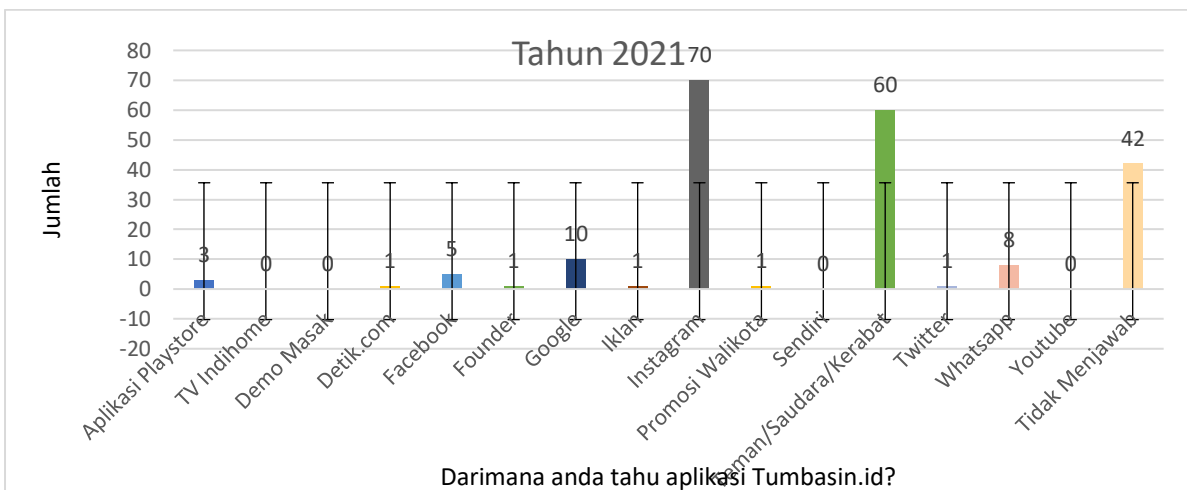


Figure 2
 How do you know the Tumbasin.Id 2021 application?

Based on the picture above, in 2021 customers know about the Tumbasin.Id application from Detik.com, Founder, Advertisement, Mayor Promotion, and Twitter each as much as 1 respondent (0.16%). Playstore applications as many as respondents (0.47%). Facebook as many as 5 respondents (0.78%). Whatsapp as many as 8 respondents (1.24%). Google as many as 10 respondents (1.55%). No answer as many as

42 respondents (6.52%). Friends/relatives/relatives as many as 60 respondents (9.32%). Instagram as many as 70 respondents (10.87%). There were no respondents who answered from TV Indihome, Cooking Demo, Alone, and Youtube (0.00%).

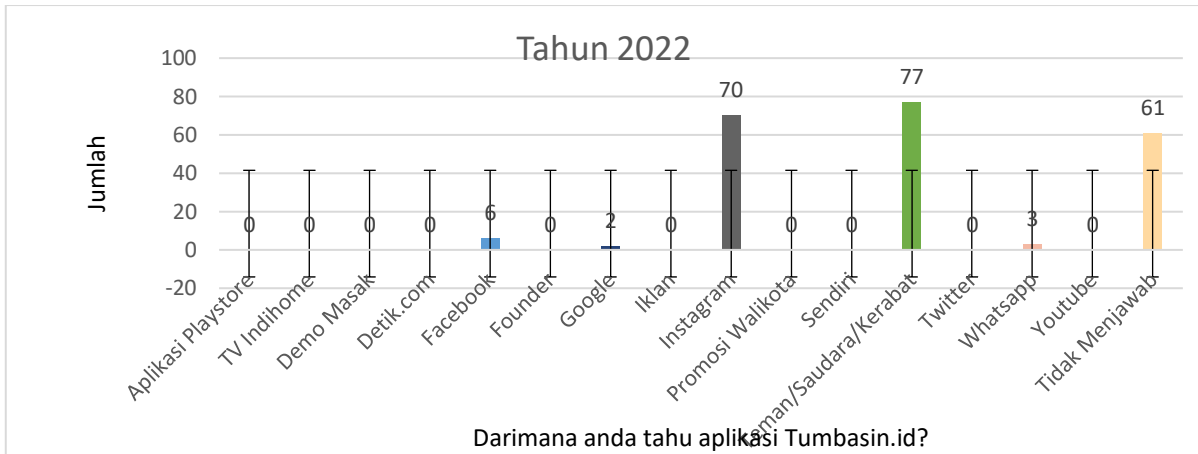


Figure 3
 How did you know the Tumbasin.Id 2022 application?

Based on the picture above, in 2022 customers know about the Tumbasin.Id application from Google as many as 2 respondents (0.31%). Whatsapp as many as 3 respondents (0.47%). Facebook as many as 6 respondents (0.93%). No answer as many as 61 respondents (9.47%). Instagram as many as 70 respondents (10.87%).

Friends/brothers/relatives as many as 77 respondents (11.96%). There were no respondents who answered from the Playstore Application, Indihome TV, Cooking Demo, Detik.com, Founder, Ads, Mayor's Promotion, Alone, Twitter, and Youtube (0.00%).

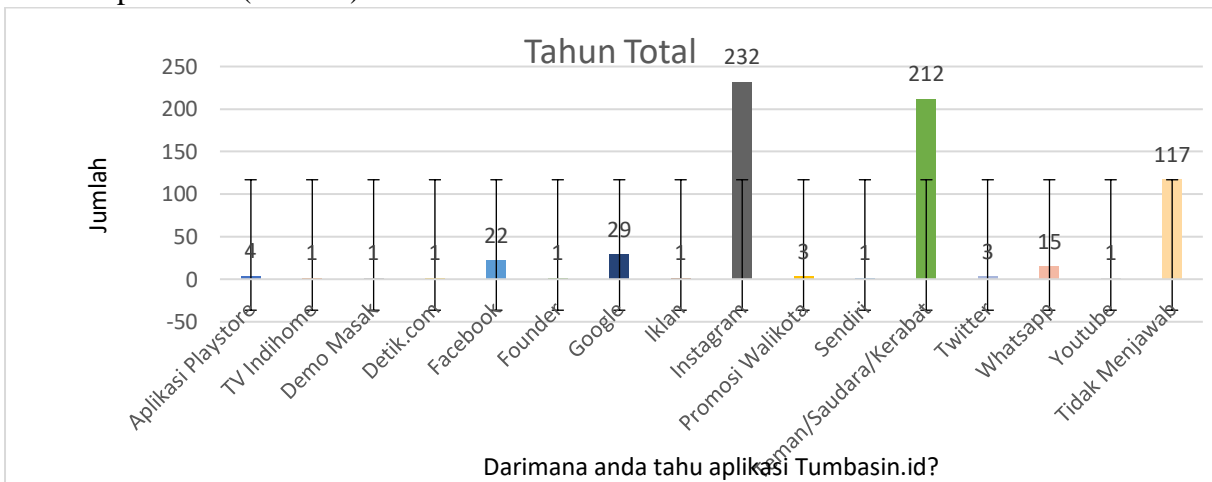


Figure 4 How do you know the Tumbasin.Id Total Year application?

Based on the picture above, the total number of customers aware of the Tumbasin.Id application from TV Indihome, Cooking Demo, Detik.com, Founder, Ads, Alone, and Youtube, each with 1 respondent (0.16%). Mayor and Twitter promotions each as many

as 3 respondents (0.47%). Playstore application as many as 4 respondents (0.62%). Whatsapp as many as 15 respondents (2.33%). Facebook as many as 22 respondents (3.42%). Google as many as 29 respondents (4.50%). No answer as many as

117 respondents (18,17%). 2. Did you last buy Tumbasin.id at the Friends/brothers/relatives as many as 212 respondents (32.92%). Instagram as many as 232 respondents (36.02%).

Table 2
 Last shopping Tumbasin.id in the market?

Pasar	2020		2021		2022		Total	
	Jumlah	%	Jumlah	%	Jumlah	%	Jumlah	%
Karangayu	44	6,83%	25	3,88%	25	3,88%	94	14,60%
Peterongan	42	6,52%	48	7,45%	60	9,32%	150	23,29%
Pedurungan	56	8,70%	57	8,85%	52	8,07%	165	25,62%
Bulu	23	3,57%	21	3,26%	20	3,11%	64	9,94%
Rasamala	23	3,57%	16	2,48%	13	2,02%	52	8,07%
Jrakah	2	0,31%	6	0,93%	6	0,93%	14	2,17%
Jatingaleh	14	2,17%	8	1,24%	11	1,71%	33	5,12%
Ngaliyan	4	0,62%	6	0,93%	16	2,48%	26	4,04%
Tidak Menjawab	14	2,17%	16	2,48%	16	2,48%	46	7,14%
Jumlah	222		203		219		644	

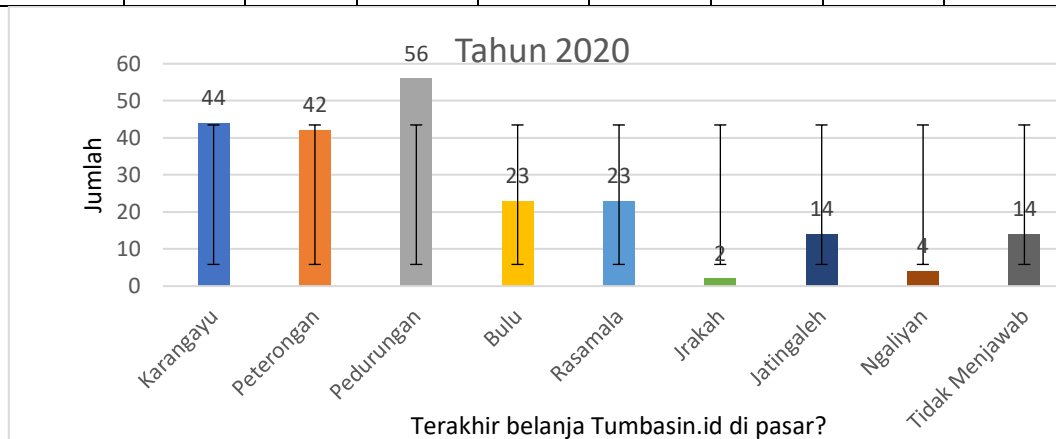


Figure 5
 How did you know the Tumbasin.Id 2020 application?

Based on the picture above, in 2020 the last customers to shop for Tumbasin.id in the Jrakah market were 2 respondents (0.31%). Ngaliyan as many as 4 respondents (0.62%). Jatingaleh and Not Answering each as many as 14 respondents (2.17%). Bulu and

Rasamala respectively 23 respondents (3.57%). Peterongan as many as 42 respondents (6.52%). Karangayu as many as 44 respondents (6.83%). As many as 56 respondents (8.70%).

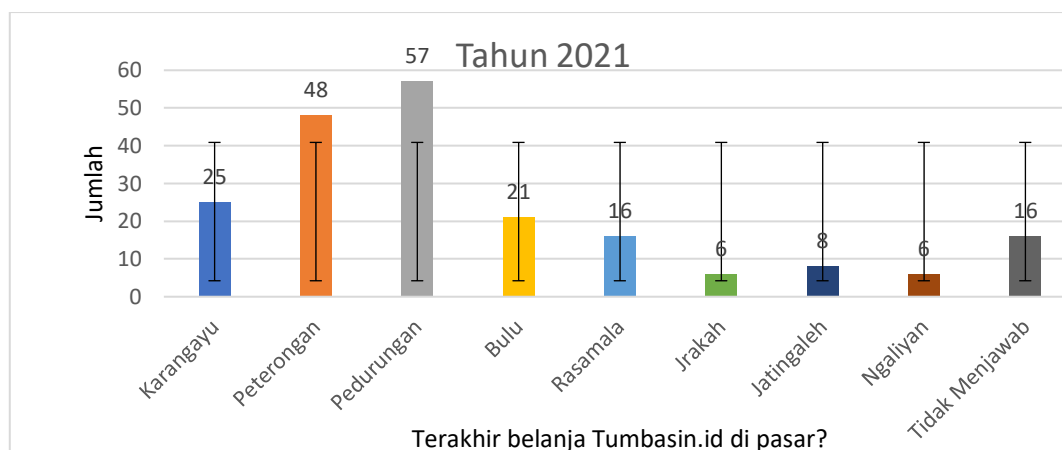


Figure 6
 How did you know the Tumbasin.Id 2021 application?

Based on the picture above, in 2021 the last customers to shop for Tumbasin.id in the Jragung and Ngaliyan markets were 6 respondents each (0.93%). Jatingaleh as many as 8 respondents (1.24%). Rasamala and Not Answering each as many as 16 respondents (2.48%). Feather as many as 21 respondents

(3.26%). Karangayu as many as 25 respondents (3.88%). Peterongan as many as 48 respondents (7.45%). As many as 57 respondents (8.85%).

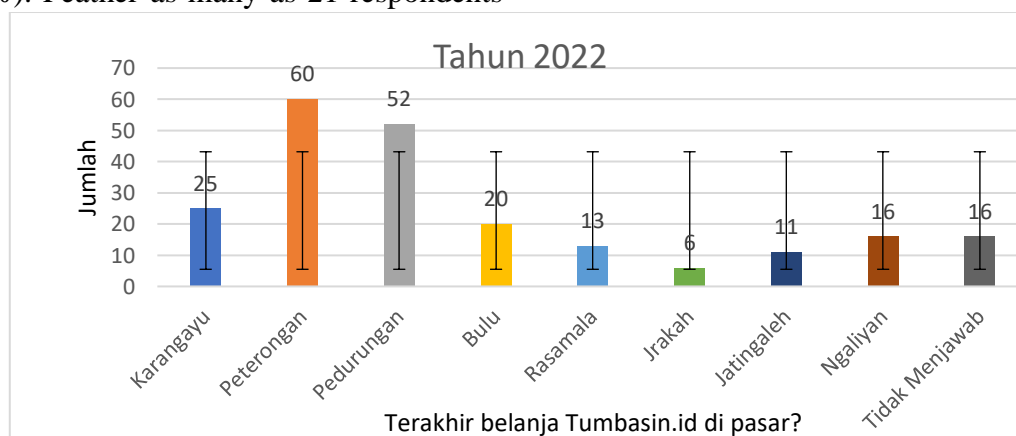


Figure 7
 How did you know the Tumbasin.Id 2022 application?

Based on the picture above, in 2022, the last customers to shop for Tumbasin.id in the Jragung market were 6 respondents (0.93%). Jatingaleh as many as 11 respondents (1.71%). Rasamala as many as 13 respondents (2.02%). Ngaliyan and Not Answering each

as many as 16 respondents (2.48%). Fur as many as 20 respondents (3.11%). Karangayu as many as 25 respondents (3.88%). There were 52 respondents (8.07%) who indulged in bullying. Peterongan as many as 60 respondents (9.32%).

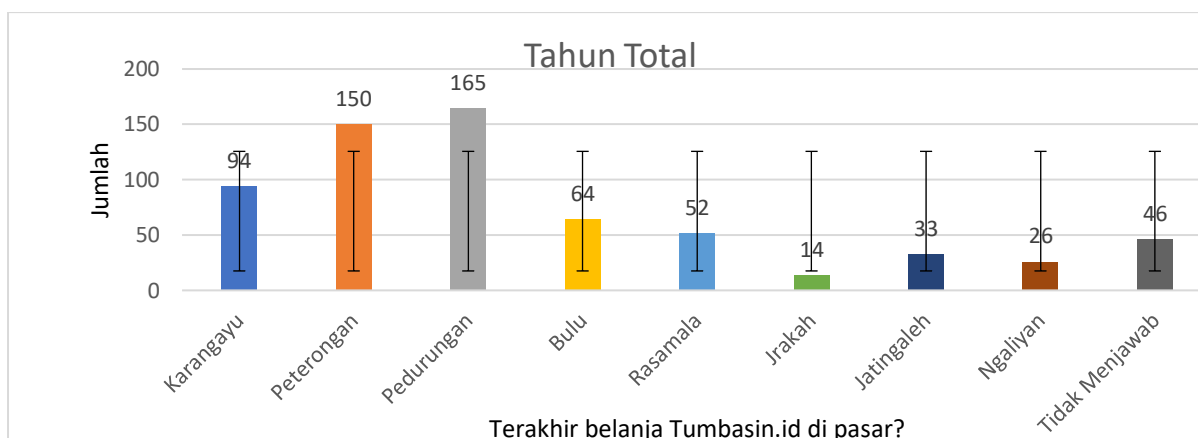


Figure 8
 How do you know the Tumbasin.Id application Total Year?

Based on the picture above, in the last year total customers shopped for Tumbasin.id in the Jragung market as many as 14 respondents (2.17%). Ngaliyan as many as 26 respondents (4.04%). Jatingaleh as many as 33 respondents (5.12%). No answer as many as 46 respondents (7.14%). Rasamala as many as 52 respondents (8.07%). Fur as many as 64

respondents (9.94%). Karangayu as many as 94 respondents (14.60%). Peterongan as many as 150 respondents (23.29%). As many as 165 respondents (25.62%).

3. Are you satisfied with the Tumbasin.id application service?

Table 3
 NPS Score for Application Satisfaction Tumbasin.id

NPS	2020		2021		2022		Total	
	Jumlah	%	Jumlah	%	Jumlah	%	Jumlah	%
Promoter	93	14,44%	85	13,20%	101	15,68%	279	43,32%
Passive	111	17,24%	99	15,37%	98	15,22%	308	47,83%
Detractor	18	2,80%	19	2,95%	20	3,11%	57	8,85%
Total	222	34,47%	203	31,52%	219	34,01%	644	100,00%
NPS Skor	11,65%		10,25%		12,58%		34,47%	

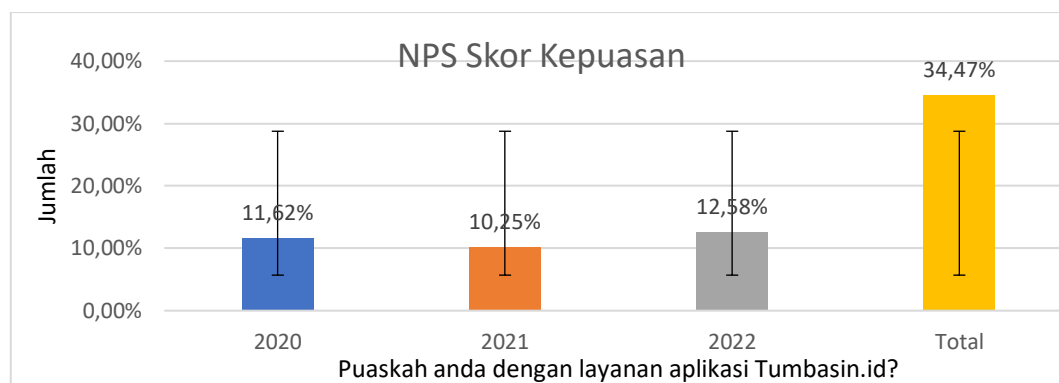


Figure 9
NPS Satisfaction Score with the Tumbasin.id application service

Based on the picture above on the NPS, the customer satisfaction score for the Tumbasin.id application service has decreased by 10.25% in 2021 compared to 11.62% in 2020 and 12.58% in 2022 with a total NPS satisfaction score of 34, 47%. In general, the customer satisfaction of the Tumbasin.id application service is very satisfied. The score given by the customer lies in a score of 7 to 10, namely from quite satisfied to very satisfied to become a customer in the Tumbasin.id application. The reasons for satisfaction are related to factors such as thoroughness, updating of goods sold, satisfying buyers, often providing promo prices, free shipping, goods sold are still fresh, and variations of goods. Thus the Tumbasin.id application is effective during the Covid-19 pandemic in Semarang City.

The problem that occurs in the field is that so far no information has been extracted about how much customers value for all the benefits of products and services provided by the Tumbasin.id application. The basic mission of a company is no longer profit, but the creation and addition of value for customers while profit is a consequence of delivering customer value. In the relationship between price and

quality received, it becomes the value given by the customer and is an important factor in the customer's repeat purchase process for the products and services provided by the company. In this case indirectly that the company's income level is influenced by the value provided by customers in the long term. Customer satisfaction is the main indicator in repurchase behavior, growth in the number of customers and company revenues (Kusumowardani, 2021).

NPS is an effective method to measure and control the level of customer satisfaction. The format is still in the form of a questionnaire, but it is neater, structured, and can be counted. NPS provides a practical way to categorize customers based on their answers through a single question (Situmorang et al., 2016). NPS not only serves as a measure of customer loyalty but also as a monitoring tool for customer loyalty. NPS is a method of measuring loyalty that is very simple, but very effective for measuring the level of customer loyalty (Helmi, 2016).

4. Do you recommend the Tumbasin.id application service to your friends/relatives?

Table 4
 NPS Score Recommended Applications Tumbasin.id

NPS	2020		2021		2022		Total	
	Jumlah	%	Jumlah	%	Jumlah	%	Jumlah	%
Promoter	106	16,46%	105	16,30%	114	17,70%	325	50,47%
Passive	90	13,98%	71	11,02%	78	12,11%	239	37,11%
Detractor	26	4,04%	27	4,19%	27	4,19%	80	12,42%
Total	222	34,47%	203	31,52%	219	34,01%	644	100,00%
NPS Skor	12,42%		12,11%		13,51%		38,04%	

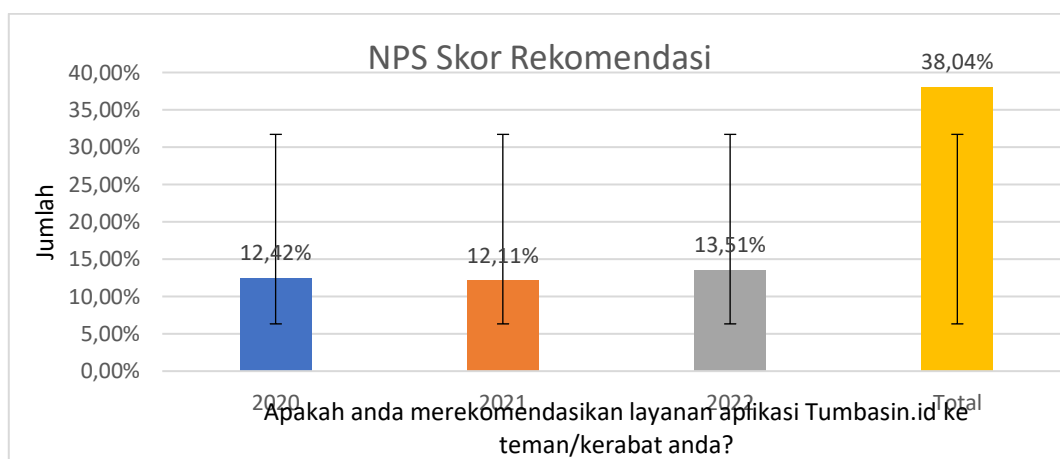


Figure 10
 NPS Recommendation Score with the Tumbasin.id application service

Based on the picture above, the NPS customer recommendation score for the Tumbasin.id application service decreased in 2021 by 12.11% compared to 2020 at 12.42% and in 2022 by 13.51% with a total NPS recommendation score of 38, 04%. In general, the customer recommendations for the Tumbasin.id application service are highly recommended. The score given by the customer lies in a score of 7 to 10, which is from moderately recommending to highly recommending the Tumbasin.id application to friends/relatives/relatives. The reasons for the recommendation are related to factors such as payments with virtual accounts, improving product quality, notification of delivery times, promos, vouchers, bonuses,

and lots of give aways, minimum orders, always available transaction history, application of google map location points, completeness of vegetables and seafood, quality goods, fresh, and good packaging. Thus the Tumbasin.id application is effective during the Covid-19 pandemic in Semarang City.

The description of respondents' answers to show how high the level of customers recommending the Tumbasin.id application to friends/relatives/relatives is shown in the NPS. The NPS value is measured from a rating scale of 0 to 10 (strongly not recommend to highly recommend) for the question of how likely it is that customers will

recommend the Tumbasin.id application to friends/relatives/relatives to make purchases on the Tumbasin.id application. Customers who give a 0-6 scale rating are categorized as detractor customers, that is, they strongly do not recommend the Tumbasin.id application. Customers who give a rating scale of 7-8 are categorized as passive customers, which are satisfied but do not want to recommend. Customers who give a 9-10 scale rating are categorized as promoter customers, which are very satisfied and willing to recommend the Tumbasin.id application to friends/relatives/relatives (Kusumowardani, 2021).

In order for the company to have a high NPS value, the company must be able to increase the number of promoters and reduce the detractor. By adding services and providing more experiences to consumers, it can also change the number of passive consumers into promoter consumers. On the other hand, the company can also reduce the number of detractors so that the percentage of the number of consumers who switch to other brands will be smaller, meaning the company can save on marketing costs. Because consumer promoters will voluntarily recommend the brand they use to others. The rising NPS also shows the growth of the products used (Helmi, 2016).

CONCLUSION

Based on the results of a study entitled The Effectiveness of the Tumbasin.Id Application During the Covid-19 Pandemic in the City of

Semarang, what affected the effectiveness of the Tumbasin.id application during the Covid-19 pandemic in the City of Semarang were customer satisfaction and customer recommendations for the tumbasin.id application service at that time. the Covid-19 pandemic in Semarang City with NPS results customer satisfaction scores in 2020 of 11.65%, in 2021 by 10.25%, in 2022 by 12.58% with a total NPS customer satisfaction score during 2020-2022 of 34, 47%. NPS customer recommendation score in 2020 is 12.42%, in 2021 it is 12.11%, in 2022 it is 13.51% with a total NPS score for customer recommendation during 2020-2022 is 38.04%.

Suggestions that can be given include that the Tumbasin.id application has a high NPS value, the company must be able to increase the number of promoters and reduce the detractor. This can be done by improving the consumer experience, increasing product quality, using social media services so that the company is always connected to its customers, and so that the company always listens to customer suggestions and recommendations. In order for research on effectiveness to be more comprehensive, measurements should not only use the Net Promoter Score but also add measurements through customer experience (moment of truth) so that Net Emotional Value measurements can be carried out. This study has limitations, namely the number of questionnaire statements is limited, so further researchers should add the number of questionnaire statements, brand categories, and research in different segments.

BIBLIOGRAPHY

- [1] Marshall, J.M., Dunstan, D.A., and Bartik, W. (2020) Effectiveness of Using Mental Health Mobile Apps as Digital Antidepressants for Reducing Anxiety and Depression: Protocol for a Multiple Baseline Across-Individuals Design. *JMIR Research Protocols*. 9 (7), 1–15.
- [2] Torous, J., Firth, J., Huckvale, K., Larsen, M.E., Cosco, T.D., Carney, R., et al. (2018) The Emerging Imperative for a Consensus Approach Toward the Rating and Clinical Recommendation of Mental Health Apps. *The Journal of Nervous and Mental Disease*. 206 (8), 662–666.
- [3] Marshall, J.M., Dunstan, D.A., and Bartik, W. (2019) The Digital Psychiatrist: In Search of Evidence-Based Apps for Anxiety and Depression. *Frontiers in Psychiatry*. 10 1–7.
- [4] Huang, H.-Y. and Bashir, M. (2017) Users' Adoption of Mental Health Apps: Examining the Impact of Information Cues. *JMIR MHealth and UHealth*. 5 (6), 1–15.
- [5] Xie, Z. and Zhu, S. (2015) AppWatcher: unveiling the underground market of trading mobile app reviews. in: Proceedings of the 8th ACM Conference on Security & Privacy in Wireless and Mobile Networks, Association for Computing Machinery, New York, NY, USA. 1–11.
- [6] Abda, I.F. (2019) Pengaruh Word of Mouth (WOM), e-WOM, Terhadap Brand Awareness Perusahaan Startup Tumbasin.id dengan Penerimaan Informasi Sebagai Variabel Mediasi, masters, Program Magister Ilmu Komunikasi Universitas Diponegoro, 2019.
- [7] Santoso, R. (2020) Review of Digital Marketing & Business Sustainability of E-Commerce During Pandemic Covid19 In Indonesia. *Jurnal Ilmu Ekonomi Terapan*. 5 (2), 36–48.
- [8] Dianari, R.G.F. (2018) Pengaruh E-Commerce Terhadap Pertumbuhan Ekonomi Indonesia. *Bina Ekonomi*. 22 (1), 43–62.
- [9] Lasalewo, T. (2020) Aspek-Aspek Yang Berdampak Terhadap Kesuksesan Produk : Suatu Tinjauan Literatur Kritis. *Jurnal Technopreneur (JTech)*. 8 (1), 1–10.
- [10] Hwang, W.J. and Jo, H.H. (2019) Evaluation of the Effectiveness of Mobile App-Based Stress-Management Program: A Randomized Controlled Trial. *International Journal of Environmental Research and Public Health*. 16 (21), 1–13.
- [11] Eko, B.R., Trisnani, T., and Wahyudiyono, W. (2020) Tantangan Komunikasi dalam Membangun Startup di Daerah (Studi Kasus Website pasarjember.com di Kabupaten Jember Jawa Timur). *Jurnal Komunika: Jurnal Komunikasi, Media dan Informatika*. 9 (2), 105–113.
- [12] Cankurtaran, P., Langerak, F., and Griffin, A. (2013) Consequences of New Product Development Speed: A Meta-Analysis. *Journal of Product Innovation Management*. 30 (3), 465–486.
- [13] Huang, S.C.-T. and Tsai, K.-H. (2013) Exploring the drivers of new product success for businesses in Asia: a meta-analysis. *Asia Pacific Business Review*. 19 (3), 303–319.

- [14] Zhang, J. and Wu, W. (2017) Leveraging internal resources and external business networks for new product success: A dynamic capabilities perspective. *Industrial Marketing Management*. C (61), 170–181.
- [15] Johnson, W.H.A. and Filippini, R. (2013) Integration capabilities as mediator of product development practices-performance. *Journal of Engineering and Technology Management - JET-M*. 30 (1), 95–111.
- [16] Wu, J. and Wu, Z. (2015) Key supplier relationships and product introduction success: The moderating roles of self-enforcement and interdependence between buyer and supplier. *Industrial Marketing Management*. 46 183–192.
- [17] Wu, I.-L. and Chiu, M.-L. (2015) Organizational applications of IT innovation and firm's competitive performance: A resource-based view and the innovation diffusion approach. *Journal of Engineering and Technology Management*. 35 25–44.
- [18] Pee, L.G. and Kankanhalli, A. (2016) Interactions among factors influencing knowledge management in public-sector organizations: A resource-based view. *Government Information Quarterly*. 33 (1), 188–199.
- [19] Peters, M.D., Wieder, B., Sutton, S.G., and Wakefield, J. (2016) Business intelligence systems use in performance measurement capabilities: Implications for enhanced competitive advantage. *International Journal of Accounting Information Systems*. 21 (C), 1–17.
- [20] Lasalewo, T., Subagyo, Hartono, B., and Yuniarto, H.A. (2016) Communication Constraints and Motivations in the Context of Knowledge Sharing: A Systematic Literature Review. in: IEEE, Balip. 1804–1808.
- [21] Tomlinson, P.R. and Fai, F.M. (2013) The nature of SME co-operation and innovation: A multi-scalar and multi-dimensional analysis. *International Journal of Production Economics*. 141 (1), 316–326.
- [22] Yustiani, R. and Yunanto, R. (2017) Peran Marketplace Sebagai Alternatif Bisnis Di Era Teknologi Informasi. *Komputa : Jurnal Ilmiah Komputer Dan Informatika*. 6 (2), 43–48.
- [23] Nurlela (2021) E-Commerce, Solusi di Tengah Pandemi COVID-19. *Jurnal Simki Economic*. 4 (1), 47–56.
- [24] Rachman, R.F. (2019) Optimalisasi Media Digital Berbasis Kemaslahatan Umat dalam Program Pahlawan Ekonomi Surabaya. *IQTISHODUNA: Jurnal Ekonomi Islam*. 8 (2), 273–292.
- [25] Wahidin, D. and Nursolin, N. (2019) Konstruksi Pengusaha Kampung UKM Digital Kota Semarang Dalam Penggunaan Internet Di Era Revolusi Industri 4.0. in: Prosiding Seminar Nasional Hasil Penelitian LPPM Universitas PGRI Madiun, pp. 151–156.
- [26] Gregori, P. and Holzmann, P. (2020) Digital sustainable entrepreneurship: A business model perspective on embedding digital technologies for social and environmental value creation. *Journal of Cleaner Production*. 272 1–9.

- [27] Fuadi, D.S., Akhyadi, A.S., and Saripah, I. (2021) Systematic Review: Strategi Pemberdayaan Pelaku UMKM Menuju Ekonomi Digital Melalui Aksi Sosial. *Diklus: Jurnal Pendidikan Luar Sekolah*. 5 (1), 1–13.
- [28] Mendrofa, N.A.N. and Sunaryanto, L.T. (2020) Analisis Perilaku Konsumen Terhadap Belanja Online Di Pasar Tradisional Kota Semarang (Studi Kasus Pada Konsumen Situs Tumbasin.Id). *Agrika*. 14 (1), 21–32.
- [29] Herrero-Crespo, Á., Gutiérrez, H., and Mogollón, J. (2014) Perceived influence on behavior of user-generated content on social network sites: An empirical application in the hotel sector. *Revista Española de Investigación En Marketing ESIC*. 19 (1), 1–12.
- [30] Liu, Z. and Park, S. (2015) What makes a useful online review? Implication for travel product websites. *Tourism Management*. 47 (C), 140–151.
- [31] Huang, A.H., Chen, K., Yen, D.C., and Tran, T.P. (2015) A study of factors that contribute to online review helpfulness. *Computers in Human Behavior*. 48 17–27.
- [32] Park, S. and Nicolau, J.L. (2015) Asymmetric effects of online consumer reviews. *Annals of Tourism Research*. 50 67–83.
- [33] Wu, K., Noorian, Z., Vassileva, J., and Adaji, I. (2015) How buyers perceive the credibility of advisors in online marketplace: review balance, review count and misattribution. *Journal of Trust Management*. 2 (1), 1–18.
- [34] Fang, B., Ye, Q., Kucukusta, D., and Law, R. (2016) Analysis of the perceived value of online tourism reviews: Influence of readability and reviewer characteristics. *Tourism Management*. 52 498–506.
- [35] Karimi, S. and Wang, F. (2017) Online review helpfulness: Impact of reviewer profile image. *Decision Support Systems*. 96 39–48.
- [36] Hong, H., Xu, D., Wang, G.A., and Fan, W. (2017) Understanding the determinants of online review helpfulness: A meta-analytic investigation. *Decision Support Systems*. 102 1–11.
- [37] Weisstein, F.L., Song, L., Andersen, P., and Zhu, Y. (2017) Examining impacts of negative reviews and purchase goals on consumer purchase decision. *Journal of Retailing and Consumer Services*. 39 201–207.
- [38] Ren, G. and Hong, T. (2019) Examining the relationship between specific negative emotions and the perceived helpfulness of online reviews. *Information Processing & Management*. 56 (4), 1425–1438.
- [39] Siering, M., Muntermann, J., and Rajagopalan, B. (2018) Explaining and predicting online review helpfulness: The role of content and reviewer-related signals. *Decision Support Systems*. 108 1–12.

- [40] Eslami, S.P., Ghasemaghaei, M., and Hassanein, K. (2018) Which online reviews do consumers find most helpful? A multi-method investigation. *Decision Support Systems*. 113 32–42.
- [41] Li, H., Wang, C. (Renee), Meng, F., and Zhang, Z. (2019) Making restaurant reviews useful and/or enjoyable? The impacts of temporal, explanatory, and sensory cues. *International Journal of Hospitality Management*. 83 257–265.
- [42] Handi, Hendratono, T., Purwanto, E., and Ihalauw, J.J. (2018) The Effect of E-WOM and Perceived Value on the Purchase Decision of Foods by Using the Go-Food Application as Mediated by Trust. *Quality Innovation Prosperity/Kvalitainovacia Prosperita*. 22 (2), 112–127.
- [43] Luo, H., Huang, X., Fan, Y., Su, F., Huang, W., Feng, W., et al. (2018) Empirical Research on the Impact of Internet Word of Mouth on Customer Citizenship Behavior. in: 2018 15th International Conference on Service Systems and Service Management (ICSSSM), pp. 1–5.
- [44] Susilowati, C. and Sugandini, D. (2018) Perceived Value, eWord-of-Mouth, Traditional Wordof-Mouth, and Perceived Quality to Destination Image of Vacation Tourists. *Review of Integrative Business and Economics Research*. 7 (1), 312–321.
- [45] Ham, J., Lee, K., Kim, T., and Koo, C. (2019) Subjective perception patterns of online reviews: A comparison of utilitarian and hedonic values. *Information Processing & Management*. 56 (4), 1439–1456.
- [46] Wang, Y., Wang, J., and Yao, T. (2019) What makes a helpful online review? A meta-analysis of review characteristics. *Electronic Commerce Research*. 19 (2), 257–284.
- [47] Atcharyakarn, N. and Zhang, J. (2021) A systematic review of perceived value toward online review on s-commerce platform. *International Journal of Research in Business and Social Science (2147- 4478)*. 10 (3), 46–52.
- [48] Strzębicki, D. (2015) The Development of Electronic Commerce in Agribusiness – The Polish Example. *Procedia Economics and Finance*. 23 1314–1320.
- [49] Pekei, B. (2016) Konsep dan Analisis Efektivitas Pengelolaan Keuangan Daerah di Era Otonomi. Taushia, Jakarta.
- [50] Mardiasmo (2017) Akuntansi Sektor Publik. Andi Offset, Yogyakarta.
- [51] Helmi, S. (2016) Pengukuran Brand Loyalty dengan Net Promoter Score pada Youth dan Netizen di Medan. in: Proceeding National Conference of Applied Sciences, Enggining, Business and Information Technology 2016, Padang Sumatera Baratpp. 1–9.
- [52] Situmorang, S.H., Annisa, M., and Hadian, A. (2016) Generasi Millennial : Net Promoter Score dan Net Emotional Value. in: Universitas Sumatera Utara Medanpp. 1–11.

- [53] Asmara, Y. and Ratnasari, V. (2016) Analisis Kepuasan dan Loyalitas Pengunjung Terhadap Pelayanan di Kawasan Wisata Goa Selomangleng Kota Kediri dengan Pendekatan Structural Equation Modeling. *Jurnal Sains Dan Seni ITS*. 5 (2), 181–186.
- [54] Kusumowardani, D. (2021) Analisis Pengaruh Nilai Pelanggan, Kepuasan dan Loyalitas Pelanggan Terhadap Pendapatan Perusahaan Pada Pelayanan Laboratorium Kesehatan. *Jurnal Ekonomi, Bisnis dan Akuntansi (JEBA)*. 23 (1), 74–91.