

Service Quality Assessment of Theme Park

Fany Astari

Department of Industrial Engineering,
Diponegoro University
Jl. Prof. Soedarto, S.H., Tembalang,
Semarang 50275, Indonesia
+62 24 7460052

fanyastari98@gmail.com

Fahmi Ardi

Department of Industrial Engineering,
Diponegoro University
Jl. Prof. Soedarto, S.H., Tembalang,
Semarang 50275, Indonesia
+62 24 7460052

fahmidardi@gmail.com

Fyna Astari

Department of Industrial Engineering,
Diponegoro University
Jl. Prof. Soedarto, S.H., Tembalang,
Semarang 50275, Indonesia
+62 24 7460052

fynastari98@gmail.com

Lovena Oki

Department of Industrial Engineering,
Diponegoro University
Jl. Prof. Soedarto, S.H., Tembalang,
Semarang 50275, Indonesia
+62 24 7460052

lovenaokiow@gmail.com

Riantika Sunardi Kahfi

Department of Industrial Engineering,
Diponegoro University
Jl. Prof. Soedarto, S.H., Tembalang,
Semarang 50275, Indonesia
+62 24 7460052

riantikahfi@gmail.com

M. Mujiya Ulkhaq

Department of Industrial Engineering,
Diponegoro University
Jl. Prof. Soedarto, S.H., Tembalang,
Semarang 50275, Indonesia
+62 24 7460052

ulkhaq@live.undip.ac.id

ABSTRACT

Theme park is one of the most important assets in tourism industry. To maintain its existence, one of the most important things is by considering customer satisfaction. Since service quality is regarded vital due to its close connection with customer satisfaction, assessing it would be beneficial for service providers. The objective of this research is to assess the service quality of a theme park. The weighted SERVPERF combined with importance-performance analysis were used to accomplish the objective of the research. However, since the attributes in the SERVPERF are intended for assessing “general service”, the attributes of THEMEQUAL—which was developed in theme park setting—are utilized instead. To show the applicability of the proposed method, a case study was conducted to assess the service quality of a theme park located in Jakarta, Indonesia. Result shows that the performance of the object of the research is 3.009 (of 5.000), or in the “average” state. It means that improvement must be made to enhance the service quality.

CCS Concepts

• Applied computing → Law, social, and behavioral sciences.

Keywords

Importance-performance analysis; service quality; SERVPERF; THEMEQUAL; theme park.

1. INTRODUCTION

Theme (or amusement) parks industry is considered as one of the most promising businesses in the world and has consistent growth from year to year. According to the report from Themed

Entertainment Association, there was a growth of 8.1 million visitors in the top 25 theme parks in the world in 2018, an increase of 3.3% compared to 2017 [1]. Attendance at themed attractions also has exceeded half a billion visits for the first time in history [1]. These show that this industry is growing better and better. From an economic point of view, economic growth from theme parks shows a promising increase, global income gained from the theme parks worldwide reached 44.8 billion US dollars in 2017 [2]. This evidence shows that there is still a broad market and potential for promoting theme parks throughout the world.

In Asia, such industry is showing steady growth, fueled by not only large populations but also with their rising middle-class population [3]. Asia is the second-fastest-growing segment of the worldwide theme park industry [4]. Overall attendance growth was 3.6% in 2018 for the top 20 Asian theme parks, compared to 2017. It contributed to 11 theme parks that were included in top 25 theme parks of a total attendance in 2018, the most compared to other continents in the world. In Southeast Asia, Universal Studio of Singapore is included in top 20 theme park in Asia.

Indonesia, as the largest country in Southeast Asia, has several large theme parks, among which the largest are Dunia Fantasi, Jungle Land Adventure Park, Jatim Park, The Jungle Water Adventure, and Taman Mini Indonesia Indah. Indonesian government estimates that there is 20 billion US dollars in foreign exchange revenue that comes from the tourism industry [5]. To tackle that, one endeavor could do is Indonesia need to capture the potential and try to develop better theme parks to attract tourists. However, it seems that the development is not growing as expected. For example, in 2018, Dunia Fantasi was visited by 2,247,282 visitors in 2018 but it is a decrease 2.3% compared to 2017 [6]. Another example is The Jungle Water Adventure, a water park located in Bogor, which experienced a 14% decrease of attendance from 2017 to 2018 [1].

Theme park is a powerful revenue generator for the tourism industry [7], which means that people's needs for tertiary entertainment are urgently needed more than ever in the age of experience economy and social media. Moreover, as Indonesia is a populous country in addition with the growing of middle-class economy, are the evidences that there is great potential in theme park business. However, a theme park would not be successful without good service quality [7], [8]. Service quality is vital

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from Permissions@acm.org.

MSIE 2020, April 7–9, 2020, Osaka, Japan

© 2020 Association for Computing Machinery.

ACM ISBN 978-1-4503-7706-5/20/04...\$15.00

DOI: <https://doi.org/10.1145/3396743.3396766>

because theme park could benefit from repeat visits and the spread of positive word of mouth from satisfied visitors. In addition, this service quality has to be continuously improved due to its close connection with customer satisfaction [9], [10].

Some scholars have extensively studied and established various scales to assess the service quality; two of the most well-known scales are the classical SERVQUAL [11] and SERVPERF [12] that can be applied for various service settings. Since SERVQUAL has been subjected to a number of theoretical and operational criticisms (see e.g., [12], [13]-[16]), this research adopted the later scale, i.e., SERVPERF, with weight factors. However, the attributes in the SERVPERF are intended for assessing the “general service”, i.e., not intended in a particular theme park setting. Therefore, this research employed the attributes in THEMEQUAL [17], which was developed in theme park setting.

In this research, we tried to extend the work by combining SERVPERF with importance-performance analysis (IPA) model [18]. The IPA model is believed to be a simple and effective method to identify attributes that performed well and those which were needed an improvement (see [19]-[22] for the examples of its applications). It is usually used to determine the priority of the service attributes according to the importance and performance. In addition, the inclusion of the IPA model in this research, is because every company is constrained by its limited resources. As a result, it has to be decided how those limited resources are best deployed to achieve the customers’ satisfaction. Such an attempt has been performed in assessing service quality of an airport [23]. To exhibit the applicability of the method proposed, a case study was conducted in a theme park located in Jakarta, Indonesia.

2. RESEARCH DESIGN

The objective of this research is to assess and analyze service quality of a theme park. In order to achieve the objective, six dimensions of THEMEQUAL [17] were adopted, i.e., tangibles (TAN), reliability (REL), responsiveness and access (RES), assurance (ASS), empathy (EMP), and courtesy (COU). This scale is intended to measure the satisfaction level of visitors in theme park setting. These six dimensions consist of 26 attributes which are explained in the following.

Tangibles dimension is related to the physical environment of theme park. It includes the facilities, stores, restaurants, and landscape [24]. This dimension has four attributes, i.e., (i) the facilities within theme park have a modern outlook (TAN1), (ii) the staff of theme park have neat appearances (TAN2), (iii) the facilities within theme park are visually appealing (TAN3), (iv) the information media (leaflets, signpost, and map) inside theme park are visually appealing (TAN4).

The second dimension is reliability. From the classical SERVQUAL, it refers to the ability to perform the promised service dependably and accurately [11]. However, safety and security of the facilities are added into the measuring items for accommodating the special characteristic in theme park setting [25]. This dimension contains six attributes, i.e., (i) the staff of theme park will help the visitor to solve the problem when a visitor has a problem (REL1), (ii) all the performance and activities of theme park start on time (REL2), (iii) the facilities in theme park are safe (REL3), (iv) theme park can meet the commitment they have made in their advertisements and brochures (REL4), (v) the facilities within theme park are reliable (REL5), (vi) theme park can accurately perform the service.

Responsiveness and access as the third dimension refers to the willingness of the staff to help customers and provide prompt service. It contains six attributes, i.e., (i) staff are never too busy to respond visitors requests (RES1), (ii) staff can tell visitors exactly when service or performance will be performed (RES2), (iii) staff can give on time service to visitors (RES3), (iv) staff are willing to help visitors (RES4), (v) visitors can obtain information from staff easily (RES5), and (vi) visitors can access staff easily (RES6).

The fourth dimension, i.e., assurance, is defined as the knowledge and courtesy of staff and their ability to convey trust and confidence. It has three attributes, i.e., (i) the behavior of staff gives confidence to the visitors (ASS1), (ii) visitors feel safe during transaction (ASS2), and (iii) staff has sufficient knowledge to answer visitors’ questions (ASS3).

Empathy as the fifth dimension is defined as caring, individualized attention the service providers provide to their customers. It has five attributes, i.e., (i) the operating hours of theme park are convenient for all visitors (EMP1), (ii) theme park has staff members who give visitors personal attention (EMP2), (iii) theme park has the visitor best interest at heart (EMP3), (iv) theme park can give visitors individual attention (EMP4), and (v) staff of theme park can understand the specific needs of visitors (EMP5).

The last dimension is courtesy. It refers to the politeness, respect, consideration, friendliness, and attitude of contact personnel, enabling visitors to have a pleasant experience [26], [27]. It contains two attributes, i.e., (i) visitors have pleasant experience (COU1), and (ii) staff members are consistently polite (COU2).

The service quality is measured by employing the weighted SERVPERF [12] as follows:

$$SQ_j = \frac{\sum_{i=1}^n W_{ij} \cdot P_{ij}}{n}, \quad (1)$$

where SQ_j is the service quality of attribute j , W_{ij} is the weighting factor of attribute j to an individual i , and P_{ij} is perception of individual i with respect to the performance on attribute j . The weighting factor is the normalized form of the importance score as follows:

$$W_{ij} = \frac{I_{ij} - \min I_j}{\max I_j - \min I_j}, \quad (2)$$

where I_{ij} is the importance score, $\min I_j$ is the minimum score of attribute j and $\max I_j$ is the maximum score of the attribute j .

The importance of each attribute along with its corresponding performance are then utilized to establish the IPA diagram [17]. It is a two-dimensional state space where the vertical axis describes the importance of such attribute, while the horizontal axis describes how well the service provider is performing the service. The IPA diagram has four quadrants: (I) concentrate here, (II) keep up with the good work, (III) low priority, and (IV) possible overkill.

The first quadrant is located in the north-west corner. The attributes belong to this quadrant are considered as important but have low performance ratings, which become the priority of the service provider to be improved. The second quadrant identifies that both importance and performance of the attributes were already good and should be preserved well by the service provider. The attributes that are slightly important and have low performance ratings are located in the third quadrant: they perform well yet the customers observe as less important. The last quadrant is believed to be less

important but have good performance score: they are needed to be downgraded because of the unnecessary investment.

3. RESULT

A case study was conducted to assess the service quality of a theme park located in Jakarta, Indonesia. It takes about 40 minutes from Soekarno-Hatta International Airport (approximately 24.2 km). This theme park is considered as the biggest theme park in Indonesia with 9.5 hectare covered. It was opened and inaugurated on August 29, 1985.

The assessment of the service quality has been carried out through an online questionnaire-based survey. The questionnaire consists of three parts. The first part aims to collect demographic data of the respondents, such as age, gender, and occupation. The second is to assess the performance of the object of the research using the weighted SERVPERF according to the THEMEQUAL attributes. The third is to identify the relative importance of each attribute.

The participants of this survey were required to be over 17 years old and have been experienced visiting the object of the research. All item statements were measured on a 5-point Likert-type scale, ranging from 1 (strongly disagree for performance-type—and unimportant for importance-type questions) to 5 (strongly agree for performance-type—and important for importance-type questions). One hundred and ninety-three respondents were participated in this survey. They consist of students, employees, entrepreneurs, civil servants etc., indicates plenty diversity for the purpose of the research. There are more female respondents (64.8%) than male respondents (35.2%). The majority of the age of the respondents in this study were between the ages of 18-29 years old (96.43%), followed by 50-59 years old (1.02%), and below 17 years old (1.02%). Based on the level of education, the respondents were higher education students (68.88%), while 21.43% of them are high school students. The profile of the respondents is shown in Table 1.

The reliability test with Cronbach's alpha [28] was conducted before analyzing the questionnaire further. All of the attributes have the value of Cronbach's alpha more than 0.7; indicated that the questionnaire being utilized is reliable [29].

Table 1. Profile of the respondents

Variable		Percentage
Gender	Male	35.2
	Female	64.8
Age	> 17	1.02
	18-29	96.43
	30-39	0
	40-49	0
	50-59	2.55
	< 60	0
Education	High school student	21.43
	Higher education student	68.88
	Others	9.69
Occupation	Student	88.27
	Civil servant	2.55
	Employee	7.65
	Entrepreneur	0.51
	Others	1.02

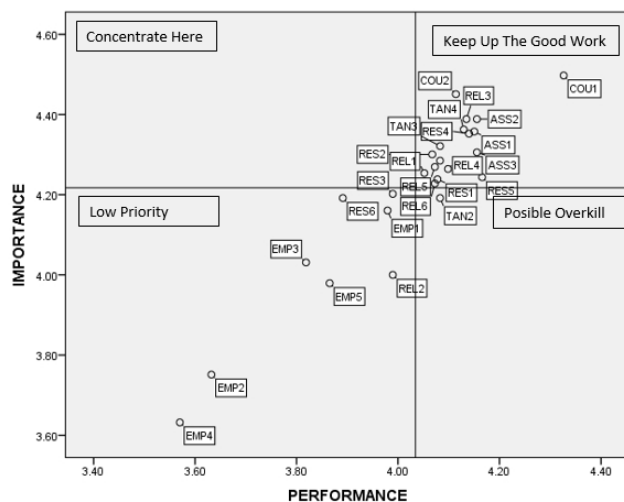
Table 2. Service quality assessment results

Dimensions/ Attributes	$\frac{\sum_{i=1}^n I_{ij}}{n}$	$\frac{\sum_{i=1}^n W_{ij}}{n}$	$\frac{\sum_{i=1}^n P_{ij}}{n}$	SQ_j
Tangibles:				
TAN1	4.285	0.762	4.083	3.110
TAN2	4.192	0.731	4.083	2.983
TAN3	4.321	0.774	4.083	3.159
TAN4	4.363	0.788	4.130	3.252
Reliability:				
REL1	4.254	0.751	4.052	3.044
REL2	4.000	0.500	3.990	1.995
REL3	4.389	0.796	4.135	3.292
REL4	4.264	0.755	4.098	3.093
REL5	4.269	0.756	4.073	3.081
REL6	4.228	0.743	4.073	3.025
Responsiveness and access:				
RES1	4.238	0.746	4.078	3.042
RES2	4.301	0.767	4.067	3.119
RES3	4.202	0.734	3.990	2.928
RES4	4.352	0.784	4.140	3.246
RES5	4.244	0.748	4.166	3.115
RES6	4.192	0.731	3.891	2.843
Assurance:				
ASS1	4.358	0.786	4.150	3.261
ASS2	4.389	0.796	4.155	3.309
ASS3	4.306	0.769	4.155	3.194
Empathy:				
EMP1	4.161	0.720	3.979	2.866
EMP2	3.751	0.688	3.632	2.498
EMP3	4.031	0.677	3.819	2.585
EMP4	3.632	0.658	3.570	2.349
EMP5	3.979	0.745	3.865	2.879
Courtesy:				
COU1	4.497	0.832	4.326	3.602
COU2	4.451	0.817	4.114	3.361
Average	4.217	0.744	4.034	3.009

The performance score for each attribute is multiplied with the normalized value of the corresponding importance score. The average value for each attribute is then computed throughout all respondents using Equation (1). The results are shown in Table 2, respect to each attribute and each section: importance and performance.

The attributes with the highest score of importance for each dimension are: TAN4 of tangibles, REL3 of reliability, RES4 of responsiveness and access, ASS2 of assurance, EMP5 of empathy, and COU1 of courtesy. The dimension of courtesy has the highest average score of importance. From the visitors' point of view, the most important thing is being served by staff with courtesy, friendliness, and fun. On the other hand, the attributes with the lowest score of importance for each dimension are: TAN2 of tangibles, REL2 of reliability, RES6 of responsiveness and access, ASS3 of assurance, EMP4 of empathy, and COU2 of courtesy.

In the performance, the attributes with the highest score are: TAN4, REL3, RES5, ASS2 & ASS3, EMP1, and COU1 of tangibles, reliability, responsiveness and access, assurance, empathy, and courtesy, respectively. The attributes with the lowest score for each dimension are: TAN1, TAN2, and TAN3 of tangibles, REL2 of reliable, RES6 of responsiveness and access, ASS1 of assurance, EMP4 of empathy, and COU2 of courtesy.



The overall performance of the object of the research is considered as “average”, based on the average score of 3.009 from the maximum score of 5. Nevertheless, the object of the research still has to do something to advance its service performance as a part of continuous improvement in order to achieve customer satisfaction. The IPA diagram then can be utilized to establish strategic strategies to achieve the customer satisfaction based on the performance and the importance of the item statements from the customers' point of view.

To establish the IPA diagram, the average score for each attribute were plotted in the two-dimensional state space. The horizontal axis refers to the performance or how well the object of the research is performing its service; while the vertical axis refers to the importance (not in a normalized form) of the attributes. The lines which are divided the diagram into four quadrants are calculated from the average scores of performance and importance. The IPA diagram of the object of the research is depicted in Figure 1.

There is no attribute belong to the first quadrant. The attributes located in the second quadrant, i.e., keep up the good work, is: TAN1, TAN3, TAN4, REL1, REL3, REL4, REL5, REL6, RES1, RES2, RES4, RES5, ASS1, ASS2, ASS3, COU1, and COU2. Visitors believed that those are important and the service provider has performed as their best. All attributes in the assurance and courtesy dimensions belong to this quadrant; it means that visitors perceived the politeness, courtesy, and knowledge of the staff well.

Third quadrant, i.e., low priority, have these attributes: REL2, RES3, RES6, EMP1, EMP2, EMP3, EMP4, and EMP5. This quadrant refers to the performance that are not quite satisfactory and they are considered as not important from the visitors' perspective. Fourth quadrant consists of attributes that are considered as less important for the visitors' point of view, but the object of the research has carried it out excessively. Therefore, there is no need for improvement. The attributes in this quadrant is only TAN 2: staff have neat appearances.

Effective service quality serves as an important factor that must be considered in the face of intense competition from other entertainment services [30]. Based on the research that has been done, the results of this study indicate that the theme park has the average performance, both in employee performance and in the

facilities provided to visitors; thus, management needs to improve current performance in order to attain customer satisfaction.

4. CONCLUSION AND FUTURE RESEARCH DIRECTION

The research has shown how to assess service quality of a theme park using the combination of weighted SERVPERF and the IPA model, by employing the attributes in THEMEQUAL scale. A case study to exhibit the applicability of the methods has been conducted in one of the largest theme parks in Indonesia. The result indicates that overall, the performance of the object of the research was average. To do improvement about what attributes to be enhanced to gain customer satisfaction, the firm might utilize the IPA model to recognize the attributes perceived important by the customers. Note that not all attributes have to be improved eventually. This can reduce the excessive investment spent by the firm.

The proposed methods are considered easy to implement, relatively simple to be interpreted, as well as inexpensive to be conducted. It has many potential benefits for the service provider since it can gain valuable insight about what attributes that have to be improved according to their performance scores and importance scores based on the visitors' perspective.

This study brings a new basis of knowledge on marketing and service science related to customer satisfaction in the theme park setting. From the practical perspective, in-depth outcome from this study will also be useful for theme parks management, as the outcomes provide guidelines to determine the priority of service attributes from the visitors' point of view.

For further research, it is recommended to use and compare other methods to assess and evaluate service quality of theme parks, especially in Indonesia, which does not have sufficient data and research on customer satisfaction in theme parks setting. For example, the customer zone of tolerance-based service quality (CZSQ) and CZSQ-based IPA (CZIPA) [31] to assess the service quality based on the competitive zone of tolerance by benchmarking against its competitors, as well as to prioritize the service attributes to be improved. Although these novel methods originally were developed in the area of hospitality to handle the inability of zone of tolerance to evaluate the priority of improving the service quality of the attributes and to overcome some limitations in the applicability of IPA, it can be further implemented to assess the service quality of theme park with some adjustments and modifications. However, despite of the superiority of CZSQ and CZIPA, the applications remain limited— see [32], [33] that were applying these methods to the different service areas.

5. REFERENCES

- [1] Themed Entertainment Association. 2018. Theme Index and Museum Index: The Global Attractions Attendance Report. Retrieved from: <https://www.aecom.com/wp-content/uploads/2019/05/Theme-Index-2018-4.pdf>
- [2] Sylt, C. 2018. 'Experience economy' boosts theme park spending to a record \$45 billion. Retrieved from: <https://www.forbes.com/sites/csylt/2018/11/04/experience-economy-boosts-theme-park-spending-to-a-record-45-billion/#370e03f629e4>.
- [3] Hunt, K. 2011. Asia's growing middle class fuels theme park booms. Retrieved from: <https://www.bbc.com/news/business-14928091>
- [4] International Association of Amusement Parks and Attractions. 2012. Amusement park industry statistics.

Retrieved from:

https://www.iaapa.org/pressroom/Amusement_Park_%20Industry_Statistics.asp.

- [5] Anisa, D. F. 2019. Indonesia prepares new strategy to meet 2019 tourist arrival target. Retrieved from: <https://jakartaglobe.id/context/indonesia-misses-tourists-arrival-targets-set-up-new-strategy-to-capture-higher-targets-this-year/>.
- [6] Laporan Tahunan 2018 PT Pembangunan Jaya Ancol. 2019. Retrieved from: <https://korporat.ancol.com/fm/app/public/files/Laporan%20Tahunan%202018.pdf>. (in Bahasa Indonesia)
- [7] Formica, S. and Olsen, M. D. 1998. Trends in the amusement park industry. *International Journal of Contemporary Hospitality Management*, 10, 7, 297–308.
- [8] Milman, A. 2001. The future of the theme park and attraction industry: A management perspective. *Journal of Travel Research*, 40, 2, 139–147.
- [9] Gilbert, G. R. and Veloutsou, C. 2006. A cross-industry comparison of customer satisfaction. *Journal of Services Marketing*, 20, 5, 298–308.
- [10] Chow, I. H. S., Lau, V. P., Lo, T. W. C., Sha, Z., and Yun, H. 2007. Service quality in restaurant operations in China: Decision-and experiential-oriented perspectives,” *International Journal of Hospitality Management*, 26, 3, 698–710.
- [11] Parasuraman, A., Zeithaml, V. A., and Berry, L. L. 1988. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 1, 12–40.
- [12] Cronin, Jr., J. J. and Taylor, S. A. 1992. Measuring service quality: A reexamination and extension. *Journal of Marketing*, 56, 55–68.
- [13] Cronin, J. J. and Taylor, S. A. 1994. SERVPERF versus SERVQUAL: reconciling performance based and perceptions-minus expectations measurement of service quality. *Journal of Marketing*, 58, 125–131.
- [14] Teas, K. R. 1993. Consumer expectations and the measurement of perceived service quality. *Journal of Professional Services Marketing*, 8, 33–53.
- [15] Buttle, F. 1996. SERVQUAL: review, critique, research agenda, *European Journal of Marketing*, 30, 8–32.
- [16] Carman, J. M. 1990. Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions, *Journal of Retailing*, 66, 33–55.
- [17] Tsang, N. F. K., Lee, L. Y. S., Wong, A., and Chong, R. 2012. THEMEQUAL—Adapting the SERVQUAL scale to theme park services: a case of Hong Kong Disneyland. *Journal of Travel & Tourism Marketing*, 29, 5, 416–429. DOI= 10.1080/10548408.2012.691391
- [18] Martilla, J. and James, J. 1977. Importance-performance analysis. *Journal of Marketing*, 41, 1, 77–79. DOI= 10.2307/1250495
- [19] Ulkhaq, M. M., Wijayanti, W. R., Kusumawati, A., Aulia, F. S., Wijayanti, R. S., and Wiganingrum, R. 2017. Combining the eTransQual scale and importance- performance analysis to assess service quality of online shopping. In *Proceedings of the International Conference on Industrial Engineering and Applications* (Nagoya, Japan, April 21–23, 2017). ICIEA '17. IEEE, 146–150. DOI= <http://10.1109/IEA.2017.7939196>
- [20] Pramono, S. N. W., Ulkhaq, M. M., Trianto, R., Rasyida, D. R., Setyorini, N. A., Setiowati, P. R., and Jauhari, W. A. 2017. Integrating the analytic hierarchy process and importance-performance analysis into ISO 14001 framework for assessing campus sustainability. AIP Conference Proceedings, 1902, 020035. DOI= <https://doi.org/10.1063/1.5010652>
- [21] Ulkhaq, M. M., Widodo, A. K., Widhiyaningrum, Yulianto, M. F. A., Gracia, M. O. 2019. An integrated M-S-QUAL and importance-performance analysis approach for assessing service quality of mobile commerce application. AIP Conference Proceedings, 2114, 060001. DOI= <https://doi.org/10.1063/1.5112472>
- [22] Ulkhaq, M. M., Rabbani, M., Rachmania, B. A., Wibowo, A. T., and Ardi, F. 2019. Integrating Importance- Performance Analysis into E-S-QUAL and E-RecS-QUAL scales for Assessing Electronic Service Quality. IOP Conference Series: Materials Science and Engineering, 598, 1, 012002. DOI= <http://10.1088/1757-899X/598/1/012002>
- [23] Rasyida, D. R., Ulkhaq, M. M., Setiowati, P. R., and Setyorini, N. A. 2016. Assessing service quality: a combination of SERVPERF and importance-performance analysis. *MATEC Web of Conferences*, 68, 06003. DOI= <http://10.1051/mateconf/20166806003>
- [24] Booms, B. H. and Bitner, M. J. 1982. Marketing services by managing the environment. *The Cornell Hotel and Restaurant Administration Quarterly*, 23, 1, 35–40.
- [25] Pikkemaat, B. and Schuckert, M. 2007. Success factors of theme parks—An exploratory study. *Tourism*, 55, 197–208.
- [26] Parasuraman, A. Zeithaml, V. A., and Berry, L. L. 1985. A conceptual model of service and its implications for future research. *Journal of Marketing*, 43, 41–50.
- [27] Carman, J. M. 1990. Consumer perceptions of service quality: An assessment of SERVQUAL dimensions. *Journal of Retailing*, 66, 1, 33–55.
- [28] Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334.
- [29] Nunnally, J. C. 1994. *Psychometric Theory*, 3rd Edition. McGraw-Hill Education.
- [30] Fotiadis, A. K. and Vassiliadis, C. A. 2016. Service Quality at Theme Parks, *Journal of Quality Assurance in Hospitality & Tourism*, 17, 178–190.
- [31] Chen, K. Y. 2014. Improving importance-performance analysis: the role of the zone of tolerance and competitor performance. The case of Taiwan’s hot spring hotels. *Tourism Management*, 40, 260–272.
- [32] Ulkhaq, M. M., Putra, B. E., Arianie, G. P., Amalia, A. N., and Pramono, S. N. W. 2016. Applying CZSQ and CZIPA for assessing service quality of domestic low-cost carriers. *Journal of Economic, Business and Management*, 4, 538–545.
- [33] Ulkhaq, M. M. Prakoso, M. F. A., Sari, V. K., and Maduma, L. 2018. Evaluating hospital service quality: An application of CZSQ and CZIPA. *International Journal of Innovation, Management and Technology*, 9, 246–251.