

ANALYSIS OF THE SUCCESS OF SHOPEE E-COMMERCE USING THE DELONE & MCLEAN IS SUCCESS MODEL

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Abstract. *Shopee was the marketplace with the most daily visits in December 2021, namely 33.27 million times, dominated by those aged 20 - 24 years according to the Jakpat survey. If categorized, this age group includes students, workers and local communities. Many people have not taken advantage of business opportunities on Shopee because of a lack of knowledge. By conducting this research, it is hoped that it can provide recommendations and information on Shopee's success so that it attracts user interest. The Delone & Mclean IS Success Model has six variables, namely system quality, information quality, service quality, usage, user satisfaction, and net benefits to measure success. By testing the application using DeLone and McLean, it is known that the Shopee application as a whole has a very good quality system and a score of 95%.*

Keywords: *Shopee, E-Commerce, Delone and Mclean*

Abstrak. *Shopee menjadi marketplace dengan kunjungan harian terbanyak pada Desember 2021 yaitu 33,27 juta kali di dominasi umur 20 - 24 tahun menurut survei Jakpat. Jika dikategorikan, usia ini masuk kalangan mahasiswa, pekerja maupun Masyarakat setempat. Banyak masyarakat belum memanfaatkan peluang bisnis di Shopee karena minimnya pengetahuan. Dengan diadakannya penelitian ini diharapkan bisa memberikan rekomendasi dan informasi kesuksesan Shopee sehingga menarik minat pengguna. Delone & Mclean IS Success Model memiliki enam variabel yaitu kualitas sistem, kualitas informasi, kualitas pelayanan, penggunaan, kepuasan pengguna, dan manfaat bersih untuk mengukur kesuksesan. Dengan menguji aplikasi menggunakan DeLone and McLean diketahui bahwa aplikasi shopee secara keseluruhan memiliki sistem kualitas yang sangat baik dan skor 95 %.*

Katakunci: *Shopee, E-Commerce, Delone and Mclean*

Introduction

Over time, human thinking has evolved to create a new era where most areas of life are intertwined with technology. One area that cannot be separated from the touch of technology is the economy. According to an article posted by OJK.go.id, the strengthening of digital infrastructure to support e-commerce in April 2021 showed that Indonesia ranks highest in the world for using e-commerce services. E-commerce is a business contract process that takes place over the internet, for example, on electronic networks. NielsenIQ found that the total number of online shopping customers in Indonesia using e-commerce reached 32 million consumers in 2021, an increase of 88%

compared to 2020. Given this fact, it is unfortunate not to maximize potential by utilizing e-commerce transactions and purchases effectively. The most visited e-commerce platform in Indonesia is Shopee, which has been accessed a total of 96,460,000 times since July 2020, followed by Tokopedia with 86,410,000 and Bukalapak with 32,760,000 visits. This indicates that Shopee plays a vital role in online trading activities in Indonesia. In December 2021, Shopee had 33.27 million active visitors, while Tokopedia had 8.82 million. A Jakpat survey stated that the age range of Shopee users is dominated by those between 20 and 24 years old, primarily comprising students, workers, and local communities (Zella AlQadrie et al., 2022).

This research focuses on the success factors of the Shopee application and its impact on enhancing consumer services. This study is important because the existing e-commerce systems still have shortcomings. The business sector requires information that can be accessed quickly, timely, relevant, and accurately. The development of e-commerce is essential for improving consumer services and for strategic purposes; therefore, information system governance must consider not only technical aspects but also managerial and behavioral aspects. For academics, the results of this study can serve as input for teaching materials, particularly in the field of information systems focusing on e-commerce. Electronic commerce (e-commerce) involves business transactions conducted online through the internet and connected devices. E-commerce has become an essential part of buying and selling transactions as it has transformed and revolutionized human life. E-commerce changes how customers, companies, and governments interact quickly. The existence of e-commerce provides advantages and convenience for users as it enables online transactions without the need to travel. E-commerce can be utilized as a source of information for price comparisons, checking the latest products, or finding products according to preferences before making online or direct purchases (Afnan & Yustisi, 2023).

Research Methodology

This study uses a descriptive qualitative research method with several stages in the research. Regarding stages such as problem identification, the author conducts the process of initializing research at this stage by identifying and formulating problems. Data collection, for data collection is carried out by observing direct observations and interviews between the study subjects and the relevant sections. At this stage, literature studies and analysis of previous research are conducted for literature review and research. Where the author's literature is studied in Delone and McLean's success models and related theories. Determining the research model, at this stage the author uses quantitative and qualitative descriptive methods in data analysis. The author prepared the level of analysis of the analysis phase (questionnaire) which was distributed to the respondents. Testing during the test stage to evaluate shopee based on Delone and McLean's success model. In this phase, the author prepares a final report in the form of conclusions and the results of the research conducted.

In this study, there were 50 respondents from the community to test the system obtained using the Slovin technique to determine the number of respondents, and for the interview, the author used purposive sampling at the stage of interviewing the respondents.

Results and Discussion

Analysis of the results of the academic information system testing using the Delone and McLean success model. The quality model testing introduces the Delone and McLean model, which includes: Information Quality, System Quality, Service Quality, Use, User Satisfaction, and Net Benefit. (Surono & Pusparini, 2020) In providing survey responses, the measurement scale is as follows:

Table 1. Measurement Scale

Indikator	Keterangan	Bobot Nilai
SS	Strongly agree	5
S	Setuju	4
CS	Simply Agree	3
TS	Tidak Setuju	2
STS	Sangat Tidak Setuju	1

Sumber: (Surono, 2020)

Table 2. Percentage of Respondent Responses Against Ideal Scores

% Jumlah Skor	Kriteria
20,00%-36,00%	Sangat Buruk
36,01%-52,00%	Buruk
52,01%-68,00%	Cukup
68,01%-84,00%	Baik
84,01%-100%	Sangat Baik

Sumber: (Pusparini et al., 2020)

For the percentage table of the system testing with the DeLone and McLean Success Model as follows:

1. Percentage of scores for the information quality aspect (Information Quality).

Table 3. Information Quality Aspect

Jawaban	Bobot	1	2	3	4	Total
SS	5	20	12	15	10	57
S	4	15	10	20	15	60
CS	3	5	14	8	10	37
TS	2	8	10	5	8	31
STS	1	2	4	2	7	15
Jumlah Responden		50	50	50	50	200
Skor Aktual		193	166	191	163	713

Skor Ideal	200	200	200	200	800
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The table above shows the survey assessment results for the Information Quality aspect. The actual score results are as follows:

% Actual Score = 89%

2. Percentage of scores for the system quality aspect (System Quality)

Table 4. System Quality Aspect

Jawaban	Bobot	5	6	7	8	Total
SS	5	20	15	18	10	63
S	4	15	15	10	16	56
CS	3	10	8	10	10	38
TS	2	5	5	6	10	26
STS	1	0	7	6	4	17
Jumlah Responden		50	50	50	50	200
Skor Aktual		200	176	178	168	722
Skor Ideal		200	200	200	200	800

The table above shows the survey assessment results for the System Quality aspect. The actual score results are as follows:

% Actual Score = 90%

3. Percentage of scores for the service quality aspect (Service Quality)

Table 5. Service Quality Aspect

Jawaban	Bobot	9	10	11	Total
SS	5	15	20	19	54
S	4	18	10	12	40
CS	3	10	8	15	33
TS	2	5	8	4	17
STS	1	2	4	0	6
Jumlah Responden		50	50	50	150
Skor Aktual		189	184	196	569
Skor Ideal		150	150	150	450

The table above shows the survey assessment results for the Service Quality aspect. The actual score results are as follows:

% Actual Score = 126%

4. Percentage of scores for the user aspect (Use)

Table 6. Use Aspect

Jawaban	Bobot	12	13	14	15	Total
SS	5	20	18	10	23	71
S	4	15	15	15	15	60
CS	3	8	10	10	10	38
TS	2	7	5	8	2	22
STS	1	0	2	7	0	9
Jumlah Responden		50	50	50	50	200
Skor Aktual		198	192	163	209	762
Skor Ideal		200	200	200	200	800

The table above shows the survey assessment results for the Use aspect. The actual score results are as follows:

% Actual Score = 95%

5. Percentage of scores for the user satisfaction aspect (User Satisfaction)

Table 7. User Satisfaction Aspec

Jawaban	Bobot	16	17	18	19	Total
SS	5	17	19	15	10	61
S	4	20	18	10	18	66
CS	3	10	8	10	12	40
TS	2	3	5	8	5	21
STS	1	0	0	7	5	12
Jumlah Responden		50	50	50	50	200
Skor Aktual		201	201	168	173	743
Skor Ideal		200	200	200	200	800

The table above shows the survey assessment results for the User Satisfaction aspect. The actual score results are as follows:

% Actual Score = 93%

6. Percentage of scores for the net benefit aspect (Net Benefit)

Table 8. Net Benefit Aspect

Jawaban	Bobot	20	21	22	23	Total
SS	5	15	10	15	10	50
S	4	20	13	25	12	70
CS	3	8	10	5	15	38
TS	2	7	15	5	3	30

STS	1	0	2	0	10	12
Jumlah Responden	50	50	50	50	50	200
Skor Aktual	193	164	200	159	716	
Skor Ideal	200	200	200	200	800	

The table above shows the survey assessment results for the Net Benefit aspect. The actual score results are as follows:

% Actual Score = 89%

Explanation for the questions in the questionnaire distribution.

Table 9. Questions for DeLone and McLean

No	Pertanyaan
Kualitas Informasi (<i>Information Quality</i>)	
1.	Informasi yang ditampilkan dalam aplikasi Shopee relevan dengan kebutuhan pengguna.
2	Pengguna berpikir bahwa informasi yang ditampilkan oleh aplikasi Shopee mudah dimengerti..
3	Pengguna merasakan informasi yang tampaknya berkualitas.
4	Pengguna percaya bahwa informasi akan ditampilkan sesuai dengan persyaratan terbaru.
Kualitas Sistem (<i>System Quality</i>)	
5	Aplikasi yang mudah digunakan.
6	Informasi yang ditampilkan dalam Aplikasi sesuai dengan kebutuhan Pengguna
7	Sistem aplikasi nyaman digunakan.
8	Aplikasi terasa cepat dalam merespon instruksi pengguna.
Kualitas Pelayanan (<i>Service Quality</i>)	
9	Sebagian besar fitur dan fungsi aplikasi terasa berguna bagi pengguna.
10	Pengguna merasa bahwa informasi yang ditampilkan oleh aplikasi shopee dapat diandalkan.
11	Penyajian informasi aplikasi shopee sesuai dengan kebutuhan pengguna.
Pengguna (<i>Use</i>)	
12	Pengguna menggunakan aplikasi shopee secara langsung tidak meminta orang lain untuk menggunakan.
13	Pengguna rutin di dalam menggunakan aplikasi shopee.
14	Pengguna telah menggunakan aplikasi Shopee untuk waktu yang lama.
15	aplikasi shopee gratis untuk digunakan.
Kepuasan Pengguna (<i>User Satisfaction</i>)	
16	Pengguna merasa puas dengan fitur dan fungsi yang ada di dalam aplikasi.
17	Pengguna puas dengan informasi yang tersedia karena mereka memenuhi kebutuhan pengguna.
18	Pengguna merasa menggunakan aplikasi shopee menyenangkan.
19	Pengguna merasa pas dengan aplikasi shopee yang andal.
Manfaat Tambahan (<i>Net Benefit</i>)	

20	Aplikasi Shopee memudahkan pengguna untuk membuat keputusan yang terkait dengan kebutuhan harian mereka.
21	Pengguna percaya bahwa aplikasi Shopee dapat meningkatkan dukungan dan layanan mereka.
22	Pengguna merasa aplikasi shopee dapat menghemat waktu.
23	Pengguna merasa aplikasi shopee meningkatkan berbagai pengetahuan.

Table 10. Conclusion of the Delone and McLean Model Testing

No	Aspek	Skor Aktual	Skor Ideal	Total Skor
1	<i>Information Quality</i>	713	800	89 %
2	<i>System Quality</i>	722	800	90 %
3	<i>Service Quality</i>	569	450	126 %
4	<i>Use</i>	762	800	95 %
5	<i>User Satisfaction</i>	743	800	93 %
6	<i>Net Benefit</i>	716	800	89 %
Total		4225	4450	95 %

Conclusion

Referring to the analysis and testing, it can be concluded that the Shopee application meets user needs, thereby saving users time in fulfilling their daily requirements. The system, using the Delone and McLean model, has important factors such as system quality, information quality, service quality, use, user satisfaction, and net benefit. These factors are crucial for system development. In addition to currently having very good application quality, the Shopee app achieved a score of 95%. Utilizing the Delone and McLean model demonstrates the ability to measure the success of information systems, indicating the interdependence of the six success measures within the Shopee application.

References

- Afnan, A., & Yustisi, Y. P. (2023). Analisis Keberhasilan Sistem Informasi Aplikasi Shopee. *Jurnal Cafetaria*, 4(1), 46–54.
- Surono, G., & Pusparini, N. N. (2020). Sistem Pendukung Keputusan Penentuan Siswa Teladan Menggunakan Metode Simple Additive Weighting (Saw) Studi Kasus : Sd Bhakti Ykkp. *Infotech: Journal of Technology Information*, 6(1), 49–56. <https://doi.org/10.37365/jti.v6i1.79>
- Zella AlQadrie, S., Prawira, D., & Ilhamsyah, I. (2022). Analisis Kesuksesan E-Commerce Shopee di Kalangan Mahasiswa Menggunakan Delone & MClean Is Success Model (Studi Kasus : Mahasiswa Universitas Tanjungpura). *Jurnal Khatulistiwa Informatika*, 10(2), 119–128. <https://doi.org/10.31294/jki.v10i2.13389>