FINAL PROJECT – TI 184833

EVALUATION OF SERVICE QUALITY IN NON-FORMAL EDUCATION INSTITUTION BASED ON CUSTOMERS' SOCIOECONOMIC CONDITION (Case Study: Community-Based Library of Surabaya)

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TUGAS AKHIR – TI 184833

EVALUASI KUALITAS PELAYANAN PADA INSTITUSI PENDIDIKAN NONFORMAL BERDASARKAN KONDISI SOSIAL EKONOMI PENGUNJUNG (Studi Kasus: Taman Baca Masyarakat Kota Surabaya)

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Surabaya 2020

APPROVAL SHEET

EVALUATION OF SERVICE QUALITY IN NON-FORMAL EDUCATION INSTITUTION BASED ON CUSTOMERS' SOCIOECONOMIC CONDITION (CASE STUDY: COMMUNITY-BASED LIBRARY OF SURABAYA)

FINAL PROJECT

Submitted as one of the requisites to achieve a Bachelor Degree of Industrial and System Engineering Department
Faculty of Industrial Technology and Systems Engineering
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EVALUATION OF SERVICE QUALITY IN NON-FORMAL EDUCATION INSTITUTION BASED ON CUSTOMERS' SOCIOECONOMIC CONDITION (Case Study: Community-Based Library of Surabaya)

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ABSTRACT

Indonesia tends to have low rankings in many international assessments about literacy. Community-based Library or *Taman Baca Masyarakat* (TBM) is one of Surabaya government's attempt to increase literacy and community empowerment. However, during 2020, its utilization is only less than 18,9% which caused by activities that are not suitable for the community around, and many more. Currently, the service of TBM in Surabaya are not considering the socioeconomic condition that caused irrelevant service provided for the community. Therefore, visitors' socioeconomic assessment was used to determine the socioeconomic condition and using economic and learning interest factors. Then, SERVQUAL method was implemented on each socioeconomic condition. The services were derived into 5 dimensions and 22 attributes to be evaluated. From the calculation, visitors' service preferences were determined. It found that visitors' service preference consists of comfortability, and trainings or other learning activities that are able to gain their interest to visit TBM. Other than that, it shows that the overall service quality according to high, moderate, and low socioeconomic visitors are below visitors' expectation and shows the lack of service quality. Therefore, IPA was used to determined which service attributes to be prioritized on improvement. By using IPA method, the most prioritized service attributes to be improved are training or other learning availability and book collections that suitable with community needs, book collection condition, internet connection availability, operational time, and outdoor area.

Keywords: Community-based Library, Socioeconomic, SERVQUAL, Importance Performance Analysis (IPA)

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EVALUASI KUALITAS PELAYANAN PADA INSTITUSI PENDIDIKAN NONFORMAL BERDASARKAN KONDISI SOSIAL EKONOMI PENGUNJUNG (Studi Kasus: Taman Baca Masyarakat Kota Surabaya)

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ABSTRAK

Indonesia cenderung memiliki peringkat rendah pada penilaian literasi internasional. Taman Baca Masyarakat (TBM) adalah salah satu upaya pemerintah Surabaya untuk meningkatkan literasi dan pemberdayaan masyarakat. Namun, selama tahun 2020, pemanfaatannya hanya kurang dari 18,9% yang disebabkan oleh kegiatan yang tidak sesuai untuk masyarakat sekitar, dan lainnya. Saat ini, layanan TBM di Surabaya tidak mempertimbangkan kondisi sosial ekonomi yang menyebabkan layanan yang tidak relevan kepada masyarakat. Oleh karena itu, penilaian sosial ekonomi pengunjung digunakan untuk menentukan kondisi sosial ekonomi menggunakan faktor ekonomi dan minat belajar. Kemudian, metode SERVQUAL diimplementasikan pada setiap kondisi sosial ekonomi. Layanan dibagi menjadi 5 dimensi dan 22 atribut untuk dievaluasi. Dari perhitungan tersebut, ditemukan bahwa preferensi layanan pengunjung terdiri dari kenyamanan, dan pelatihan atau kegiatan pembelajaran lainnya yang dapat menarik minat mereka untuk mengunjungi TBM. Selain itu, ini menunjukkan bahwa keseluruhan kualitas layanan menurut pengunjung dengan sosial ekonomi tinggi, sedang, dan rendah berada di bawah harapan mereka dan menunjukkan kurangnya kualitas layanan. Oleh karena itu, IPA digunakan untuk menentukan atribut layanan mana yang akan diprioritaskan pada peningkatan. Kemudian didapatkan bahwa atribut layanan yang paling diprioritaskan untuk ditingkatkan adalah pelatihan atau ketersediaan pembelajaran lainnya dan koleksi buku yang sesuai dengan kebutuhan masyarakat, kondisi buku, ketersediaan koneksi internet, waktu operasional, dan area *outdoor*.

Keywords: Taman Baca Masyarakat, Sosial Ekonomi, SERVQUAL, *Importance Performance Analysis* (IPA)

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CHAPTER 1
PRELIMINARY

This chapter explains the background of conducting research, the formulation of the problem, the purpose of research, the benefits derived from research, the scope of research consisting of boundaries and assumptions, as well as the systematic writing of research reports.

1.1 Background

Literacy and reading interest are basic knowledge but have very important roles in the nation's development. From those two, humans can work, improve the economy, and participate in their social environment so that they can improve the quality of life. According to the Human Development Index (United Nation Development Programme, 2019) – which consist of health, education, and income per person, stated that Indonesia's 2018 HDI ranked at 111th out of 150 countries, below China (85) and Philippines (106). They also stated that Indonesia's inequality in education is in the percentage of 18,2%. From the Global Competitiveness 2019 Report by the World Economic Forum, Indonesia is ranked 50th out of 141 countries. While According to American Central Intelligence Agency (CIA), literacy rate – the percentage of people above 15 years old who can read and write from a certain population – of Indonesian in 2019 ranked on number 66th out of 160 countries with the percentage of 95,60%

Table 1. 1 Percentage of people above 15 years old who can read and write

Rank	Country	Total %	Date
64	Jordan	98	2018 est.
65	Turkey	96.1	2017 est.
66	Indonesia	95.6	2018 est.
67	Equatorial Guinea	95.3	2015 est.
67	Mexico	95	2018 est.
69	Panama	95	2018 est.
69	Colombia	95	2018 est.
71	Saudi Arabia	95	2017 est..
72	Vietnam	95	2018 est.

Table 1. 2 Percentage of people above 15 years old who can read and write (cont.)

Rank	Country	Total %	Date
72	Lebanon	95	2018 est.
72	Malaysia	94.8	2018 est.
75	Malta	94.5	2018 est.
76	Peru	94.4	2018 est.
77	Ecuador	92.8	2017 est.
77	South Africa	87	2017 est.

(Source: The World Bank, 2018)

While according to research from Central Connecticut State University in 2016, Indonesian reading interest ranked on number 60 out of 61 countries.

Table 1. 3 World Reading Interest Rank

Country	Rank	Country	Rank
Romania	41	Georgia	51
Portugal	42	Tunisia	52
Brazil	43	Malaysia	53
Croatia	44	Albania	54
Qatar	45	Panama	55
Costa Rica	46	South Africa	56
Argentina	47	Colombia	57
Mauritius	48	Morroco	58
Serbia	49	Thailand	59
Turkey	50	Indonesia	60
		Botswana	61

(Source: Central Connecticut State University, 2016)

As a country, the Indonesian government is responsible to provides education for Indonesian citizens which stated on UUPN Pasal 11(1) that the government and regional governments are obliged to provide services and facilities, as well as guarantee the quality of education for every citizen without discrimination. The Indonesian government is still working and has several programs to improve quality and equal distribution of education and the access to it. Some of the programs are *Wajib belajar 9 tahun* (1994), *Gerakan Nasional Orang Tua Asuh* (1996), *Wajib belajar 12 tahun* (2003), *Bantuan Operasional Sekolah* (2005), *Kartu Indonesia Pintar* (2014), *Program Indonesia Pintar* (2019), and *Rumah Belajar* (2020). However, those programs are still not optimal to provides equal educations. According to Indonesia's Central Bureau of Statistics, the number of school dropouts is more than 200.000 students in the 2018/2019 school year, and more than 100.000 students not able to pursue higher-level

education. They also stated that this phenomenon might be caused by the family economy, parents' educational level, environment, community view, and the interest of the school. In 2019, the number of low incomes is up to 24,78 million people. Figure 1.1 below shows Indonesia's Literacy Index that consists of literacy ability, access, alternatives, and culture.
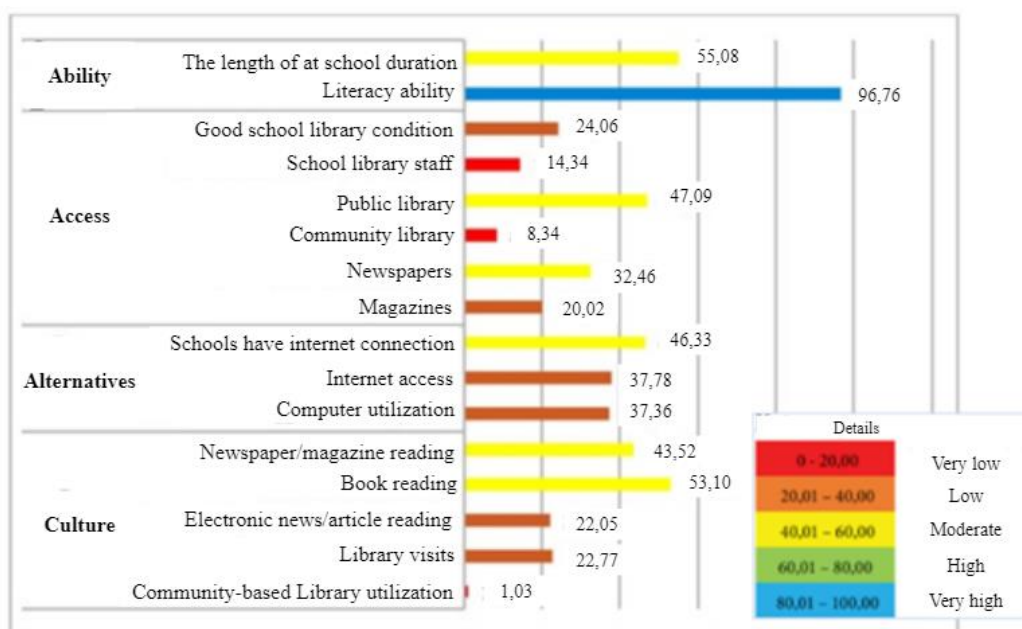
Figure 1. 1 Indonesia National Literacy Index (Source: Kemdikbud, 2019)

From the index above, Indonesia's Ministry of Education stated that literacy activity is still in the low category. Literacy ability shows the higher value that indicates an improvement in education equality. While alternative dimension has an average value that indicates people, in general, started to use technology to access information. However, the low value on Access and Culture dimensions need to be improved. To support the improvement of those dimensions, the government established *Undang-undang No.20 Tahun 2003* about the National Education System that rules the availability of nonformal and informal education, and public libraries. Regional governments have important roles in the education equality programs. According to *Undang-undang No.43 Tahun 2007 pasal 8*, regional governments are responsible to establish public libraries, assure the equal distributions of reading materials, and promote reading interests. However, only 8 out of 27 regions have regulations about library management and service causing

low literacy activities. The availability of regional regulation shows the effort of the regional government to achieve quality and equality in education.

In 2019, East Java province ranked 14th in Indonesia Human Development Index and positioned at 32nd out of 34 provinces for the percentage of people above 15 years old who can read and write. It indicates the effort to achieve educational quality and equality in this province still very low. However, in Indonesia, the region that has the most effort and interest in achieving quality and equality in education is Surabaya. Since 2009, Surabaya has published regulations for the program such as *Peraturan Daerah Nomor 5 Tahun 2009* and *Peraturan Walikota Surabaya Nomor 11 Tahun 2010* about Library Establishment and Management. With these two regulations, Surabaya government started programs to increase Surabaya literacy activity, such as

1. School libraries are encouraged to follow the national library standards, so that the condition of buildings, facilities, and the number of collections is adequate;

2. The Office of Education issues a circular about "compulsory reading curriculum" so that each school requires its students to visit the school library;

3. Providing public library access in two places, namely in City Hall and in Rungkut District;

4. Set up a library in city parks, and support the establishment of hundreds of Taman Baca at the *Rukun Warga* (RW) level to bring book access closer to the public; and

5. Recruiting honorariums to manage school libraries and reading parks in villages that are funded by the Surabaya City regional budget and income.

Those activities are some of the Surabaya Government strategies to achieve Surabaya as the city of literacy and support the improvement of quality and equality education. In 2018, the number of low incomes in Surabaya is up to 130.500 people and the percentage of illiterate people (15+ years old) is 1,18%. Percentage of people above 15 who have graduated from junior high school and below are up to 53,98% and 220 school dropouts. To remove the inequality in education, the Surabaya government provides 2 public libraries, 528 *Taman Baca Masyarakat,*

and more than 1000 reading points that are available to be accessed by public freely, quickly and, easily.

  Taman Baca Masyarakat or Community-based library (TBM) is one of the nonformal education facilities. Post-independence, started in 1950, the government had established 1680 *Taman Pustaka Rakyat* until 1959, and in 2019, there are now 4455 TBM across Indonesia. In Surabaya, TBM started to promote their existence in 2007 and have 528 units until 2020. TBM has library-like management to increase the reading interest of the residents who have difficulties to access formal education and public library. Surabaya Library and Archive Service (Dispusip) also generated an electronic book collection catalog that provides information about the book title and its location. The catalogs are integrated from the public libraries, TBM, school libraries, and universities repository collection that can be accessed through "https://dispusip.surabaya.go.id/dils/". Not only provides catalogs, but the website also provides ebooks, videos, and archives that help Surabaya citizens to gain easy access to knowledge.
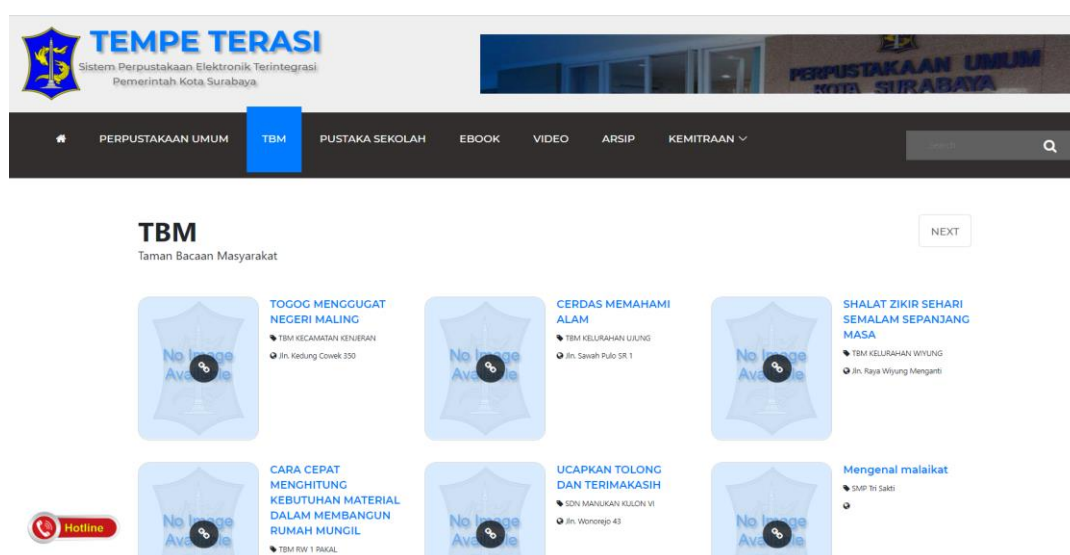
Figure 1. 2 Integrated Surabaya Library System Website
(Source: https://dispusip.surabaya.go.id/dils/)

  The existence of TBM is expected to become one of the literacy problem solvers by providing literature and guiding people around from low-income families to read and study. Nowadays, some TBM are running partnerships with universities, schools, and communities. According to Kemdikbud, 1000 residents could be served by one TBM or library. Public responses to the TBM presence are

mostly enthusiastic (Al Ayubby, 2018). Mostly the visitors are students. TBM is a place for them to learn anything outside school, play, and discuss. However, the objectives of TBM establishment are not only to provide reading materials for students or kids, but it also expected to be able to increase reading interests, knowledge, and skills of the community or community empowerment.

According to what researcher gained from field observations and preliminary interview with TBM staffs in 3 different TBM (Keputih, Kejawan Tambak, and Semolowaru), the other activities besides reading are consists of tutoring, English course, storytelling, drawing & coloring, dancing, watching movies, discussion, and writing. According to Surabaya's Library and Archive Services (Dispusip), the number of TBM visitors in 2020 (January until March) was only 548.893 while the Surabaya city population is about 2,9 million people. If it assumed that one visitor only visits once in three months, this indicates only less than 18,9% of people utilized TBM facilities. According to the previous study, TBM available in almost every area of the city, but in reality, some people have no interest in visiting TBM because of many things such as the uncomfortable place for study, unvary book collections, limited facilities, unstructured operational hours, and activities that are not suitable for the community around TBM (Khoirunnisa & Theresia, 2019). This statement is supported by the Dispusip Head of Service, that they are right now are trying to assess the interest and needs of Surabaya people based on their social and economic condition. As one of the educational institutions, they also want to increase not only intelligence but also the character and moral value of Surabaya people while creating and maintaining a good relationship between the TBM staffs and the communities to increase the number of visitors that will lead to the level of community empowerment. As for now, the service of TBM, such as book collection, activities, staffs' trainings, and skills given are standard or the same for every TBM without considering the social and economic condition, and common social status of the area itself. This brings up the irrelevant service provided for the community.

The problem obtained from the irrelevant service brings up the question about the community satisfaction level for the service, preference of service, factors affecting their interest to use TBM considering their needs based on area and social

status. Thus, this study is made to know how satisfied the communities are with the current service and what can be improved from the service provided using the Servqual method and Importance Performance Analysis.

1.2 Problem Identification

According to the explanation above, the proposed problem identification in this study is "How is the service quality and community preference of Community-based Library in Surabaya based on social and economic condition using SERVQUAL and Importance Performance Analysis method."

1.3 Objectives

According to the problem identification above, below are the objectives of the study on Taman Baca Masyarakat Surabaya

1. To determine attributes that are affecting the service quality of Taman Baca Masyarakat Kota Surabaya
2. To determine the service quality level of services provided by Taman Baca Masyarakat Kota Surabaya
3. To determine visitors' service preference in Taman Baca Masyarakat Kota Surabaya
4. To give recommendation for Taman Baca Masyarakat Kota Surabaya to increase service quality

1.4 Benefits

Below are the expected benefits of the study

1. Discover service quality level of Taman Baca Masyarakat Kota Surabaya from visitors' perspectives.
2. Recommend improvement priorities for Taman Baca Masyarakat Kota Surabaya corresponding to customers segments.

1.5 Scope

Below are the limitation and assumption implemented in the study

1.5.1 Limitation

Because of the number of attributes that affect the desires of visitor and the extent of the existing problems, as well as limitations faced by researchers, it is necessary to do restrictions for this study, namely:

1. The number of visits used in this study is obtained from secondary data of 2020.
2. The sample used in the study is the visitors of Taman Baca Masyarakat.
3. The formation of dimensions in this study is based on the Dispusip officers' perspectives and quality dimensions developed by Parasuraman, Berry dan Zeithaml (1990).

1.5.2 Assumption

To simplify the problem and support confidence in the observations, the following assumptions need to be set:

1. There was no change in policy at Taman Baca Masyarakat Kota Surabaya dan Dinas Perpustakaan dan Kearsipan Kota Surabaya about the business model during the study period.
2. There was no sudden surge in visitors during the study period.
3. This study only assesses Gap 5 in Service Quality
4. Respondents' answers to the questionnaire are a reflection of their true opinions without any specific purpose.

1.6 Report Writing System

In this subchapter, systematic writing used in this study will be explained below

CHAPTER 1 PRELIMINARY

This chapter explains the background of conducting research, the formulation of the problem, the purpose of research, the benefits derived from research, the scope

of research consisting of boundaries and assumptions, as well as the systematic writing of research reports.

CHAPTER 2 LITERATURE REVIEW

This chapter explains the study of literature, theories, concepts, and facts related to research that is useful as material and reference in solving problems and strengthening understanding.

CHAPTER 3 RESEARCH METHODOLOGY

This chapter explains the framework of thought or the stages of the final project research implementation process. This chapter also presents research methodology flow diagrams to make it easier to understand the sequence of stages created so that research can proceed in a structured and systematic manner.

CHAPTER 4 DATA COLLECTING AND PROCESSING

This chapter explains about data collection obtained from questionnaires that have been filled by respondents. The data that has been collected, will then go through a test of validity and reliability, then processed to get the level of importance and visitor satisfaction. Data processing using SPSS 12.0 for Windows and Microsoft Excel.

CHAPTER 5 DATA ANALYSIS AND INTERPRETATION

This chapter presents the analysis and interpretation of the results of data processing on the level of visitor satisfaction, as well as recommendations for improvements to services based on priorities according to the visitor.

CHAPTER 6 CONCLUSIONS AND SUGGESTIONS

This chapter contains conclusions and suggestions based on the results of research that has been done. The conclusions section will answer the goals that have been determined previously and the advice section will be given input based on the results of the research analysis to researchers who will continue this research to become even better.

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CHAPTER 2
LITERATURE REVIEW

This chapter explains the study of literature, theories, concepts, and facts related to research that is useful as material and reference in solving problems and strengthening understanding.

2.1   Service

Service can be defined as an economic activity that considered as a process of action and appearance. The results of service may not a product in physical form or construction but more a process, cannot be stored and does not cause any ownership, and provides added value or solution faced by consumers (Parasuraman, Zeithaml, & Berry, A Conceptual Model of Service Quality and Its Implications for Future Research, 1985). It also can be defined as activities that offered by one firm to other that is more intangible and is a process that focuses on dynamic resources such as skill, knowledge, and an understanding of value as a collaborative process between providers and customers (Kotler, Keller, Brady, Malcolm, & Hansen, 2006). According to (Kotler, Keller, Brady, Malcolm, & Hansen, 2006), the service industry has 4 main characteristics, namely:

1. Intangible

   The service industry has no tangible shape that could be touched, felt, listened, or smelled before we purchase or experience the service itself.

2. Unseparated

   Services are produced and used together because there is no physical shape to be stored. The main characteristic of service marketing is there is the interaction between service provider and customer that makes both of them affecting the service quality.

3. Varies

   Service varies because it depends on who provides the service, when, and where the service is provided. Customers will realize the high

variability and put it on the review that will be considered by other customers to purchase the service.

4. Perishable

Service cannot be stored. However, it would not be a problem if the management is ready for stable or increasing demand.

Two categories that processed by the service industry are people and objects. In the service industry, service marketing strategy is centered on the customer, usage, and relationships. (Vargo & Lusch, 2004). There are three main elements of service. The first one is the product and features which state what type of service that company offers and what differs theirs from other companies. The other element that gives impacts on customer satisfaction is the process that includes the technique, procedures, and flow of activities by how the service is delivered. Since service is usually produced and consumed almost at the same time, costumers are regularly present in the company's place and directly interact with the workforce and being a part of the business process. Therefore, the workforces give impacts on customer perception and satisfaction. Their appearance, attitude, behavior, skills, and knowledge are mandates to deliver the service. The third elements are layout and decoration which more into tangible products that support the service processes such as information boards, uniforms, menu book, brochures, and equipment. These physical products are needed for service also to be judged on by customers as a part of intangible service quality and increase customer satisfaction.

Customer satisfaction is the customer evaluation of the product or services received are in accordance with the needs and expectations of customers (Sukmadi, Riyadi, Danurdara, & Masatip, 2014). Customer expectation on the service industry means the confidence in service delivery as a standard in the customer perspective. According to Zeithaml through William et al (2016), customer expectation consists of five-level, namely:

1. Ideal Service level

The ideal service level is the highest level of service expectation that customers hope to receive.

2. Desired Service

   The desired service means expected service level that customers want to receive, and what they believe can be and should be delivered by the providers. Desired service is affected by:

   - Enduring service intensifier → can be classified into two. The first one has Derived service expectations that occur when customer expectations are influenced by other people. The other one is Personal service philosophy that means customers subliminal judgments about the performance of service providers

   - Personal needs → divided into physical, social, and functional needs

3. Adequate service

   Adequate service means the minimum level of service the customer will tolerate and accept without being frustrated.

   - Transitory service intensifier → temporary and individual factors that make customers more aware of the need for service

   - Perceived service alternatives → when there are more than one service providers provide the same service

   - Self-perceived service role → means customers' perception towards their participation in the service provided

   - Situational factor → means the service performance condition beyond the control of service providers

   - Predicted service → that are service level anticipated by customer's objective point of view on the individual transaction

4. Zone of Tolerance

   It refers to the gap between desired and adequate service levels. If the performance is above the ideal service level, the customer will be very pleased and when the performance falls below the adequate service level, the customers will be dissatisfied and have a negative impression.

5. Predicted Service Level

   It is the level of service that customers expect from the service providers.

While the other internal and external factors that affect both desired and predicted service expectations are: Explicit service promises (statements made for advertising and publications); Implicit service promises (quality cues by the price and tangibles associated); Word-of-mouth communication; and Past experience. A variety of factors may result in a discrepancy between management perceptions of customer expectations and the actual specification for a service that will affect the quality perceptions of customers (Parasuraman et al, 1990).

Customer perception is the subjective assessments of actual service received or experienced whether they are satisfied or not with the service quality that is relative to their expectations. The figure below shows four factors that influence customers' service perception:
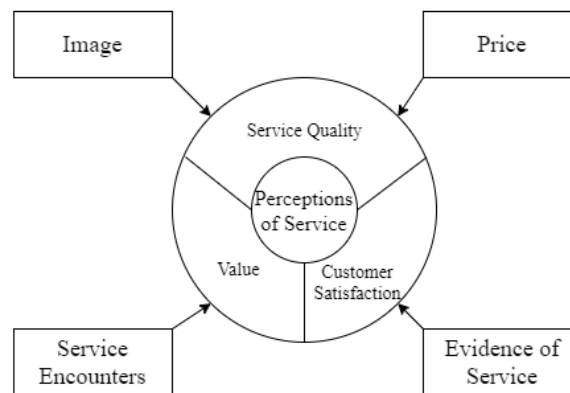
Figure 2. 1 Factors Affecting Customers' Service Perception
(Source: William et al., 2016)

Customer perception can be affected by the image or reputation of the providers. The price of service can also influence customer perceptions. Price is one of the indicators to judge whether the service can meet their expectation or not. If the price is higher than the average, the higher quality might be expected. If it is too low, the customer may doubt about the service. Service encounter means the interaction between customer and service provider during a period of time that also affecting the customer perception. It consists of three kinds of encounters, namely remote encounters (no direct human contact), phone encounter (contact by information-technology), and face-to-face encounter (direct contact in person). The

last factor is evidence of service which consists of the people, the process, and physical evidence to be judged.

Quality of service itself is a comparison between what customers expect and the performance of service received, and how effective and efficient the processes are. According to Tjiptono, the quality of service is a dynamic state associated with products, services, human resources, processes, and environments that meet or exceed expectations. To measure the quality of service that are mostly intangibles, there are five service dimensions as reference or guide to defining the service value (Parasuraman, Zeithaml, & Berry, 1985).

1. **Tangibles** as a representative of service offered by the company to the customers such as physical facilities, equipment, personnel appearance, and others.

2. **Reliability** as the ability of the company to perform and deliver service as promised accurately, equally performed, and trusted.

3. **Responsiveness** as the company's willingness to help customers with providing service rapidly and appropriately

4. **Assurance** as the ability of the personnel to have the knowledge, good behavior, confidence, become trustworthy with their communication, credibility, security, competences, and courtesy

5. **Empathy** as the ability to learn/identify individual customer needs and provide service with care, good communication, and easy access.

The differences between expectation and performance relating to the quality dimensions are modeled into five gaps that will be shown in the figure below
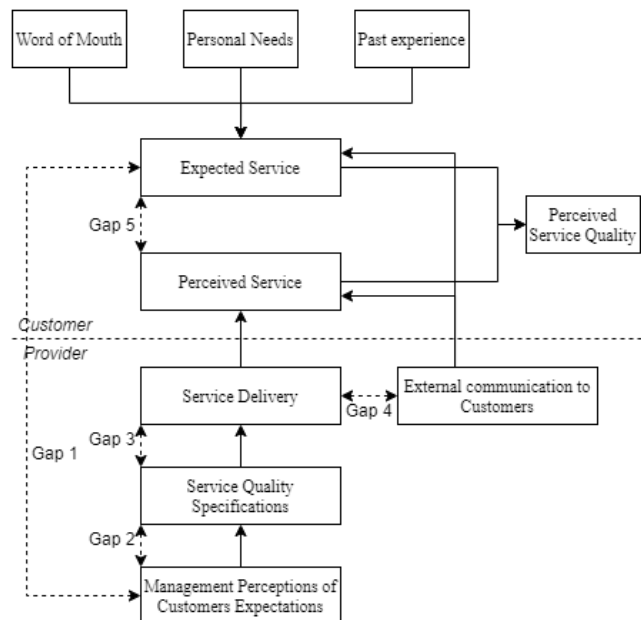
Figure 2. 2 The Gap Model of Service Quality
(Source: Parasuraman et al. (1985))

Gap 1 is the difference between the customer's expectation and management's perception of customer's expectations when customer expectations are not identified well. Gap 2 is the difference between management's perception of customer's expectations and service quality specification or inappropriate standards. Gap 3 is the variation between service specifications and the actual service delivered. Gap 4 is the difference or mismatch between service delivery and communication to customers about service delivery. Gap 5 is the difference between the customer's expectation and perceived service. This gap model helps managements as a diagnostic tool to identify service quality systematically.

2.2   Community Empowerment

Community empowerment means the process of enabling the community to increase control over their lives (Labonte & Laverack, 2008). Communities are groups of people who share common interests, concerns, or identities. According to Kartasasmita through Mannan et al (2019), Community empowerment is an attempt to increase the dignity of society whose present condition is being unable to escape from the trap of poverty and backwardness. The empowerment itself has three main objectives. The first one is empowerment by creating an environment

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that enables the community potential development. The other objective is empowering to strengthen community economic potentials by increase education level, health, access to markets, information, and technologies. Lastly, empowerment through household economic development. Therefore, community empowerment involves the participation of the communities that implies actions to the social, cultural, political, and economic determinants.

2.3   Non-formal Education

Non-formal education refers to education that occurs outside the formal school system (Khasnabis, Heinicke , & Achu, 2010). According to the Indonesian Ministry of Education and Culture, Non-formal education as a subsystem of the national education system has objectives to increase the faith to the Almighty God, increase intelligence and skills, enhancing character, strengthening personality and nationalism, and developing nation building responsibility in human beings. Non-formal education plays the role as a substitute if there are any citizens unable to access formal education, as additional to the formal education (if knowledge, skills, and attitude lessons from formal education, then the people may utilize non-formal education), and as complementary that provides knowledge and skills other than the basic knowledge such as computer class, English class, and personality course. Non-formal education consists of 5 categories, namely:

1. *Pendidikan Anak Usia Dini* or Early childhood education programs that give education stimulus and guidance to the newborn until 6 years old children that generate skills and attitude for the children.

2. *Pendidikan keaksaraan* or Literacy education as educational services for illiterate citizens to have the ability to read, write and count, speak Indonesian, and analyze to provide opportunities for self-actualization potential.

3. *Pendidikan kesetaraan* or education equalizer provides an education that is equal to elementary, middle, and high or vocational school programs that generate the same curriculum and certificate with formal school without attending formal school.

4. *Pendidikan Kursus* or Course education provides provision of knowledge, skills, life skills, and attitudes to develop themselves, develop the profession, work, independent business, and / or continue their education to a higher level. This type of non-formal education consists of an academic course and practical/technical course.

5. *Pendidikan Keluarga* or Family education that takes place in the family carried out by parents and education units as their duties and responsibilities in educating children/students.

6. *Taman Baca Masyarakat* or Community-based Library that provides services in the field of reading material in the form of books, magazines, tabloids, newspapers, comics, and other multimedia materials that are equipped with rooms for reading, discussion, book review, writing, and other literacy activities.

2.4   Taman Baca Masyarakat

Taman Baca Masyarakat (TBM) or Community-based library is a small-scale library, also can be interpreted as a reading corner, reading house, and so on, that spread over some points in the neighborhood to facilitate its surroundings in literacy. According to the Ministry of National Education, TBM is an institution to facilitate people with reading materials and information sources on knowledge such as books, magazines, tabloids, newspapers, comics, and other media. They are also responsible for provides activities to develop reading interest and literacy amongst the community such as discussions, book reviews, writings, and so on. TBM has three main functions, which are

1. As a learning source – provides learning source such as books and activities that increase skills to be implemented such as cooking, gardening, farming, and so on.

2. As an information source – provides reading materials such as newspaper, tabloids, references, booklets, and/or internet access for the community to obtain information quickly, appropriately, and inexpensive.

3. As a recreation-education place – nonfiction-books and activities provided able to entertain the community with fun and educative materials. TBM also performs as a place to develop knowledge, skills, and attitude.

According to TBM Technical Guidelines by Ministry of National Education, services provided by TBM may include:

- Reading on the spot – by providing a comfortable reading room supported by various reading materials corresponding to visitors' needs;
- Lending books – books can be brought home for several days with terms and conditions;
- Learning – such as guiding in fast readings techniques (scanning and skimming), finding sentences and keywords in literature, and effective learning.
- Skills practices – with books provided, community are asked to perform the skills in communal, such as cooking or sewing;
- Literacy activities – by providing fun and attractive literacy activities such as book reviews, discussions, short story writings, storytelling, and so on;
- Conduct contests related to literacy.

To be able to perform its role and functions, TBM must be supported by resources that consist of physical resources and human resources. Physical resources consist of two. The main physical resources are every reading material. Reading materials are the main service for the community and must be procured according to community characteristics, needs, reading ability, and local potencies. The supporting resources are everything needed to support TBM management, such as bookshelves, desks and chairs, electronics, etc. As for the human resource, The TBM organization must consist of three people that perform as Head of TBM, Administration and technical staff, and service staff. Head of TBM is responsible to lead TBM, arrange programs, conduct cooperation, and maintain finance. The administrative staff is responsible for administrations, lettering, and procuring and

selecting reading materials. Service staff is responsible to perform TBM service, and perform member administration.

To push The Indonesian community to understand the importance of literacy, The Ministry of Education commands every TBM to be creative and innovative by knowing what community needs, conducting socialization, guiding the community in learning and gaining information. Because TBM must have a strong relation to the community, cooperation is important mainly with the community organization such as *rukun tetangga, rukun warga, karang taruna, remaja masjid,* and PKK. Local potencies from these organizations can be used to spread the importance of literacy and developing their community. Cooperation with surrounding schools may increase reading interest by asking students to read books or making resumes. Cooperation with surrounding universities is also important to obtain recommendations and reading materials.

2.5   Residential Area

Housing *(perumahan)* is a set of houses as a part of residential *(pemukiman)* both urban and rural areas, which equipped with infrastructure, facilities, and public utilities to fulfil minimum housing specification. While residential consists of more than one housing that has infrastructure, facilities, public utilities and other supporting activities in urban or rural areas (UU No. 14 Tahun 2016). According to Constantinos Doxiadis through Nuryahbani et al (2015), five basics elements of residential are nature (climate, natural resources, topography), man (biological and emotional needs such as security, human relationships, morality, and culture), Society (stratification, population density, culture, economy, education, health, entertainment, and law), shells (houses, public facilities, offices, recreation area, transportations), facilities (water, electricity, roads, television, networks). According to this theory, to determine residential area types, scoring analysis is done by Ministry of Public Works and Public Housing of Indonesia with indicators namely:

1. Residents characteristic

   The identification of social condition such as education level, type of work, population density, financial allocations for their houses, how they fulfil their primary needs, and income rate.

2. Housings characteristics

   The identification of building functions and type of activities, building visuals, building capacity compare to the number of people inside the building, housing ownerships, housings treatment, and legality & land use permit.

3. Facilities characteristics

   The availability of water, electricity, drainages, roads, television, networks, and sanitation services.

4. Environment characteristic

   The identification of activities around the residents such as airports, rivers, fields, including the environmental quality, availability of infrastructure & facilities, and its accessibility.

2.6   Socioeconomic Condition

Socioeconomic condition refers to the position of a person in a community related to education, income, household assets, and the ability to fulfill needs ((Astuti, 2016). As mentioned in the background of the study in Chapter 1, the Service specifications of TBM must follow the needs of the surrounding community. There is a Causation theory about education accessibility with the social-economic status of the community (Agustino, 2019). The needs of knowledge are mostly affected by the social and economic conditions of the community itself. People with lower incomes might have more difficulties to access higher or even formal education. People with lower incomes also might have lower or higher willingness to learn depends on their learning interests and social judgement. That is why the needs of the service must be adjusted by the social-economic condition of each TBM community.

According to Nasution (2004), social and economic status can be measured from the type of job, income, assets, educational level, house condition and location, and social activity. In this study, only 3 factors used which are, total family income, educational level, and household assets, with two additional factors namely total family expense and learning interest.

a. **Total family income**

Total family income is the total earning of all family members, basic income, and additional income for one month in rupiah.

b. **Educational level**

Educational level affects socio-economic conditions in terms of ability to gain knowledge and skill that useful for better financial sources or types of jobs. Parents' educational level also affects the continuity of their child's education.

c. **Household assets ownership**

Assets are one of the financial sources that expected to give benefits at a later time. According to Sumardi (2014), to determine economic status, it can be seen by:

- Status of house ownership: their own house, official house, rented house, or relatives' house.
- The physical condition of the house: permanent or semi-permanent.

d. **Total family expense**

Fulfillment of individual or family needs for basic necessities (food, clothing, housing, education, electricity, water, telephone, transport, recreation, and other).

e. **Learning interest**

Learning interest is the individual willingness to learn, gain knowledge and skill, interest to participate in school or training.

2.7 Sampling Methods

Sampling is a technique applied by researchers to systematically select a smaller number of representative items or individuals from a pre-defined population

to serve as subjects for observation or experimentation (Sharma, 2017). Since it is impossible to test every individual of the population, sampling is used as a representative of the population under study to minimize cost, minimize observation time needed, and convenience matter. Sample acts as representative of the population, but sampling always caused differences with the population in terms of real value called sampling error. According to Sharma (2017), there are several factors to be considered in implementing sampling procedures, which are: population variance, population size, research objectives, desired result precision, accuracy, and so on. There are many techniques to obtain samples needed that divided into two categories, which are probability sampling and nonprobability sampling.

2.7.1 *Probability Sampling*

Probability sampling is when every individual on the population have the same specific chance (or at least known) and not zero to be selected as a sample. Probability sampling techniques are:

1. Simple Random Sampling – where each population individuals have the same probability to be selected as a sample. It is considered as a fair way of selecting sample by following the size of the population

2. Systematic Sampling – where the samples are selected based on every nth unit and random starting draw points so that the selection of the first point determines the whole sample. This technique is not suitable for the population that follows a certain pattern or order.

3. Stratified Sampling – involves the division of a population into smaller groups known as strata. Strata are formed based on members' shared attributes or characteristics. This technique may be divided into two, which are proportional – where the sample size is depending on the population size, and nonproportional – where the sample size is not depending on the population size because of analytical reasons.

4. Cluster Sampling – where the selected sample is in groups. Once the clusters are selected, they are compiled into frames. This is reasonable because every cluster are homogenous.

2.7.2 *Nonprobability Sampling*

Nonprobability sampling is when every population individual does not have the same probability to be chosen as samples and sometimes unknown. It based on the judgment or subjectivity of the researcher. Nonprobability sampling techniques are:

1. Quota Sampling – where the sample is chosen from a certain subpopulation that has characteristics in quota desired.

2. Purposive Sampling – also known as judgmental or subjective sampling where the researcher defines the unit sample to be studied based on characteristics required.

3. Convenience Sampling – also known as self-selection sampling where the individuals are voluntarily decided to be the part of the research as a respondent.

4. Snowcall Sampling – where the first respondent gives the information of the same characteristic needed as the first one. This technique is suitable to find a sample with rare and special characteristics (Taherdoost, 2016).

2.7.3 *Determining Sample Size*

Determining sample size is important to make sure the sampling that has been done is enough to represent the population under study.

2.8 SERVQUAL

As stated in the subchapter 2.1 above, service quality is a comparison between what customers expect and the performance of service received, and how effective and efficient the processes are. Service quality means the good or bad evaluation of customers' perception of the service (Tripathi, 2013).

Figure 2.2 above indicates that perceived service quality is the comparison between expected service and perceived service based on the 10 dimensions of service quality (Gap 5). Expected service means that the level of service customers expected to be served on. The customers' expectation is made of either the word of

mouth or what they heard about the service, their personal needs, or the past experience of the same service field. As for the implementation of the survey, the expectation section consists of questions to assess expectation value from customers towards the service. Perceived service means the level of service customers received when they use some or all of the service. As for the implementation of the survey, the perceived section consists of questions to assess customers' perception of the service.

2.9   Important Performance Analysis (IPA)

The importance-performance analysis is one of the decision tools that facilitates the identification of improvement prioritization (Matzler, Sauerwein, & Heischmitdt, 2003) by classifying the attribute into several categories. This method was first introduced by Martilla and James in 1977 by analyzing both attribute importance and factor performances. The combination of importance (value of the attribute of purchasing experience) and performance (value of the attribute of the consumptive experience) can effectively identify better competitiveness drivers and insight for decision making (Guadagnolo, 1985). In this method, customers will be asked to judge how are the importance and performance of the service provided and the result will be presented in an IP matrix shown in Figure 2.4 corresponding to the importance-performance on a scale of low or high.
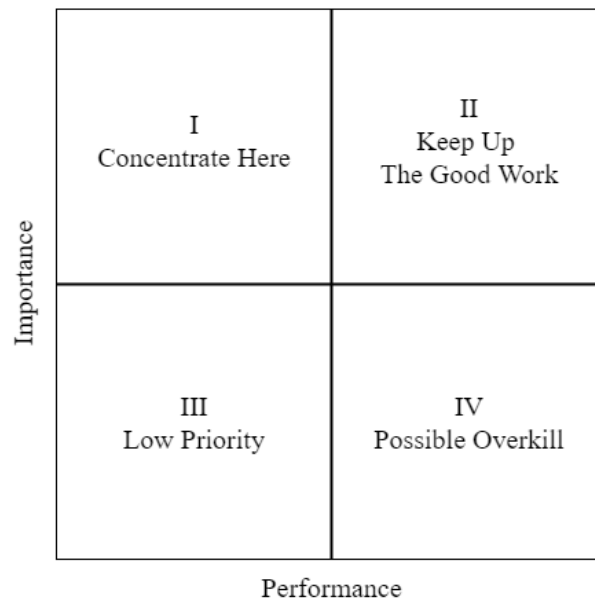
Figure 2. 3 Importance Performance Matrix (Source: Martilla and James, 1977)

The interpretation of the matrix determines the strategies corresponding to the server attributes, namely:

I. **Concentrate here** This area shows important service attribute according to the customers, but indicates low satisfaction on performance. Attributes that falls in this area should be improved.

II. **Keep up with the good work** This area shows important service attributes that have high performance according to the customers resulting in higher satisfaction levels. Attributes that fall in this area must be maintained.

III. **Low Priority** This area shows the not so important attributes according to the customers. The attributes have low performance either. Attributes that fall in this area should be reviewed because they have a low effect on customer satisfaction.

IV. **Possible Overkill** This area shows good performance attributes, but only have slight importance according to the customers. Attributes that fall in this area may be exaggerated and can be removed to minimize cost. But on the other hand, there might be a good reason for continuing this practice.

2.10 Previous Research

In this subchapter, the previous researches with a brief explanation of the method, objects, and objectives will be explained. Some methodologies are used as a basic reference in this study. The following paragraphs are the details of the previous researches.

The first research was done by Anna, Mannan, and Srirahayu (2019) that evaluates the roles of TBM in empowering the Surabaya City people. She uses TBM that has SMEs supervision activities to indicates the role of the service provided. Some of the TBM in Surabaya have empowerment programs such as training that conducted informally and intermittently. TBM Collections are still irrelevant to the activities and development. The TBM collection should be tailored to the needs of local residents to increase the information transfer process and become useful as its intended. Constraints faced by TBM are procurement difficulties, lack of public awareness. The author is using this research as a reference for the basic understanding of the Community-based Library and its role to the community.

The second research was done by Rahmawati (2010) that analyzes the service quality with Library and Archive office is the object under study using SERVQUAL and Importance Performance Analysis methods. According to the respondents, there are 38 attributes that can affect service quality. The mean of service quality gap in the object under study is -0,717. It indicates there are unsatisfied visitors because their expectation is not fulfilled. According to IPA analysis, there are 23 important attributes but still have low performances. The most unsatisfying attribute is related to the book collections. The author is using this research as a reference to gain an understanding of how Servqual and IPA synergized to achieve the research objectives.

The third study was done by Rino Akbar (2018) who analyze the service quality of the AHASS motorbike workshop in Tamsis Jaya Baru. This study aims to determine the service quality of the services provided by AHASS Tamsis Jaya Baru because there were many complaints from the customers. The result shows the gap between expected and perceived service quality provided by the company. For tangibles, the gap is -1.060; for reliability, the gap is -0.515; responsiveness gap

is 0-0,142; assurance gap is -0,770; empathy gap is 0,331. While in Importance Performance Analysis, the main priority service to be improved is supporting facilities for the customers (restrooms, Televisions, Magazines), the parking space area, safety assurance (CCTV, lost and found items), and spare part warranty. As the second previous study, the author is using this research as a reference to gain an understanding of how Servqual and IPA synergized to achieve the research objectives.

The fourth study was done by Astuti (2016). This study aims to find out the effects of social and economic conditions on the learning interest of the students of SMK YPKK 3 Sleman. It uses SPSS to analyze conduct double regression analysis. The result shows that the education level of the mother, total family income, household assets ownership, and the level of needs fulfillment positively and significantly affects the students' learning interest. The author is using this research as a reference to determine what factors affect the learning interest of the students.

Lastly, a study was done by Khorunnisa (2019) to analyze the marketing strategy in a Community-based Library in Surabaya namely TBM Gencar. This study was done with the indication that many people do not know the TBM and its existence. It also stated that the cause of a small number of visitors is an uncomfortable place for study, unvary book collections, limited facilities, unstructured operational hours, and activities that are not suitable for the community around TBM. This research used the Marketing Mix 7P tool to determine whether the current marketing strategy of TBM Gencar Surabaya. The result shows that the current strategy can be said to be successful in increasing public interest to visit because the excellence of products and services provided have attracted people to come and utilize the service.

Table 2. 1 Previous Researches

No	Researchers	Title	Year	Object	Methodology
1	Nove Anna, Endang Mannan, Srirahayu	Evaluation of The Role of Society-based Library in Empowering Surabaya City People	2019	Surabaya Society-based library (TBM)	Descriptive, Observation, Interview

Table 2. 1 Previous Researches (continued)

No	Researchers	Title	Year	Object	Methodology
2	Herlina Rahmawati	*Analisis Kualitas Pelayanan jasa menggunakan Metode Servqual dan Importance Performance Analysis di Kantor Perpustakaan dan Arsip Kabupaten Karanganyar*	2010	Kantor Perpustakaan dan Arsip Kabupaten Karanganyar	Servqual, IPA
3	M. Rino Akbar	*Analisis Kualitas Pelayanan Terhadap Pelanggan dengan Metode Service Quality dan Importance Performance Analysis*	2018	*Bengkel AHASS Tamsis Jaya Baru*	Servqual, IPA
4	Wurdiyanti Astuti	*Pengaruh Kondisi Sosial Ekonomi Keluarga Terhadap Minat Belajar Siswa*	2016	Students of SMK YPKK 3 Sleman	Causal associative, Double Regression analysis
5	Amalia Khoirunnisa, Theresia	*Strategi Pemasaran dalam Taman Bacaan Masyarakat (TBM) dalam Meningkatkan Minat Baca Masyarakat*	2019	TBM Gencar Surabaya	Qualitative, Descriptive, 7P Marketing Tools

According to the previous researches explained above, this study will evaluate the service quality of the Surabaya Community-based library based on customers' socioeconomic conditions. This study is a modification and integration between research done by Rahmawati (2010) who analyze the service quality with Library and Archive office and research by Astuti (2016) that stated the effects of socioeconomic condition on the learning interest. One of the differences of this study and the research done by Rahmawati is the object that kind of similar but has different activities. The object of Rahmawati's research is a library. The other

difference is that this study is considering the socioeconomic factors of the community around to make sure the services provided are tailored with that the community needed. However, some of the SERVQUAL dimensions attributes in this study mostly using the ones on Rahmawati's research since the attributes were gained from the visitors.

CHAPTER 3
RESEARCH METHODOLOGY

This chapter explains the framework of thought or the stages of the final project research implementation process. This chapter also presents research methodology flow diagrams to make it easier to understand the sequence of stages created so that research can proceed in a structured and systematic manner.

3.1   Research Methodology Flowchart

This subchapter presents research methodology flow diagrams to make it easier to understand the sequence of stages created so that research can proceed in a structured and systematic manner. The flow diagram will be shown below
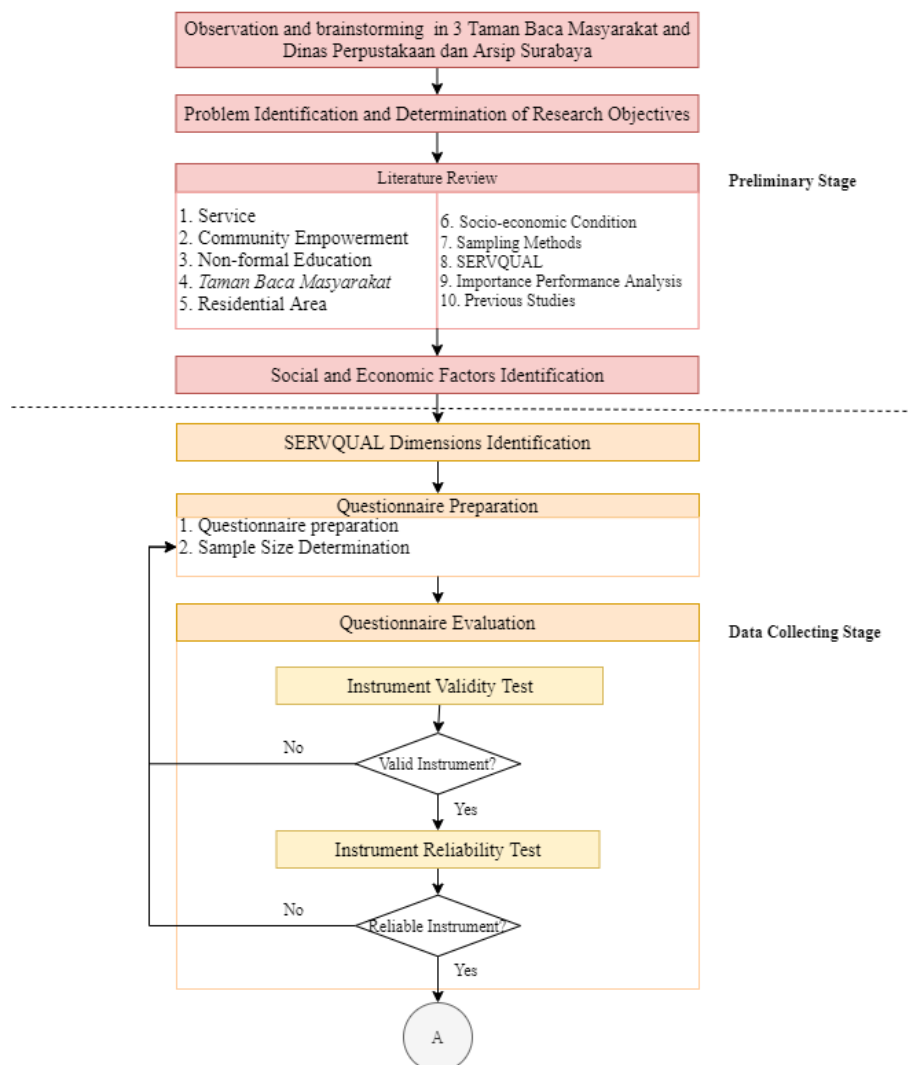
Figure 3. 1 Research Methodology Flowchart
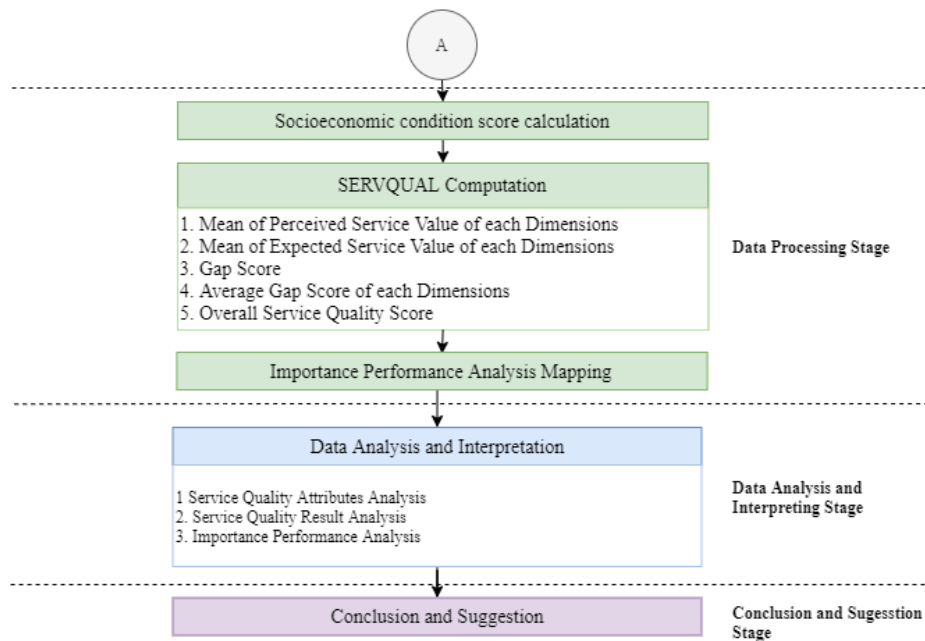
Figure 3. 2 Research Methodology Flowchart (continued)

3.2   Methodology Flowchart Explanation

This subchapter explains the methodology flowchart in detail. The stages in conducting the research will be explained below.

3.2.1   Preliminary Stage

This preliminary stage consists of observation and brainstorming, problem identification, literature review, and SERVQUAL dimension and socioeconomic factors identification.

1.   Observation and Brainstorming

Observation and brainstorming were done by visiting three different TBM in Keputih, Kejawan Tambak, and Semolowaru and conducting observations. Brainstorming was done by having a preliminary interview with the staff of TBM about the Business Model Canvas of TBM and discussion with Surabaya Library and Archive Service employee.

2.   Problem Identification

Problem identification is conducted to be researched in this study. The problem in this research is the service quality and community preference of

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Community-based Library in Surabaya based on socioeconomic conditions using SERVQUAL and Importance Performance Analysis.

3. Literature Review

The literature review was done to gain an understanding of every aspect of the problem under study and to find a suitable methodology for the problem identified which are SERVQUAL and Importance Performance Analysis.

4. Socioeconomic Factors Identification

The socioeconomic factors are gained from the previous studies and input recommendation from Surabaya Library and Archive officer. The table below shows the factors that will be used in this study.

Table 3. 1 Economic Factors and Indicators

Factors	Indicators	Answer option	Score
Total Family Income	Number of a family member	1 person	4
		2 to 4 people	3
		5 to 7 people	2
		> 7 people	1
	Family monthly family income (primary & additional)	Less than Rp500.000	1
		Rp500.000 - Rp2.000.000	2
		Rp2.000.000 - Rp4.000.000	3
		Rp4.000.000 - Rp7.000.000	4
		More than Rp7.000.000	5
Total Family Expense	Average monthly spending includes primary needs, education, health, electricity-water-telephone, transportation, and recreation	Less than Rp500.000	5
		Rp500.000 - Rp2.000.000	4
		Rp2.000.000 - Rp4.000.000	3
		Rp4.000.000 - Rp7.000.000	2
		More than Rp7.000.000	1
Assets Ownership	Homeownership status	Private	1
		Rent	0
	Housing type (permanent, semi-permanent (plywood, bamboo))	Permanent	2
		Semi-permanent	1
	Housing size type	More than 60 m²	5
		Type 60 (60 m²)	4
		Type 45 (45 m²)	3
		Type 21 (21m²)	2
		Less than 21 m²	1
Education level	Last education level	Bachelor	4
		High school	3
		Middle school	2
		Elementary school	1

(Source: Astuti W.Y., 2016)

The learning interest factor as the social factor will be separately analyzed with the economic condition with indicators as seen on table 3.2 below

Table 3. 2 Learning interest indicators

Factors	Indicators	Answer option	Score
Learning Interest	Enjoyment to receive learning material/training	Strongly Agree	4
	Level of attention when receiving learning material/training	Agree	3
	Frequency to participate in learning activities/training	Not agree	2
External Support	Family member gives support to the respondent in education/training	Strongly not Agree	1
	The neighborhood gives support to the respondent in education/training		

(Source: Astuti W.Y., 2016)

5. *SERVQUAL Dimension Identification*

SERVQUAL dimensions developed by Parasuraman will be identified in this stage. The dimensions that affect the quality of service will be modified corresponding to the customer needs in the previous studies and input from Surabaya Library and Archive officer.

3.2.2 *Data Collecting Stage*

This stage consists of trial questionnaire preparation and evaluation, then the actual questionnaire will be arranged, distributed and the response data will be gained.

1. *Questionnaire Preparation*

The questionnaire is prepared by making a list of questions to assess visitors' socioeconomic conditions and to measure the expected and perceived quality by the customers. The questionnaire will also ask the visitor to give their opinion, critique, and recommendation for the *Taman Baca Masyarakat* services. First, the respondents will have to fill in the questions about their name, age, job, and address. For the socioeconomic condition assessment, the questionnaire will have 12 questions as in Table 3.1 and Table 3.2, and the respondents have to choose one of the answer

options provided corresponding to their condition. As for the SERVQUAL measure, the respondent will have to choose their response to the statement of attributes with a Likert scale.

Table 3. 3 Likert Scale

Expectation/Importance		Perceived/Performance	
Scale	Scale	Scale	Definition
1	Not at all important	1	Strongly disagree
2	Slightly important	2	Disagree
3	Moderately important	3	Neutral
4	Very important	4	Agree
5	Extremely important	5	Strongly agree

The questionnaire that has been prepared will be spread to the respondents in 31 subdistricts including subdistricts with extreme residential conditions to reach desired customer segments and assess the service quality of *Taman Baca Masyarakat* based on it. The locations are selected based on the residential area characteristics mentioned in subchapter 2.5 assessed by Dinas Pekerjaan Umum Cipta Karya (2010) on their document of the development of settlements and urban infrastructure strategy. Table 3.4 below shows the selected residential area in Surabaya.

Table 3. 4 Surabaya Residential Area Categorization

No	Residential Area	Subdistrict
1	Densely populated downtown area	Wonokromo, Simokerto
2	Worker (industrial) settlement area	Rungkut, Gunung Anyar
3	Near college area	Sukolilo
4	Fisherman settlement area	Kenjeran, Bulak
5	Newly developed settlement area	Tandes, Sambikerep
6	City center (business) settlement area	Tegalsari, Lakarsantri, Genteng

(Source: Peraturan Daerah Kota Surabaya, 2016)

In order to reflects on Indonesia's Literacy Index, which are the index of people above 15 years old who can read and write, and the objectives of *Taman Baca Masyarakat* that focuses on community empowerment, the

respondent of the questionnaire in this study will be people above 15 years that have visited *Taman Baca Masyarakat* of Surabaya.

2. *Determining the sampling size*

In this stage, the population and sampling technique is determined. In this study, the population is a member of *Taman Baca Masyarakat Kota Surabaya*. The sampling technique used in this study is random sampling. The population of the Surabaya Community-based Library is unknown. Then the sample size is determined using Lemeshow Formula. The Lemeshow formula to determine sample size is: (Levy & Lemeshow, 2013)

$$n = \frac{Z_\alpha^2 \times p \times (1 - p)}{d^2}$$

where:

n = sample size

Z_α = confidence interval (95%)

p = proportion of the population under study

d = tolerable error level (10%)

Below is a calculation to determine the sample size. According to the secondary data gained from the Surabaya Library and Archive officers, there are only 18,9% of the Surabaya population utilized their service.

$$n = \frac{(1.96)^2 \times 0,189 \times 0,811}{0,1^2}$$

$$= 58,88$$

Thus, the result for the minimum sample size in this study is 60 respondents.

3. *Validity and Reliability Test*

In the questionnaire preparation, the questions are created corresponding to the SERVQUAL dimensions stated before this stage. The trial questionnaire will be distributed onto 30 samples to measure the validity and reliability of the questionnaire to determine whether the respondents able to understand the questions or not. The evaluation of the

trial questionnaire will be conducted using validity and reliability test and the unnecessary question will be re-evaluated or removed. After the trial evaluation, the actual questionnaire will be re-arranged and distributed.

a) Validity Test

Validity determines whether the measurement variables truly measure that it was intended to measure (Joppe, 2000). Construct validity is a judgment based on numerous studies using a specific measuring instrument to reveal something that is intended by the questionnaire. The measuring instrument is valid if it has a big contribution to the total score (Sugiyono, 2010). Validity test is done by using the Pearson Correlation Coefficient with the formula below:

$$r = \frac{n\left(\sum XY\right) - \left(\sum X\right)\left(\sum Y\right)}{\sqrt{[n(\sum X^2) - (\sum X)^2][n(\sum Y^2) - (\sum Y)^2]}}$$

Where:

r = Pearson correlation between X and Y

n = Number of respondents

X = First variable scores

Y = Second variable scores

Validity test in this research will be calculated using SPSS with the following steps (Raharjo S. , 2019):

1. Determine the total score for each attribute
2. Click Analyze > Correlate > Bivariate
3. Put all attributes item to the Variables
4. Choose Pearson; Two-Tailed; Flag significant correlation
5. Click OK

b) Reliability Test

The reliability test is a test that serves to measure the reliability and internal consistency of indicator variables to represent dimensions. Internal consistency gives an estimate of the equivalence of sets of items

from the same test (Kimberlin & Winterstein, 2008) To determine the reliability of the instrument, Cronbach's alpha will be used. Cronbach's alpha is a function of the average intercorrelations of items and the number of items in a scale. According to Putro (2013), the acceptable coefficient values above 0,7. Cronbach coefficient formula will be shown below (Putro, 2013):

$$\alpha = \left(\frac{K}{K-1}\right)\left(\frac{S_x^2 - \sum S_i^2}{S_x^2}\right)$$

Where:

α = Alpha Cronbach Coefficient

K = Number of questions item

$\sum S_i^2$ = Number of score variants

S_x^2 = Test Score variants

Reliability test in this research will be calculated using SPSS with the following steps (Raharjo, 2019):

1. Click Analyze > Scale > Reliability Analysis
2. Put all attribute item into Items
3. Make sure to choose the Alpha model, and select 'scale if item deleted'
4. Click OK

The following table is the acceptable indicator to determine whether the instrument is valid and reliable or not

Table 3. 5 Validity and Reliability Test Criterion

Analysis	Acceptable Value	Reference
Validity Test	$r_{attribute} > r_{table}$	(Putro, 2013)
Reliability Test	Cronbach's $\alpha \geq 0,6$	

3.2.3 Data Processing Stage

This stage consists of the calculation for the socioeconomic score, the SERVQUAL gap, and the Importance-Performance Mapping.

1. *Socioeconomic score calculation*

Each of the answer options provided in the questionnaire for each question and will have their own value (see Table 3.1 and Table 3.2). The answer will be added up to determine the socioeconomic condition of each respondent. After the total score of the answer from each respondent is gained, then the socioeconomic condition will be classified. Table 3.6 below shows the classification formula of the socioeconomic factors depend on the total score

Table 3. 6 Socioeconomic Classification Formula

Category	Formula
High	$(X \geq M_i + SD_i)$
Moderate	$(M_i - 1\,SD_i) \leq X < (M_i + 1\,SD_i)$
Low	$(X < M_i - SD_i)$

Where:

M_i = Ideal mean

SD_i = Ideal standard deviation

2. *SERVQUAL*

This stage consists of the calculation of the SERVQUAL gap for each attribute, mean of perceiving and expected value, and the overall service quality score. To calculate servqual value, the mean of perceived and expected value will be calculated first using the formula below:

$$\bar{X}E_i = \frac{\sum E_i}{n}$$

$$\bar{X}P_i = \frac{\sum P_i}{n}$$

Where:

$\bar{X}E_i$ = mean of expected value for each attribute i

$\bar{X}P_i$ = mean of perceived value for each attribute i

$\sum E_i$ = total expected value for each attribute i from all respondents

$\sum P_i$ = total perceived value for each attribute i from all respondents

n   = number of respondents

    After determining the attributes, the SERVQUAL calculation to analyze the gap between perceived and expected value will be developed. According to Parasuraman et al, below are the formulas to obtain the service quality rate:

- Difference between expected variables and perceived variables:

$$Gap\ Score = Perceived\ Service - Expectation$$

- The result of the computation will be:
  - When ES > PS, it will tend toward totally unacceptable quality
  - When ES = PS, perceived quality is satisfactory
  - When ES < PS, Perceived quality is more than satisfactory and will tend toward ideal quality

    A negative servqual score indicates the quality gap of the attribute quality. A positive servqual score indicates the attribute quality that is enough to satisfy the visitor.

- Overall service quality:

    To calculate the overall service quality provided by the provider, the formula by Besterfield in Handoko (2011) will be used.

$$Service\ Quality\ (Q) = \frac{Perceived\ Service}{Expectation}$$

    From the formula above, if the result of $Q \geq 1$, it can be stated that the service quality is good. Otherwise, if $Q \leq 1$, the quality of the service need to be improved.

3. *Importance Performance Analysis Mapping*

    Importance Performance Analysis is used to determine the position of various service attributes and determine the action required based on the importance and performance of each attribute in the Cartesian diagram. The horizontal axis (x) will be filled by the perception level score, while the vertical axis (y) will be filled by the expectation level score. Below are the formulas to position each attribute

$$\bar{X} = \frac{\sum Xi}{n}$$

$$\bar{Y} = \frac{\sum Yi}{n}$$

Where:

X = Mean perception / performance score

Y = Mean expectation / importance score

n = Number of respondents

Importance Performance Analysis for each attribute will be positioned using SPPS Software with the following steps:

1. Input means performance and importance score of each attribute
2. Click Graphs > Legacy dialogs > Scatter/Dot
3. Click Simple Scatter > Define
4. Put Performance to the X-axis column, and Importance to the Y-axis > Click OK (plots will be generated)
5. Double click plots
6. Click Add a Reference Line to the X-axis, then input total mean performance, Click Mean > Apply
7. Click Add a Reference Line to the Y-axis, then input total mean importance, Click Mean > Apply
8. To show attribute number ID, click Elements > Data Label Mode, then click on the plots.

3.2.4 Data Analysis and Interpretation Stage

Data Analysis and interpretation stage is the result stage of data processing that has been done. The results of data processing will explain 1) Visitors' socioeconomic condition analysis 2) The attributes of service affecting the service quality, 3) Service quality analysis, 4) Visitors' service preference analysis, and 5) Importance Performance Analysis.

3.2.5 *Conclusion and Suggestion Stage*

The conclusion and suggestion stage are the last stage of this final project research. The conclusions obtained from the analysis and interpretation of data and must answer all the objectives of this final project research, such as 1) The attributes of service affecting the service quality, 2) The service quality level based on visitors' socioeconomic condition, 3) Visitors' preference of service and 4) The recommendation and improvement to increase the service quality. Suggestions are given for Surabaya Library and Archive office and this final project research if there are any deficiencies.

CHAPTER 4
DATA COLLECTING AND PROCESSING

This chapter explains about the attribute identification, the data collection obtained from questionnaires that have been filled by respondents, data validity and reliability test, and data processing using SERVQUAL and IPA.

4.1 Attribute Identification

Before the questionnaire were distributed, the attribute identification was done to gain basic attributes of the Community-based Library's services that fulfill visitors' needs and obtain visitors' satisfaction. The attributes are obtained from author's direct observation and from the journal by Emru (2010); Anna, Mannan, and Srirahayu (2019); and *Buku Juknis TBM Rintisan* (Technical implementation guidelines of Community-based Library) by Indonesian Ministry of Education. Then author did interview with the staff and the authorities of Surabaya Public Library officer to validate the attributes gained before since community-based library did not have any specific service standard. These attributes were used to measure the service quality in this research which will be shown on Table 4.1 below.

Table 4. 1 Identified Service Attributes

Dimension	Symbol	Attribute	Source Previous Study	Authorities
Tangible	TA1	Taman baca has an outdoor area	✓	
	TA2	Taman baca has accessible location		✓
	TA3	The reading room has an interesting design	✓	
	TA4	Book collections are complete and in good condition	✓	
	TA5	Book collections have fulfilled customer needs		✓
	TA6	Book collections are well arranged	✓	
	TA7	The reading room has a comfortable, bright, clean, quiet and smoke-free area	✓	

Table 4. 2 Identified Service Attributes (continued)

Dimension	Symbol	Attribute	Source	
			Previous Study	Authorities
	TA8	Learning equipment is complete (paper, pencil, colored pencil, crayons, whiteboard)		✓
	TA9	Trash bin available	✓	
	TA10	Internet available	✓	
Reliability	REL1	Borrowing and returning procedures are easy	✓	
	REL2	Borrowing time limit is sufficient		✓
	REL3	Operational time is sufficient		✓
	REL4	The reward for active visitors	✓	
	REL5	Training and other activities held are suitable for visitors' needs.		✓
	REL6	Competitions and art performance are available		✓
Responsiveness	RES1	Staffs are always ready to answer visitors' questions	✓	
	RES2	Staffs always willing to help visitors	✓	
	RES3	Staffs can understand visitors' needs		✓
Assurance	AS1	Staffs handle demand and complaints well	✓	
	AS2	Staffs have sufficient knowledge to answer visitors' questions	✓	
	AS3	Staffs have skills to interact with children		✓
	AS4	Staffs have good behavior and trustworthy	✓	
	AS5	Staffs instill self-confidence in visitors	✓	
Empathy	EM1	Staffs can follow visitors' improvement in every visit		✓

4.2   Data Collecting

This subchapter shows the result of the questionnaire, data validity test, and data reliability test.

4.2.1   *Questionnaire Distribution*

After the questionnaire was arranged, it was validated by the officer, and then distributed to the respondents who are the visitors of community-based library

in Surabaya with age above 15 years old. It distributed directly for 5 days from July 13th 2020 until July 18th 2020. The questionnaire in this research has five sections, which are:

- Section 1, is a section to identify demography data of the visitors including domicile, age, occupation, and latest education.
- Section 2, is a section to identify economic condition of the visitors
- Section 3, is a section to identify learning interest of the visitors
- Section 4, is a section where visitors identify the importance of the service attributes
- Section 5, is a section where visitors identify the performance of the service attributes

The total of the responses has fulfilled the 60 minimum sample required. From 160 responses, three of them cannot be processed because there is no address of the community-based library they have ever visited. Thus, there are 157 data will be processed into descriptive data and will be used measure the gap between expectation and perceived service of community-based library in Surabaya

4.2.2   *Validity Test*

Before the expectation and perceived data collected from the questionnaire are processed, validity test to the response will be conducted. Validity test in this study is construct validity which is calculating the correlation coefficient between each attribute score for each respondent with the total score of each respondent. The method used for is Product Moment Pearson, and the result will be stated as Pearson correlation. The attribute will be valid if $r_{attribute}$ is bigger than the r_{table}, and invalid attributes will not be processed.

The SPSS 24 Software is used to calculate the Pearson correlation. With the level of significance is 5%, and number of respondents of 72, the df will equal to 70, then the r_{table} is 0,231. The result of the calculation will be shown in the Table 4.2 below.

Table 4. 3 Overall Validity Test Result

Expectation				Perceived			
Attribute	Pearson Correlation	R Table	Result	Attribute	Pearson Correlation	R Table	Result
TA1	0.442	0.231	Valid	TA1	0.543	0.231	Valid
TA2	0.51	0.231	Valid	TA2	0.665	0.231	Valid
TA3	0.734	0.231	Valid	TA3	0.734	0.231	Valid
TA4	0.525	0.231	Valid	TA4	0.462	0.231	Valid
TA5	0.767	0.231	Valid	TA5	0.571	0.231	Valid
TA6	0.773	0.231	Valid	TA6	0.625	0.231	Valid
TA7	0.553	0.231	Valid	TA7	0.607	0.231	Valid
TA8	0.738	0.231	Valid	TA8	0.574	0.231	Valid
TA9	0.673	0.231	Valid	TA9	0.602	0.231	Valid
TA10	0.408	0.231	Valid	TA10	0.49	0.231	Valid
REL1	0.754	0.231	Valid	REL1	0.746	0.231	Valid
REL2	0.724	0.231	Valid	REL2	0.618	0.231	Valid
REL3	0.811	0.231	Valid	REL3	0.501	0.231	Valid
REL4	0.665	0.231	Valid	REL4	0.601	0.231	Valid
REL5	0.764	0.231	Valid	REL5	0.449	0.231	Valid
REL6	0.697	0.231	Valid	REL6	0.606	0.231	Valid
RES1	0.871	0.231	Valid	RES1	0.615	0.231	Valid
RES2	0.782	0.231	Valid	RES2	0.625	0.231	Valid
RES3	0.765	0.231	Valid	RES3	0.73	0.231	Valid
AS1	0.838	0.231	Valid	AS1	0.666	0.231	Valid
AS2	0.85	0.231	Valid	AS2	0.605	0.231	Valid
AS3	0.66	0.231	Valid	AS3	0.639	0.231	Valid
AS4	0.644	0.231	Valid	AS4	0.508	0.231	Valid
AS5	0.605	0.231	Valid	AS5	0.528	0.231	Valid
EM1	0.726	0.231	Valid	EM1	0.703	0.231	Valid

According to the validity test result towards 72 responses above, the level of expectation and perceived value in each attribute are bigger than 0,231 that indicates the validity of each attributes. Thus, there are no attributes that should be removed and these attributes are valid to be used for further survey, data processing, and analysis.

4.2.3 Reliability Test

The next step in data processing is reliability test, where the data used in this test is valid data according to the validity test. Reliability test is used to measure the reliability and internal consistency of indicator variables to represent dimensions or to show how far the metrics are reliable where respondents could give consistent answer towards the questions. The method used to determine reliability is Cronbach's Alpha coefficient using SPSS 24 Software. The data is reliable if the generated Cronbach's Alpha coefficient is greater than 0,6. Table 4.4 below shows the Cronbach's Alpha coefficient generated for expectation and perceived attributes.

Table 4. 4 Reliability Test Result (Cronbach's Alpha)

Data	Cronbach's Alpha
Expectation/Importance	0.952
Perceived/Performance	0.916

The calculation result of Cronbach's alpha for expectation attributes is 0,940, while for the perceived attributes is 0,945 which are greater than the critical value 0,6. According to the previous terms, it can be concluded that from 72 respondents, all of the could give consistent answers for 25 attributes in the questionnaire.

4.2.4 Questionnaire Result

The data collected from the questionnaire are divided into 4 sections, which are respondents' demography data, socioeconomic data, and expectation and perceived service quality data. This sub sub-chapter only consist of respondents' demography data and respondents' socioeconomic data. Expectation and perceived service quality data will be shown in the data processing subchapter since the socioeconomic data need to be calculated first.

4.2.4.1 Respondents' Demography Data

In this section, respondents' demography data will be divided into domicile, age, occupation, and latest education.

1. Domicile

This research is restricted for respondents that ever have visited community-based library in Surabaya in 31 Sub-District. The domicile of the respondents is represented by the library they visited. The distribution of the domicile based on sub-districts will be shown in the Table 4.4 below. Sub-district that have the most respondents is Semampir which has 15 respondents and equal to 9,4%.

Table 4. 5 Respondent Domicile Distribution based on Sub-district

Sub-district	Number of Respondents	Percentage	Sub-district	Number of Respondents	Percentage
Semampir	15	9.4%	Pakal	4	2.5%
Kenjeran	13	8.2%	Sambikerep	4	2.5%
Tambaksari	11	6.9%	Tegalsari	4	2.5%
Wonocolo	9	5.7%	Wonokromo	6	3.8%
Rungkut	8	5.0%	Bubutan	3	1.9%
Sukolilo	8	5.0%	Sukomanunggal	3	1.9%
Genteng	7	4.4%	Tandes	3	1.9%
Mulyorejo	6	3.8%	Tenggilis Mejoyo	3	1.9%
Sawahan	6	3.8%	Asemrowo	2	1.3%
Benowo	5	3.1%	Bulak	2	1.3%
Gubeng	5	3.1%	Gunung Anyar	2	1.3%
Krembangan	5	3.1%	Jambangan	2	1.3%
Dukuh Pakis	4	2.5%	Simokerto	2	1.3%
Gayungan	4	2.5%	Wiyung	2	1.3%
Karangpilang	4	2.5%	Pabean Cantian	1	0.6%
Lakarsantri	4	2.5%	**Total**	**157**	**100.0%**

The blue-highlighted sub-districts are the sub-districts that follows the extreme residential areas categorized in Table 3.4 Surabaya Residential Area Categorization for further analysis of its' socioeconomic condition.

2. Age

Another information gained from the questionnaire is respondents' age. The age group is made based on the information from World Health Organization (WHO). This research also restricted to the respondents above 15 years old, follows the World Literacy Index which is people above 15 years old who can read and write. The result of the respondent age could be seen in Figure 4.1 below. Most of

the respondents come from the age range of 15 -24 years old with the percentage of 50.3%. While the second largest is 65 respondents are 25-44 years old with the percentage of 41.4%. Respondents age 45 – 60 years old are 11 which is 7 %, and 2 respondents with the percentage of 1.3% are more than 60 years old.

Age

Respondent Age	Quantity	Percentage
15 - 24 years old	79	50.30%
25 - 44 years old	65	41.40%
45 - 60 years old	11	7.00%
more than 60 years old	2	1.30%
Total	**157**	**100%**
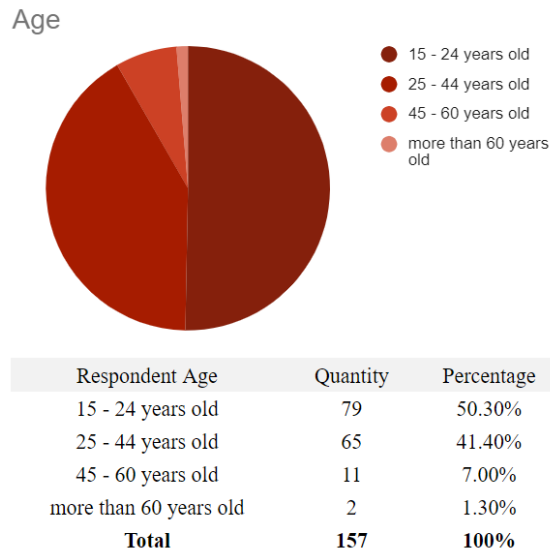
Figure 4. 1 Respondent's Age Distribution

3. Occupation

The occupation of the respondent was recorded to gain more information about the visitors' segment, such as which occupation is more likely to visit the community-based library. The result of the visitors' occupation could be seen in Figure 4.2 below. Mostly the visitors are students with the percentage of 36,90%, employees, and unemployed people.

Occupation

Respondent Occupation	Quantity	Percentage
Student	58	36.90%
Employee	51	32.50%
Housewife/ Unemployed	32	20.40%
Teacher	8	5.10%
Civil servants	3	1.90%
Entepreneur	2	1.30%
Street vendors	1	0.60%
Drivers	1	0.60%
Retired	1	0.60%
Total	**157**	**100.00%**
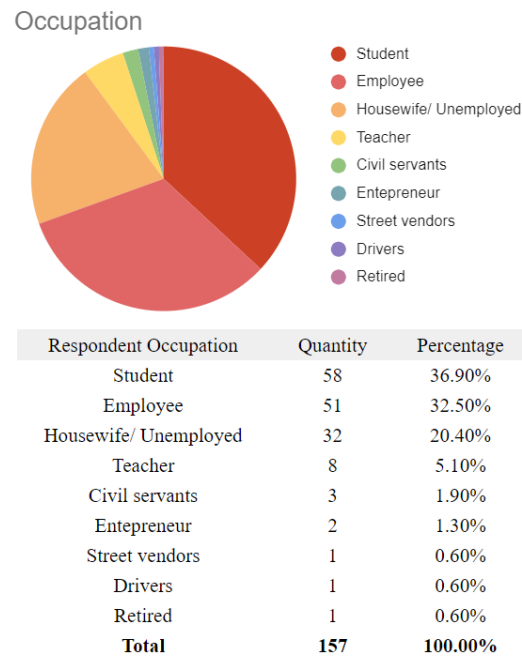
Figure 4. 2 Respondents' Occupation Distribution

4. Education

The latest education of the respondents also recorded and is classified according to the existing education in Indonesia. The result of the respondents' latest education could be seen in Figure 4.3 below. Based on the responses, the visitors of the community-based library in Surabaya latest education are mostly High school graduates with the percentage of 52,2%, and Bachelor with the percentage of 29,3%.

Respondent Education	Quantity	Percentage
High school/ Vocational	82	52.20%
Diploma/Undergraduates	46	29.30%
Junior high school	23	14.60%
Elementary school	6	3.80%
Total	**157**	**100.00%**
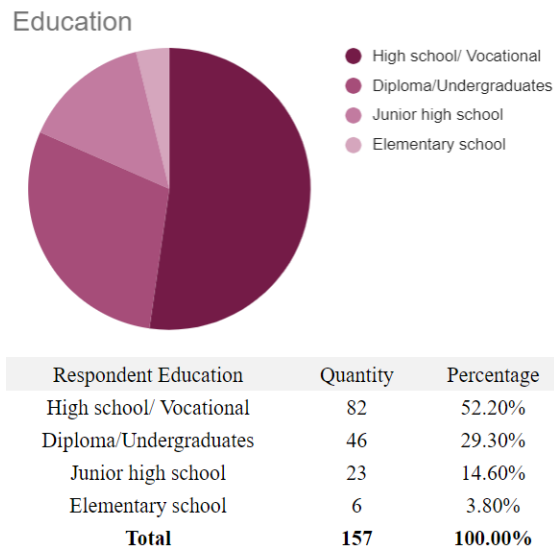
Figure 4. 3 Respondents' Latest Education Distribution

4.2.4.2 Respondents' Socioeconomic Data

In this section, respondents' Socioeconomic data will be divided into economic condition and learning interest.

1. Respondents' Economic Condition

Respondents' economic condition is one of factor to measure their socioeconomic condition that consists of number of family member, income, latest education, and home ownerships, including its building type, and building area.

a. Respondents' Number of Family Members

Respondents' family members become one of the variables to measure family economic condition. Number of family members represent the family financial responsibility since per capita income is derived from family income divided by the number of family members. From Figure 4.2 above, it can be seen that mostly 60,51% or 95 respondents' family size are ranged between 2 to 4 people. The second largest family size is ranged between 5 to 7 people, and there are 4 respondents have family member more than 7 people.

Respondents' Family Member
- 1 person
- 2-4 people
- 5-7 people
- more than 7 people

| Family Member	Quantity	Percentage
1 person	1	0.64%
2-4 people	95	60.51%
5-7 people	57	36.31%
more than 7 people	4	2.55%
Total	**157**	**100.00%**
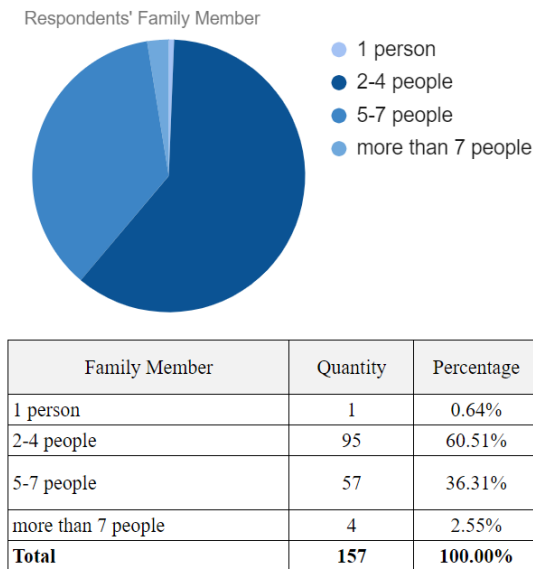
Figure 4. 4 Respondents' Number of Family Members Distribution

b. Income

Income is one of main variables to measure respondents' economic condition. In this research, respondents' monthly family income is subtracted with monthly family spending or expenses. In the questionnaire, respondents were asked to determine which range their monthly family income and monthly family expenses. Then, the classification of income vs. expenses are derived into 5 categories:

- Level 0, means that the income is less than the expenses
- Level 1, means that the income is equal to the expenses
- Level 2, means that the income is higher than the expenses
- Level 3, means that the income is higher two range from the expenses. For example, the income is in range 4 and the expenses is range 2.
- Level 4, means that the income is higher three range from the expenses. For example, the income is in range 5 and the expenses is range 2.

Figure 4.5 below shows the distributions of respondents' family income compared with family spending. It could be seen that most of the respondents with the percentage of 54,14% are in level 1, which means their monthly income is equal to monthly expenses. There are 36,31% of the respondents has income that higher than the expenses, and 8 respondents who have income that less than the expenses.

Income vs Expenses	Quantity	Percentage
Level 0 (income < expenses)	8	5.10%
Level 1 (income = expenses)	85	54.14%
Level 2 (income > expenses)	57	36.31%
Level 3 (income >> expenses)	5	3.18%
Level 4 (income >>> expenses)	2	1.27%
Total	**157**	**100.00%**
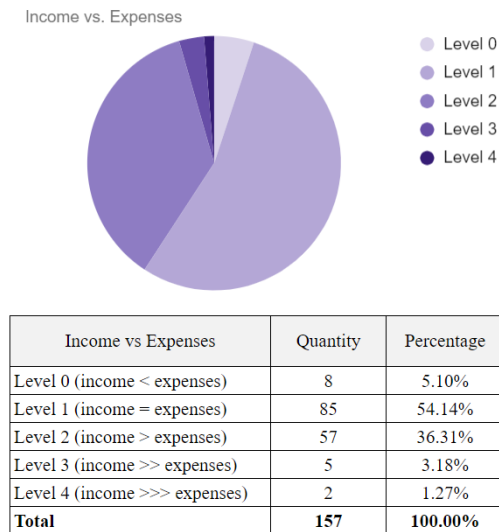
Figure 4. 5 Respondents' Monthly Family Income vs Expenses Distribution

c. Respondents' Latest Education

Respondents' latest education also become one of the variables that took place in socioeconomic assessment. It shows the opportunity of higher occupancy rate that affects the socioeconomic score. From Figure 4.6 below, it could be seen that 52,20% respondents' latest education is high school or vocational high school, 29,30% have diploma or bachelor degree, 14,60% are junior high school graduates and the rest are elementary school graduates.

| Respondent Education	Quantity	Percentage
High school/ Vocational	82	52.20%
Diploma/Undergraduates	46	29.30%
Junior high school	23	14.60%
Elementary school	6	3.80%
Total	**157**	**100.00%**
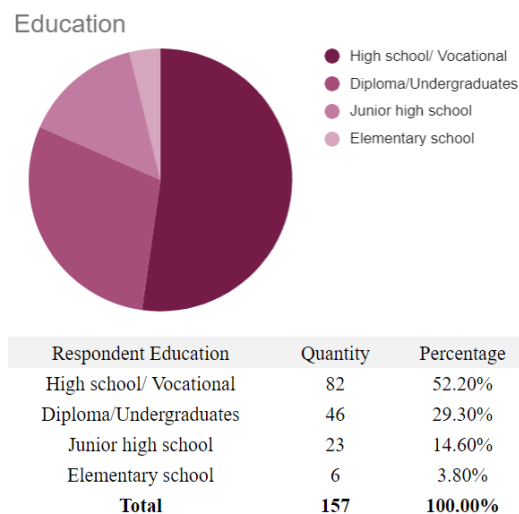
Figure 4. 6 Respondent's Latest Education Distribution

d. Home Ownership

Home ownership is become one of the variables to measure economic condition it represents respondents' assets ownerships. Figure 4.7 below shows that most of the respondents live in their own home with the percentage of 79.62%, and the rest are live in the rent house, rent room, or flats.

| Asset Ownership (House)	Quantity	Percentage
Private House	125	79.62%
Rent	32	20.38%
Total	**157**	**100.00%**
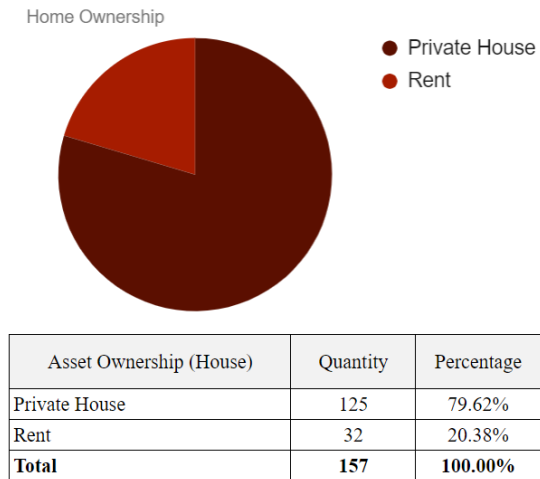
Figure 4. 7 Respondents' Home Ownerships Distribution

e. Building Type

The type of the building is become one of the variables to measure economic condition since permanent buildings indicate higher assets value or higher rental rate. From figure 4.8 below, it could be seen that 91,72% of the respondents lives in the permanent buildings, and there are 13 respondents live in semi-permanent buildings.

| Building	Quantity	Percentage
Permanent	144	91.72%
Semi-permanent	13	7.64%
Total	**157**	**100.00%**
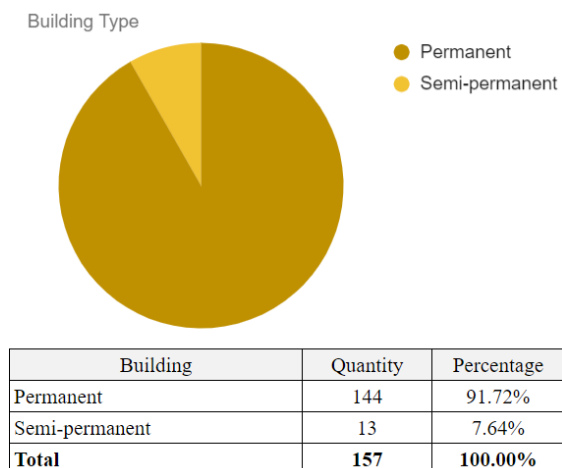
Figure 4. 8 Respondents' Home or Building Type

f. Respondents' Living Area

Respondents' living area also included as variable to measure their economic condition since wider living area indicates higher assets or rent value that affect the financial status. In the figure 4.9 below, it could be seen that 24,84% of the respondents live in 21 square meter living area, 22,93% live in the less than 21 square meter living area, 21, 66% live in the more than 60 square meter living area, 17,83% of the respondents live in 45 square meter living area, and 12,74%% of the respondents live in 60 square meter living area.

Living Area	Quantity	Percentage
Less than 21 sq. metre	36	22.93%
21 sr. metre	39	24.84%
45 sq. metre	28	17.83%
60 sq. metre	20	12.74%
more than 60 sq. metre	34	21.66%
Total	**157**	**100.00%**
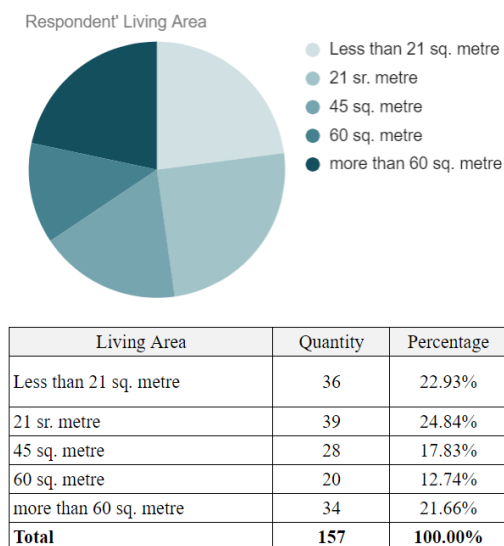
Figure 4. 9 Respondents' Living Area Distribution

2. Respondents' Learning Interest

Respondents' learning interest is the other factor that combined with economic condition to measure respondents' economic condition in this research. It derives into respondents' enjoyment level when receiving learning material or training, level of attention when receiving learning material or training, and also support received from family and neighborhood for respondents' learning interest.

a. Respondents' Learning Activities

Respondents' learning activities consists of learning activities respondents ever participated in. It represents how interested the respondents are towards the learning opportunities. In the questionnaire, respondents were asked to choose every learning activities that they have ever visited with the options of:

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- College/ University

- School

- Skill courses

- Language courses

- Paid trainings from governments or corporates

- Free trainings from governments or corporates

- Learn on your own from books, internet, or other sources
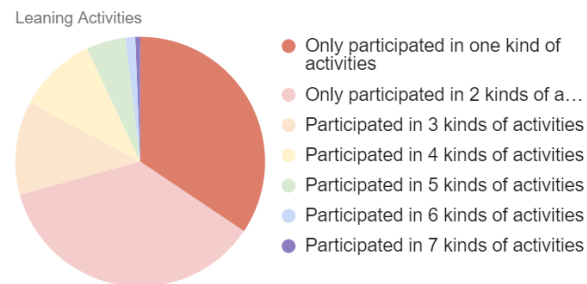
Learning Activities Type Respondents ever Participated in	Quantity	Percentage
Only participated in one kind of activities	54	34.39%
Only participated in 2 kinds of activities	57	36.31%
Participated in 3 kinds of activities	19	12.10%
Participated in 4 kinds of activities	16	10.19%
Participated in 5 kinds of activities	8	5.10%
Participated in 6 kinds of activities	2	1.27%
Participated in 7 kinds of activities	1	0.64%
Total	**157**	**100.00%**

Figure 4. 10 Respondents' Learning Activities

From Figure 4.10 above, it could be seen that most of the respondents (36,31%) participated in 2 kind of activities, followed by 34,3% respondents that only participated in one learning activities.

b. Enjoyment to receive learning material/training

Respondents' enjoyment level when receiving learning material or training shows their interest towards learning with no pressure. Figure 4.11 below shows the distribution of respondents' responds whether they enjoy the learning activities they received or not. It could be seen that 49,04% of 157 respondents are agree that they enjoy their learning activities, 32,48% are strongly agree that they enjoy their learning activities, 15,92% are neutral, 1,91% not agree, and 0,64% are not agree.

Enjoyment to receive learning material/training
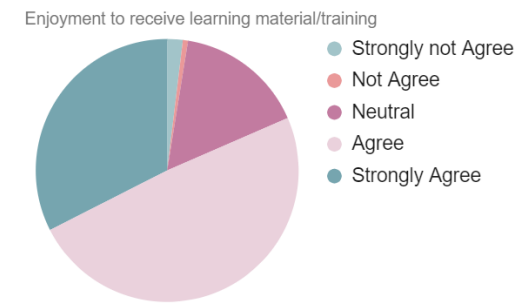
Enjoyment to receive learning material/training	Quantity	Percentage
Strongly not Agree	3	1.91%
Not Agree	1	0.64%
Neutral	25	15.92%
Agree	77	49.04%
Strongly Agree	51	32.48%
Total	**157**	**100.00%**

Figure 4. 11 Respondents' Enjoyment Level

c. Level of attention when receiving learning material/training

Respondents' attention level when receiving learning material or training shows their interest towards learning with no pressure. In the questionnaire, respondents ask to choose one of five statements about how they give attention on their learning activities. Figure 4.12 below shows the distribution of respondents' responds whether they give enough attention to their learning materials or not. It could be seen that 69.43% of 157 respondents say that their attention level given to the learning materials is high, 29,3% say that their attention level given to the learning materials is very high, and 1,27% are low.

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Level of attention when receiving learning material/training

● Low
● High
● Very High

Level of attention when receiving learning material/training	Quantity	Percentage
Very Low	0	0.00%
Low	2	1.27%
High	109	69.43%
Very High	46	29.30%
Total	**157**	**100.00%**
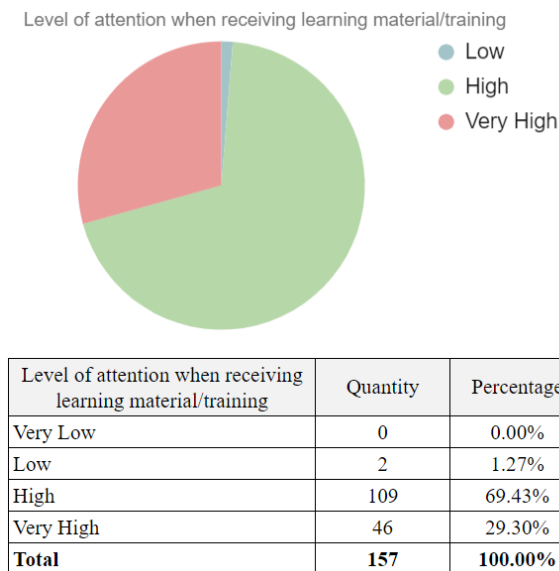
Figure 4. 12 Respondents' Attention Level towards the Learning Materials

d. Frequency to participate in learning activities or training

Respondents' learning frequency shows their interest towards learning. In the questionnaire, respondents ask to choose one of four statements about how often they participate in various learning activities, which are:

- Very low. Never participate in any learning activities

- Low. Only participate in learning activities that are suit with their interest infrequently

- High. Only participate in learning activities that are suit their interest frequently

- Very high. Always participate in learning activities whether it suit their interest or not

Figure 4.13 below shows the distribution of respondents' responds about the frequency of their learning activities. It could be seen that 43,95% of 157 respondents say that their learning frequency is high, 31,22% say that their learning frequency is low, 23,57% very high, and 1,27% very low.

Frequency to participate in learning activities/training
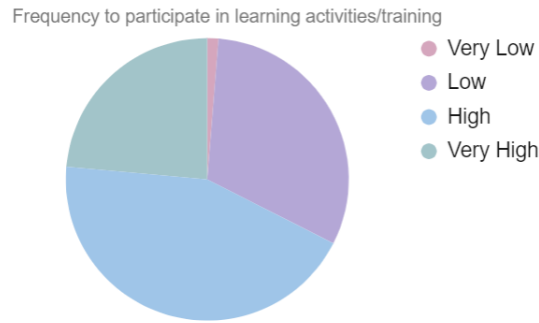
| Frequency to participate in learning activities/training	Quantity	Percentage
Very Low	2	1.27%
Low	49	31.21%
High	69	43.95%
Very High	37	23.57%
Total	**157**	**100.00%**

Figure 4. 13 Respondents' Learning Frequency Distribution

e. Family member gives support in education or training

Respondents' family support is included as one of the variables to measure socioeconomic condition since it is very important for an individual to have support from the family financially and mentally as it will be easier for them to participate in any learning activities well. Respondents' are given a statement "Family member gives support in your education" and they need to respond the statement by choosing one of four statements below:

- Strongly not agree, means "They don't support my learning activities financially and mentally at all"
- Not agree, means "They only support my learning activities mentally"
- Agree, means "They only support my learning activities financially"
- Strongly agree, means "They support my learning activities financially and mentally"

Figure 4.14 below shows the distribution of the responds. It could be seen that 56,69% of 157 respondents stated that they are strongly agree, 36,94% stated that they are agree, 5,10% stated that they are not agree, and the rest are stated that they are strongly not agree.

Family member gives in education/training

- Strongly not Agree
- Not Agree
- Agree
- Strongly Agree

| Family member gives in education/training	Quantity	Percentage
Not at all	2	1.27%
Only support mentally	8	5.10%
Only support financially	58	36.94%
Support mentally and financially	89	56.69%
Total	**157**	**100.00%**
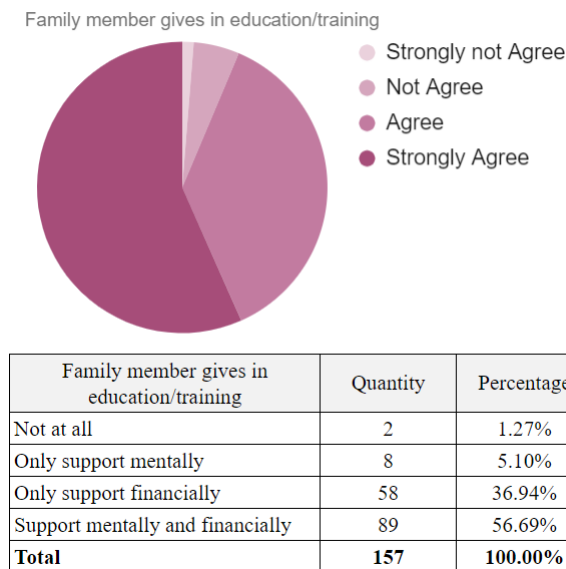
Figure 4. 14 Respondents' Family Support Distribution

f. Neighborhood gives support in education or training

Respondents' neighborhood support is also included as one of the variables to measure socioeconomic condition since it is very important for an individual to have support from the neighborhood mentally. Unsupportive neighborhood could lead into losing in learning interest. Respondents' are given a statement "Neighborhood gives support in your education activities" and they need to respond the statement by choosing one of four statements below:

-   "They don't support my learning activities financially and mentally at all"
-   "They only support my learning activities financially"
-   "They only support my learning activities mentally"
-   "They support my learning activities financially and mentally"

Figure 4.15 below shows the distribution of the responds. It could be seen that 63,9% of 157 respondents stated that their neighborhood supports them mentally, 33,76% stated their neighborhood support them mentally and financially, 1,91% stated that their neighborhood supports them financially, and the rest are stated that their neighborhood not support them at all.

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The neighborhood gives support in education/training

The neighborhood gives support in education/training	Quantity	Percentage
Not at all	2	1.27%
Only support financially	3	1.91%
Only support mentally	99	63.06%
Support mentally and financially	53	33.76%
Total	**157**	**100.00%**
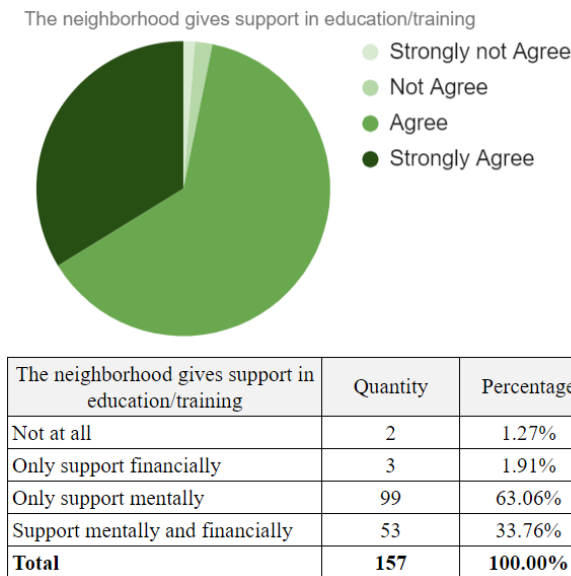
Figure 4. 15 Respondents' Neighborhood Support Distribution

4.3 Data Processing

This subchapter shows the calculation of visitors' socioeconomic condition, SERVQUAL score, and the mapping of importance performance analysis.

4.3.1 Socioeconomic Assessment

This section consists of descriptive data calculation and recapitulation of economic condition and learning interest, and also the recapitulation of overall respondents' socioeconomic condition.

4.3.1.1 Economic Condition Classification

Collected data of respondents' economic condition will be scored corresponding to the scoring system in Table 3.1 based on respondents' responses and the whole economic value is added up. To interpret the data, it derived into 3 categories which are High, Moderate, and Low. These categories are determined from mean and standard deviation value. The formula of this calculation is stated in Table 3.6 Socioeconomic classification formula.

The mean value of the economic condition is known to be 13, and the standard deviation is 2. Thus, the respondents with economic value above 15 will be classified as high economic condition and below 11 will be classified as lower

economic condition. The result of the calculation could be seen in Table 4.5 below. According to the result, the economic condition of the visitors of community-based library in Surabaya are mostly in the Moderate category with the percentage of 54,78% or 86 out of 157 respondents.

Table 4. 6 Economic Condition Classification Result

Economic Condition			
Category	Class	Frequency	Percentage
High	$X \leq 15$	39	24,84%
Moderate	$11 \leq X < 15$	86	54,78%
Low	$X < 11$	32	20,38%
Total		**157**	**100%**

4.3.1.2 Learning Interest Classification

Collected data of respondents' learning will be scored corresponding to the scoring system in Table 3.2 based on respondents' responses and the whole learning interest value is added up. To interpret the data, it derived into 3 categories which are High, Moderate, and Low. These categories are determined from mean and standard deviation value. The formula of this calculation is stated in Table 3.6 Socioeconomic classification formula.

The mean value of the learning interest is known to be 19, and the standard deviation is 3. Thus, the respondents with economic value above 22 will be classified as high learning interest and below 16 will be classified as lower learning interest. The result of the calculation could be seen in Table 4.6 below. According to the result, the learning interest of the visitors of community-based library in Surabaya are mostly in the Moderate category with the percentage of 74,52% or 117 out of 157 respondents.

Table 4. 7 Learning Interest Classification Result

Learning Interest			
Category	Class	Frequency	Percentage
High	$X \leq 22$	31	19,75%
Moderate	$16 \leq X < 22$	117	74,52%
Low	$X < 16$	9	5,73%
Total		**157**	**100%**

4.3.1.3 Socioeconomic Classification

Collected data of respondents' learning will be scored corresponding to the scoring system in Table 3.1 based on respondents' responses and the whole economic learning interest value is added up. To interpret the data, it derived into 3 categories which are High, Moderate, and Low. These categories are determined from mean and standard deviation value. The formula of this calculation is stated in Table 3.6 Socioeconomic classification formula.

The mean value of the socioeconomic is known to be 32, and the standard deviation is 4. Thus, the respondents with economic value above 36 will be classified as high socioeconomic condition and below 32 will be classified as lower socioeconomic condition. The result of the calculation could be seen in Table 4.7 below. According to the result, the socioeconomic condition of the visitors of community-based library in Surabaya are mostly in the Moderate category with the percentage of 64,33% or 101 out of 157 respondents.

Table 4. 8 Socioeconomic Classification Result

Socioeconomic Condition			
Category	Class	Frequency	Percentage
High	$X \leq 36$	33	21,02%
Moderate	$28 \leq X < 36$	101	64,33%
Low	$X < 28$	23	14,65%
Total		**157**	**100%**

To gain better analysis about the socioeconomic condition, Table 4.8 below shows the composition of each socioeconomic level. For example, 10,19% of visitors with high socioeconomic level has high economic condition and moderate learning interest. The largest frequency percentage is 36,94% which are visitors with moderate socioeconomic level that has moderate socioeconomic condition and moderate learning interest.

Table 4. 9 Socioeconomic with Each Variable Classification

Socio-economic	Economic Condition	Learning Interest	Frequency	Percentage	Total	
					Frequency	Percentage
High	High	High	7	4.46%	33	21.02%
	High	Moderate	16	10.19%		
	Average	High	10	6.37%		
Moderate	High	Moderate	16	10.19%	101	64.33%

Table 4. 10 Socioeconomic with Each Variable Classification (continued)

Socio-economic	Economic Condition	Learning Interest	Frequency	Percentage	Total	
					Frequency	Percentage
	Moderate	High	9	5.73%		
	Moderate	Moderate	58	36.94%		
	Lower	High	5	3.18%		
	Lower	Moderate	13	8.28%		
Lower	Moderate	Moderate	6	3.82%	23	14.65%
	Moderate	Lower	3	1.91%		
	Lower	Moderate	8	5.10%		
	Lower	Lower	6	3.82%		
	Total		**157**	**100.0%**	**157**	**100.0%**

4.3.2   SERVQUAL Score Calculation

SERVQUAL data processing step is started with calculating the gap. To calculate the gap, the questionnaire to assess visitors' perspective of expectation and perceived service quality is distributed that have been explained in the previous subchapter. Then, the mean value of each attributes is calculated for both expectation and perceived value. Next is to calculate gap value by subtracting the mean perceived value with mean expected value of the service quality.

Besides calculating the gap, the overall service quality will also be calculated by dividing the mean value of each dimension for expectation and mean value of each dimension perceived value. Then those dimensions service quality will be averaged to obtain overall service quality.

In this research, the gap and overall service quality calculation will be done for each socioeconomic condition that can be seen in the sub section below.

4.3.2.1 High socioeconomic level

Table 4.9 below shows the SERVQUAL calculation for high socioeconomic level. From the gap calculation result, it could be seen that the highest gap is owned by attribute REL 5 which is the training and other activities, followed by attribute TA5 book collections that have fulfilled visitors' needs. As for the dimensions service quality, the highest value is owned by dimension Empathy, and the lowest

value is owned by dimension Tangible. The overall service quality score for high socioeconomic value is 0.950

Table 4. 11 SERVQUAL Calculation for High Socioeconomic Level

ID	Attribute	High socioeconomic level			
		Expectation/ Importance (E)	Perceived/ Performance (P)	Gap	Overall Service Quality (Q = P/E)
1	TA1	4.636	4.303	-0.333	
2	TA2	4.758	4.515	-0.242	
3	TA3	4.727	4.394	-0.333	
4	TA4	4.697	4.030	-0.667	
5	TA5	4.758	4.000	-0.758	0.908
6	TA6	4.667	4.545	-0.121	
7	TA7	4.879	4.424	-0.455	
8	TA8	4.606	4.000	-0.606	
9	TA9	4.788	4.576	-0.212	
10	TA10	4.667	4.030	-0.636	
11	REL1	4.697	4.485	-0.212	
12	REL2	4.545	4.364	-0.182	
13	REL3	4.576	4.182	-0.394	0.925
14	REL4	4.485	4.242	-0.242	
15	REL5	4.785	3.970	-0.815	
16	REL6	4.424	4.212	-0.212	
17	RES1	4.606	4.606	0.000	
18	RES2	4.606	4.606	0.000	0.996
19	RES3	4.545	4.485	-0.061	
20	AS1	4.545	4.515	-0.030	
21	AS2	4.636	4.455	-0.182	
22	AS3	4.697	4.545	-0.152	0.973
23	AS4	4.788	4.576	-0.212	
24	AS5	4.697	4.636	-0.061	
25	EM1	4.606	4.545	-0.061	0.987
	Average	**4.657**	**4.370**	**-0.287**	**0.950**

4.3.2.2 Moderate Socioeconomic Level

Table 4.9 below shows the SERVQUAL calculation for high socioeconomic level. From the gap calculation result, it could be seen that the highest gap is owned by attribute TA 10 about internet connections availability, followed by attribute TA5 book collections that have fulfilled visitors' needs. As for the dimensions

service quality, the highest value is owned by dimension Empathy, and the lowest value is owned by dimension Tangible. The overall service quality score for moderate socioeconomic value is 0.978

Table 4. 12 SERVQUAL Calculation for Moderate Socioeconomic Level

		Moderate socioeconomic level			
ID	Attribute	Expectation/ Importance (E)	Perceived/ Performance (P)	Gap	Overall Service Quality (Q = P/E)
1	TA1	4.525	4.149	-0.376	
2	TA2	4.663	4.564	-0.099	
3	TA3	4.693	4.505	-0.188	
4	TA4	4.673	4.040	-0.634	
5	TA5	4.713	3.980	-0.733	0.921
6	TA6	4.743	4.634	-0.109	
7	TA7	4.832	4.604	-0.228	
8	TA8	4.465	4.188	-0.277	
9	TA9	4.743	4.624	-0.119	
10	TA10	4.715	3.772	-0.943	
11	REL1	4.594	4.614	0.020	
12	REL2	4.475	4.535	0.059	
13	REL3	4.672	4.176	-0.496	0.974
14	REL4	4.257	4.485	0.228	
15	REL5	4.697	4.198	-0.499	
16	REL6	4.129	4.119	-0.010	
17	RES1	4.525	4.644	0.119	
18	RES2	4.535	4.604	0.069	1.020
19	RES3	4.495	4.584	0.089	
20	AS1	4.465	4.564	0.099	
21	AS2	4.653	4.634	-0.020	
22	AS3	4.683	4.683	0.000	0.996
23	AS4	4.832	4.713	-0.119	
24	AS5	4.584	4.525	-0.059	
25	EM1	4.426	4.564	0.139	1.031
Average		**4.591**	**4.428**	**-0.163**	**0.978**

4.3.2.3 Low Socioeconomic Level

Table 4.9 below shows the SERVQUAL calculation for high socioeconomic level. From the gap calculation result, it could be seen that the highest gap is owned by attribute REL 5 which is the training and other activities, followed by attribute

TA10 about internet connection availability. As for the dimensions service quality, the highest value is owned by dimension Empathy, and the lowest value is owned by dimension Tangible. The overall service quality score for low socioeconomic value is 0.949

Table 4. 13 SERVQUAL Calculation for Low Socioeconomic Level

		Low socioeconomic level			
ID	Attribute	Expectation/ Importance (E)	Perceived/ Performance (P)	Gap	Overall Service Quality (Q = P/E)
1	TA1	4.522	4.000	-0.522	
2	TA2	4.609	4.435	-0.174	
3	TA3	4.609	4.261	-0.348	
4	TA4	4.609	3.913	-0.696	
5	TA5	4.478	3.957	-0.521	0.909
6	TA6	4.478	4.391	-0.087	
7	TA7	4.783	4.348	-0.435	
8	TA8	4.391	3.783	-0.609	
9	TA9	4.652	4.565	-0.087	
10	TA10	4.665	3.957	-0.709	
11	REL1	4.261	4.391	0.130	
12	REL2	4.304	4.174	-0.130	
13	REL3	4.348	4.043	-0.304	0.927
14	REL4	4.130	4.087	-0.043	
15	REL5	4.883	3.609	-1.274	
16	REL6	3.870	3.609	-0.261	
17	RES1	4.261	4.391	0.130	
18	RES2	4.391	4.348	-0.043	0.980
19	RES3	4.348	4.000	-0.348	
20	AS1	4.261	4.217	-0.043	
21	AS2	4.391	4.174	-0.217	
22	AS3	4.652	4.478	-0.174	0.981
23	AS4	4.609	4.696	0.087	
24	AS5	4.522	4.435	-0.087	
25	EM1	4.043	4.261	0.217	1.054
	Average	**4.443**	**4.181**	**-0.262**	**0.949**

4.3.3 Importance Performance Analysis Mapping

In this sub subchapter, the IPA diagram mapping will be done in order to determine which attributes that will be focused on improvement by generating

which attributes that has highest importance and lowest performance. Importance Performance Analysis needs 2 variables to become input for the which are importance level and performance level of each attributes. In this research, the importance level is represented by expectation value of the attributes, means that the higher the expectation, the more important the attributes are and vice versa. While the performance level is represented by the perceived value. Perceived value shows the service received by the visitors. Thus, the performance could use the perceived value of each attributes, means that the higher the perceived value received by the visitors, the higher performance done by the service provider.

The importance performance analysis mapping will used SPSS 24 Software to plot the attributes according to their own importance and performance value. The importance performance analysis mapping will also be done for each socioeconomic condition that can be seen in the sub section below.

4.3.3.1 High Socioeconomic Level IPA

As stated before, SPSS 24 Software is used to plot the importance performance analysis of each attribute. Figure 4.16 below shows the result of the attribute mapping. The y-axis represents the importance value and x-axis represents the performance value. After the attributes importance and performance level are inserted, the IPA plots are generated. Then, to divide the quadrants, mean value of importance and mean value of performance are put in to generate reference line as a guide for quadrants.

According to the plots, it could be seen that the attributes for high socioeconomic are almost spread evenly. The attributes that falls in the first quadrant (from the most important to the less important) are attribute 15 (REL5) about trainings and supporting activities, attribute 5 (TA5) about book collections that have fulfilled visitors' needs, attribute 4 (TA4) about completed book collections and in good condition, and attribute 10 (TA10) about internet connection availability.

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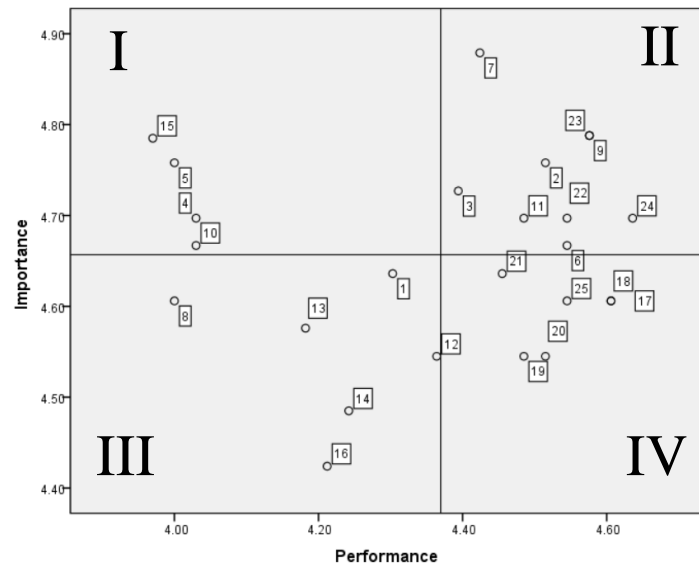
Figure 4. 16 IPA Mapping for High Socioeconomic Level

4.3.3.2 Moderate Socioeconomic Level IPA

SPSS 24 Software is used to plot the importance performance analysis of each attribute. Figure 4.17 below shows the result of the attribute mapping. The y-axis represents the importance value and x-axis represents the performance value. After the attributes importance and performance level are inserted, the IPA plots are generated. Then, to divide the quadrants, mean value of importance and mean value of performance are put in to generate reference line as a guide for quadrants.

According to the plots, it could be seen that the attributes for moderate socioeconomic are almost all scattered on the right side of the map. The attributes that falls in the first quadrant (from the most important to the less important) are attribute 10 (TA10) about internet connection availability, attribute 5 (TA5) about book collections that have fulfilled visitors' needs, attribute 15 (REL5) about trainings and supporting activities, attribute 4 (TA4) about completed book collections and in good condition, and attribute 13 (REL3) about operational time.
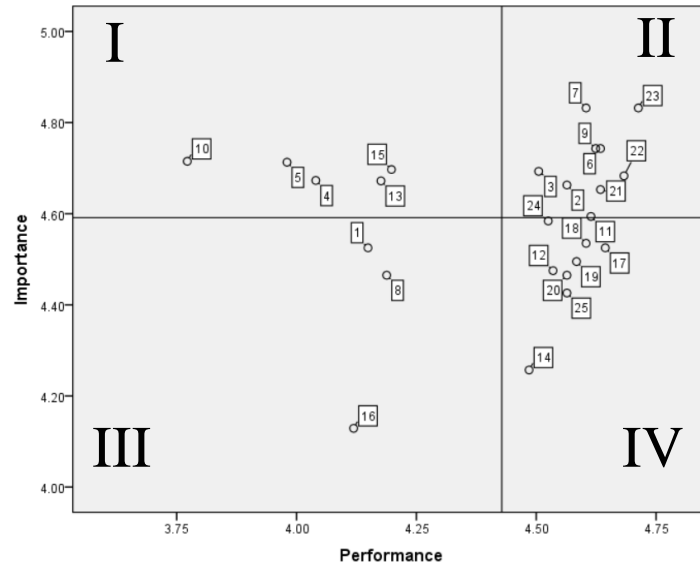
Figure 4. 17 IPA Mapping for Moderate Socioeconomic Level

4.3.3.3 Low Socioeconomic Level IPA

SPSS 24 Software is used to plot the importance performance analysis of each attribute. Figure 4.18 below shows the result of the attribute mapping. The y-axis represents the importance value and x-axis represents the performance value. After the attributes importance and performance level are inserted, the IPA plots are generated. Then, to divide the quadrants, mean value of importance and mean value of performance are put in to generate reference line as a guide for quadrants.

According to the plots, it could be seen that the attributes for low socioeconomic are almost all scattered in the middle. The attributes that falls in the first quadrant (from the most important to the less important) are attribute 15 (REL5) about trainings and supporting activities, attribute 10 (TA10) about internet connection availability, attribute 4 (TA4) about completed book collections and in good condition, attribute 1 (TA1) about outdoor area, and attribute 5 (TA5) about book collections that have fulfilled visitors' needs.

70
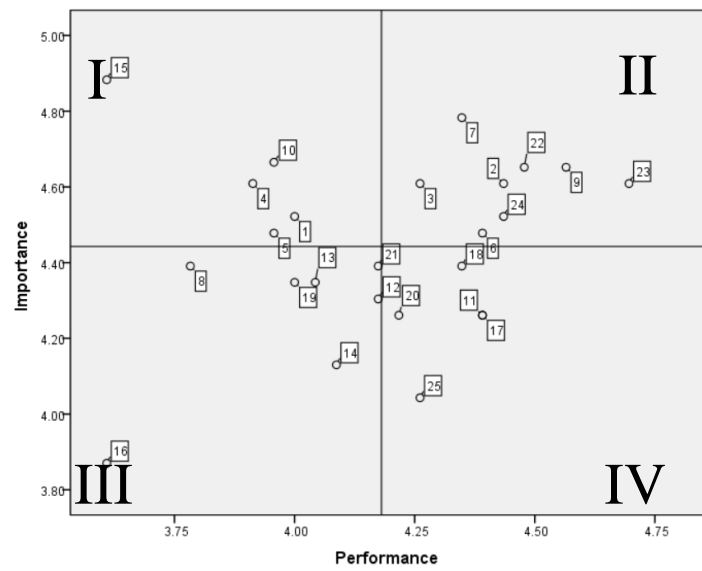
Figure 4. 18 IPA Mapping for Low Socioeconomic Level

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CHAPTER 5
DATA ANALYSIS AND INTERPRETATION

This chapter will explain the analysis of visitors' socioeconomic condition, the attributes of service, service quality, visitors' service preference, and importance performance analysis based on visitors' socioeconomic condition.

5.1 Service Attribute Analysis

Attribute identification was done in order to obtain the service attribute of community-based library in Surabaya. About 15 of the attributes were first obtained from the previous studies, journals, and guidelines from Indonesian ministry of education. Then, direct observation to four libraries was done to gain more insight about the service. After some of the attributes are collected, interview with the staff and the authorities of Surabaya public library's officer were done to validate the previous attributes and obtained 10 more attributes. There is one attribute from the previous studies that need to be adjusted to the condition in Surabaya community library which is "The reading room has a comfortable, bright, clean, quiet and smoke-free area". Since the purpose of these community library are for learning, training, recreation, and empowerment activities, the word "quite" is removed. The visitors of these community-based library are able to learn, ask questions, and discuss with other visitors. Children also allowed to visit anytime to read, learn, do homework, even allowed to play in order to gain their interest. This policy is implemented to introduce them to literacy, and teach them how to socialize.

5.2 Visitors' Socioeconomic Condition Analysis

Visitors' socioeconomic assessment was done in this research in order to find out the main market segment of community library in Surabaya. It also done to determine visitors' service preference of the community library based on their socioeconomic condition.

The socioeconomic assessment consists of two factors such as economic factor and learning interest factor. The learning interest was chosen as the social

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aspects because the research object is one of nonformal education institution by Surabaya government to support their literacy programs and policy. In the economic factor there are several measured variables namely family size, income, latest education, home ownerships, home or building type, and living area. While for the learning interest factor, the measured variables are learning participations, enjoyment, attention rate, frequency, and also supports from family and neighborhood morally and/ or financially. All these variables were assessed by adding up the points corresponding to the respondents' chosen statements for each variable. From those calculation, the average score for economic condition is 13 with the minimum value of 7 and maximum value of 19. The visitors' economic condition also classified into 3 categories namely high, moderate, and low. From this assessment, it could be known that most of the visitors are in moderate economic condition with the percentage of 54,78%. While for the learning interest, the average score is 19 with the minimum value of 12 and maximum value of 25. The visitors' learning interest also classified into 3 categories namely high, moderate, and low. From this assessment, it could be known that most of the visitor has moderate learning interest with the percentage of 74,52%. After calculating all of the variables, them the socioeconomic condition could be classified.

The classification of the socioeconomic condition derived into high, moderate and low. The mean value of visitors' socioeconomic conditions is 32 with minimum value of 20 and maximum value of 42. From this assessment, it could be known that most of the visitor has moderate socioeconomic condition with the percentage of 64,33%. Each socioeconomic level has several combinations of economic condition and learning interest rate that will be explained in the sub subchapter below.

5.2.1 High Socioeconomic Level

From the calculation in the previous chapter, 21,02% of the visitors have high level of socioeconomic condition. In this level, there is no visitors who have low both economic condition and learning interest. This indicates that families with average to higher economic level would be able to fulfil their needs including the education and resulting in higher learning interest. People in high economic

conditions are usually able to participate in many learning activities and have more access to education.

5.2.2 Moderate Socioeconomic Level

From the calculation in the previous chapter, 64,33% of the visitors have moderate level of socioeconomic condition. In this level, people tend to have moderate to low economic condition and moderate to high learning interest. Even there are 3,18% of the visitors with low economic condition but have high learning interest. This level also shows the majority of the visitors' characteristic that is 36,94% of the visitors have moderate economic condition and moderate learning interest.

5.2.3 Low Socioeconomic Level

From the calculation in the previous chapter, 14,65% of the visitors have low level of socioeconomic condition. In this level, there is no visitors who have both high economic condition and high learning interest. This indicates that families with low to average economic level hardly able to fulfil their needs including the education. People in low economic conditions are usually focusing to fulfil their primary needs first and resulting in lower learning interest.

5.2.4 Socioeconomic Condition in Certain Residential Area

This section will determine how are the socioeconomic condition in certain residential area mentioned in Table 3.4. After the classification of the economic condition and learning interest level, the characteristic for each residential area could be analyze. This study found out that several residential areas have particular economic and learning interest conditions.

First is "Densely populated downtown area". The area included in this category is Wonokromo and Simokerto subdistrict. Visitors in this area have moderate to high learning interest despite on their moderate to low economic condition. This is become a good opportunity for community library to maintain and accommodate their learning interest. Then in the "Worker settlement area",

such as Rungkut and Gunung Anyar, it shows that mostly the visitors in this area have higher economic condition and moderate learning interest. This condition become management's tasks to make programs that increase their learning interest. In "Near college area", such as Sukolilo subdistrict, the economic condition of the visitors is vary but tends to moderate level. On the social aspect, it shows that they have higher learning interest. It could be caused by the near college aspect that increase their learning interest. Many students live in that area and many activities from college that included the community around might become one of the biggest factors of this condition. The forth area is "Fisherman settlement area". This area includes Kenjeran and Bulak subdistricts. Visitors in this area tend to have average to low economic condition and also have average to low learning interest as well. It might be caused by the residents in those areas are prefer to work to increase their economic condition. Community library management need to be more focus in this area by providing learning programs that are suitable with their main occupations and give them understanding about the importance of school and learning for students in those area. The management also have to provide free tutoring to the students in those area. In "New developed settlement area" such as Tandes and Sambikerep subdistricts, there are many new elite clusters and developers. This research found that the majority of the residents are in average to high economic condition with also average to high learning interest. Finally, in "City center settlement area", as a business center in Surabaya, the visitors in this area have average to high economic condition and learning interest. People in this residential area have sufficient economic condition to provide education for their family. However, community library management still should accommodate their higher learning interest with new programs and activities.

5.3   Visitors' Service Preference Analysis

Visitors' service preference is used to attract visitors and to know what they expect from the service. Understanding the visitors' preference can inform management's decisions to improve the service quality of community-based library service and experience. Service preference also can be used to formulate

appropriate improvement strategies to facilitates learning activities in the library. In this research, the service preference will be determined by the attributes that have highest importance value and will be divers for each socioeconomic level.

This research found that high and moderate-level socioeconomic visitors most prefer to visit community-based library with comfortable, bright, clean, and smoke-free area. As a place to study, learn, play, discuss, and gain information, the community-library have to be comfortable. The reading room should have sufficient brightness for reading that will also affect the visitors' comfortability. Community-based library in Surabaya mostly do not have sufficient space too place desks and chairs for every visitor. Visitors also most likely to sit on a carpet or floors. That is why the cleanliness will affect visitors' decision to visit the library. Smoke-free area in the library also become a factor that affects their decision to visit the library. It might be caused the majority of the visitors are woman and children. As for low-level socioeconomic visitors, they prefer to visit if the community-based library provides training and other learning activities that suitable for their needs. As stated in the previous subchapter, low socioeconomic visitors are come from moderate to low economic condition. They seek for free training programs to increase their entrepreneurship ability to improve their economy. Children or students from low socioeconomic level also not be able to join courses or tutoring classes, or even not be able to attend schools. They seek a place where they can learn for free. These preferences are consistent with the previous study, where community-based library should accommodate community needs.

5.4   SERVQUAL Analysis

SERVQUAL analysis consists of gap analysis and overall service quality analysis. These analyses will be implemented towards each socioeconomic level.

5.4.1 Gap Analysis

Service gap was obtained by subtracting mean of perceived value with mean of expectation value to determine which service attributes not fulfil the visitors' expectation. If from the data processing generate positive gap value, then the

service performance is suitable with visitors' expectation and vice versa. In this research, the gap analysis would be done for each socioeconomic condition.

This research found that trainings or other learning activities of community-based library in Surabaya have the biggest negative gap according to the visitors with high and low socioeconomic level. Trainings and learning activities in the community-based library should follow the community needs. Current trainings and learning activities in community-based libraries are corresponding to the ability and creativity of the librarians, or even the same for all community-based library in Surabaya. That is what why visitors feel unsatisfied towards the service of the library. Other than that, attribute "Book collections" is the second biggest negative gap according to the visitors with high and moderate socioeconomic level. Book collections of the community libraries in Surabaya do not meet visitors' expectations and needs. Book collections in the community library should have adjusted with visitors' needs, their socioeconomic condition, and the residential area. For example, community library in fisherman living area should provide books (and trainings) about fish or fish waste processing. Visitors with high-level socioeconomic condition tends to search for book or reading material that are suitable with their need somewhere else while visitors with low-level socioeconomic condition will not be able to gain new information and ability according to their needs. The other attributes that has the highest negative gap according to moderate socioeconomic level visitors is "Internet connection availability". This attributes also became the second highest gap according to the low socioeconomic level visitors. Internet is infinite source to gain information about anything and become everybody's necessity to accommodate their study. Children could visit community library to watch interactive learning videos from the internet with librarians and friends. Students could visit the community library to do their homework and search for answer on the internet. Nonworkers can use the internet to look for jobs, or tutorial to create something and being productive. However, not all community libraries in Surabaya provides internet connections yet. This also should be one of management's concerns along as new school year policy for students to study at home or online school classes. Not all students are

able to pay for internet connection in their house. Community library should be able to accommodate this need along with the health protocols appeal.

5.4.2 *Overall Service Quality Analysis*

Overall service quality is used to measure service quality of the service performed and determine whether the service quality is good or not. Overall service quality is generated by calculating the ratio between perceived service and expectation. If the ratio value is below 1, then the quality of the service is not good enough. The overall service quality will be derived according to each socioeconomic level.

This research found that according to high socioeconomic level visitors, the service quality value is 0,950. While for moderate socioeconomic level visitors, the service quality value is 0,978, and 0,949 for visitors with low socioeconomic level. From all socioeconomic level visitors, the service quality of community-based library is below 1, means that it is not good enough and still need some improvements. To determine which attributes to be improved to increase service quality level, further analysis would be done.

5.5 Importance Performance Analysis

Importance performance analysis is used to determine which attributes that should be improved. Other than that, it also could be used to determine which attribute performance should be keep, which attributes have low priority to be improved, and which attributes that are possible to be removed from the service. In importance performance analysis, the attributes are placed into Cartesians diagram corresponding to their importance and performance. The importance performance analysis in this research is derived according to each socioeconomic level.

There are 4 attributes that according to all socioeconomic level have the high priority to be improved, namely "Training and other learning availability that suitable for visitors' needs", "Book collections condition", "Book collections suitable for visitors' needs", and "Internet connection availability". These attributes are almost consistent with the visitors' service preference discussed in the previous

subchapter. There is also additional attribute according to the moderate socioeconomic level namely "Operational time". While according to the low socioeconomic level visitor, "Outdoor area" also need to be improved. Below is the further analysis towards each attribute in quadrant I or attribute with high priority:

a) Training and other learning activities (suitable with community needs)

According to the previous interview with the librarians, there are some learning activities for children that have ever been done in the community library such as writing, storytelling, drawing, and coloring. Some of the community library staff in Surabaya also become tutors for students and help finish their school homework. As for the community empowerment program, they also provide some trainings to the Surabaya citizens such as fish cultivation, entrepreneurships, skills, and others. However, trainings and learning activities in the community-based library should follow the community needs. Current trainings and learning activities in community-based libraries are only corresponding to the ability and creativity of the librarians, or even the same for all community-based library in Surabaya. Thus, the management of Surabaya community library should determine what trainings are suitable for each area in Surabaya based on majority occupation of the residential area.

In densely populated downtown area, the visitors have low economic condition and higher learning interest. Community library should provide them with suitable activities such as students tutoring to help students with no capabilities to join tutoring classes. Besides, entrepreneurships and crafting skills would be interested and beneficial for them to increase their economy. In worker settlement residential area, their economic conditions are high but they have moderate learning interest. Community library in this area could provide computer and internet training for the nonworkers and understanding about future industry. They also could cooperate with the industrial company around for providing potential career or job vacancy, or even become one of their Corporate Social Responsibility (CSR). Then the companies in that area could support the community libraries to develop literacy in the community around. While for near college residential area, collaborations with universities around

could be implemented such as accomodate book donations, borrowing books from universities, and engaging college students to conduct learning activities, volunteering, discussion, and *Kuliah Kerja Nyata* (KKN) or student's community service program. Visitors in fisherman settlement area have low economic condition and since the learning interest is also low, first, community library should give them understanding about the importance of school and learning to prevent students become dropouts for working. Community library also should provide tutoring classes and homework clubs to help them with their study. Since most of the residents in that area depends on the sea produces, their management should be improved to increase their selling value. Therefore, community library could provide learning and training activities related with their main occupation such as fish cultivation, sea waste processing, shells crafting, and so on. Visitors in newly developed settlement area have high economic condition and high learning interest. This area has many new elite clusters and housings. Therefore, book collections should accommodate the potential visitors needs such as families and kids. Community library also can become agent to distribute information on hygiene, health, and other relevant topics to the daily lives. Visitors in city center or business settlement area have high economic condition and high learning interest. Therefore, community library could provide job information center, and hold class for job applications and interview preparation. Trainings and other learning activities schedules should be published on social media that allows visitors from other subdistricts to join classes according to their interests.

b) Book collections (that are suitable with community needs)

The collection of learning materials is not only limited to books, but also magazines, newspaper, and even videos, globe, posters, and photos. Some categories may be represented in a typical Community library, such as fiction and non-fiction for adults, young-adults, and children, newspapers, community information, government information and local administrations, business information, and study materials.

Those learning materials have to be updated because current collections are far from updated. It caused lack of information and knowledge received by visitors. The management needed to update their collection. Even though community library in Surabaya sometimes received books from the citizens around or universities, the management still have to considers the community needs. Book collections in the community library should have adjusted with visitors' needs, their socioeconomic condition, and the residential area. For example, community library in fisherman living area should provide books (and trainings) about fish cultivation or fish waste processing. With the updated collections and suitable with the community needs, perhaps it will increase visitors' and other potential visitors to visit the community library around them. Community library also need to provide reading materials for special needs visitors such as braille books or sound books.

To maintain the book collection relevancy with the community needs, material inflow and outflow should be managed. Old books with outdated information and poor condition that are less used by the visitors can be replaced with the updated ones or in different forms such as internet or electronic databases. Community library may also conduct exchange of materials stock between other libraries in the similar socioeconomic and residential area to maximize the usage and provide greater variety of collections to choose.

c) Book collections condition

Visitors evaluated that the quality of provided collection was not sufficiently good. They tend to look at the physical aspect of the book such as the cover, binding, and unarranged paper. Currently, the librarian has covered every book with plastic cover but there are still some damages on the binding. Therefore, management need to increase the performance of this attributes by fixing the bindings of the books or prevent the damage by add more binding or staples to keep book collections in good condition.

d) Internet connection availability

Internet connection availability is very important attribute to be improved. Along with the need for information that is so fast, visitors want the availability of internet services in the community library. Visitors rated the internet service attributes in the library as not pleasing because internet services are very rarely found and only at a certain point. This also should be one of management's concerns along as new school year policy for students to study at home or online school classes. Not all students are able to pay for internet connection in their house. For this reason, management must improve the performance of this attribute by providing free internet services. Besides, internet availability should be guided with workshops and seminars to introduce the use of the internet to the community. It will be helpful for the community to use internet access positively, beneficial for the community development, and prevent misleading information.

e) Operational time

According to the visitors, operational time is one of important attributes and shows the reliability of the service. The performance of this attributes is rated not pleasant by the visitors with moderate socioeconomic level. Since the operational time started at 1 pm to 4 pm and sometimes the librarians come late to the library. The management have to improve the performance of this attributes. Operational time of the community library should accommodate those who live, work, and study in the community. The potential solutions for this attribute are by implementing longer operational hours in the newly developed settlement area start from morning until afternoon including on the weekend since it will have more potential visitors, extended until 7 p.m. to accommodate visitors that are mostly workers.

f) Outdoor area

According to the low socioeconomic level visitors, this attribute is important and need to be fixed. It is because usually people with low socioeconomic condition do not have sufficient land or field to play in outdoor

area while people in moderate or higher socioeconomic level would have their own facilities from their neighborhood. This attribute is rather difficult to be implemented because some of the existing buildings are not possible to have outdoor area. However, some community libraries do have outdoor playing area, for example community-based library in Semolowaru and Kejawan Tambak urban village office. If this attribute can be implemented successfully, it can be a place for the community around to organize learning activities that could increase visitors' interest to visit the community library.

Besides those six priority attributes, to improve quality of service, the other indicators such as comparative indicator needs to be evaluated by calculate and bench-marking statistical data of other community library services. The Surabaya Library and Archive Authority should provide information system that allows staffs or librarians to input the library usage data such as number of loans, number of visits per day, memberships, and number of training participants, etc.; and inflow and outflow of the learning materials they received or discards for easy updates on the online catalogue. The information system also should allow staffs to input their working hours per day for easier performance calculation, and their training capabilities. This information systems allows the authority to compare the performance of each community library and observe community's learning interest.

CHAPTER 6
CONCLUSION AND SUGGESTION

This chapter contains conclusions and suggestions based on the results of research findings and analysis.

6.1 Conclusion

By integrating SERVQUAL and Importance Performance Analysis, the conclusions of the research findings and analysis which could be drawn are:

1. To measure service performance performed by Community-based Library in Surabaya, several service attributes were needed to be evaluated. Service attributes were obtained from direct observation, previous studies, journals, and guidelines from Indonesian Ministry of Education. From those sources, 15 attributes were first obtained, and then added and validated by Surabaya Library and Archive officer to adjust the attributes with the current service performed. After some addition and validation, 25 attributes were obtained to be used to measure service quality of Community-based Library in Surabaya.

2. From the data collecting and processing than have been done, visitors' service preferences are varied according to their socioeconomic condition. Visitors with high and moderate socioeconomic level are prefer to visit community library that are more comfortable, bright, clean, and smoke-free area. While visitors with low socioeconomic level are prefer to visit community library if it provides training and other learning activities that suitable for their needs, that can increase their skills, productivity, entrepreneurship, and have good effect for their economy. Students from low socioeconomic level also more prefer to visit community library if they provide tutoring class or could help them to finish their homework.

3. Based on SERVQUAL analysis, overall service quality score was obtained to determine whether the service quality can be classified as good or not. This research found that according to all socioeconomic level visitors, the

service quality is inadequate. It means that the service quality does not meet visitors' expectation. From data processing of gap between expectation and perceived value, it can be known that there are some attributes that still have negative gap value. Negative gap value means the attribute's performance does not equal or exceed visitors' expectation. "Trainings or other learning activities" attribute have the biggest negative gap according to the visitors with high and low socioeconomic level. Other than that, attribute "Book collections" is the second biggest negative gap according to the visitors with high and moderate socioeconomic level. Lastly, other attributes that has the highest negative gap according to moderate socioeconomic level visitors is "Internet connection availability". This attributes also became the second highest gap according to the low socioeconomic level visitors.

4. Importance Performance Analysis was used to determine which attributes that should be more focused on or should be improved. According to all visitors from all socioeconomic level, trainings and other learning activities in community libraries should be more vary but still in concordance with community needs. Tutoring class for students and skills and entrepreneurship trainings are very desirable. Book collections as learning materials also have to be updated and adjusted with the community needs, residential area, or majority of occupations. The condition of book collections also needs to be improved. Even though some of the staffs already added plastic covers, the bindings of the books are not strong enough. Besides, book collection needs to be arranged well to prevent more damage. Internet connection availability is also desirable by visitors from every socioeconomic level. The internet can be used for children to watch interactive learning videos, for students to do their homework, and nonworkers to look for jobs or tutorials. Community library also expected to accommodate online or at home school along as new school year policy for students who are not able to have internet connection. Operational time of the community library also need to be improved. Visitors' from moderate socioeconomic level expect it to have longer operational time. Finally, the outdoor area. Lower level socioeconomic visitors are expected community

library to have outdoor area for community activity since their residential area usually are densely populated.

6.2 Suggestion

In order to improve drawbacks of this research, several suggestions were made by the author for further research as follow:

1. The number of samples used need to be larger for each socioeconomic condition to obtain more representative, accurate, and valid data.
2. Service attributes in further research should be added and adapted with conditions in the future to gain more accurate service quality evaluation
3. The solutions for each suggestion towards Library and Archive office management need further research and should be examined for more accurate improvement implementation including conduct voice of customer research and visitors' behavioral effect.

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APPENDIX

Appendix 1. Research Questionnaire

Evaluasi Kualitas Pelayanan Taman Baca Masyarakat Kota Surabaya

Saya Khifti Haya Trisetya, mahasiswa Teknik Industri - Institut Teknologi Sepuluh Nopember Surabaya (ITS). Saat ini, saya sedang melakukan penelitian tugas akhir mengenai Evaluasi Kualitas Pelayanan Taman Baca berdasarkan kondisi Sosial dan Ekonomi Masyarakat Kota Surabaya.

Kriteria responden yang diperlukan:
1. Pernah mengunjungi Taman Baca Masyarakat Kota Surabaya
2. Berusia 15 tahun keatas

Dengan ini saya mohon kesediaan Anda untuk dapat mengisi kuisioner berikut. Identitas dan hasil dari kuesioner ini akan dijaga kerahasiaannya dan hanya akan digunakan sebagaimana mestinya.

Apabila terdapat pertanyaan maupun saran terkait penelitian ini, Anda dapat menghubungi saya pada:
Email: khiftihaya94@gmail.com

Saya mengharapkan partisipasi Anda dalam mengisi semua pertanyaan sebaik-baiknya untuk keberhasilan penelitian ini. Saya mengucapkan terimakasih atas ketersediaan Anda dalam mengisi kuisioner penelitian ini.

*Sebagai apresiasi kepada para responden, tersedia hadiah saldo OVO/GOPAY/Token Listrik dengan total Rp300.000 bagi 6 orang yang beruntung.

* Required

Nama Anda *

Your answer

No. Handphone / whatsapp (untuk pengundian hadiah)

Your answer

Apakah jenis kelamin Anda? *

○ Perempuan
○ Laki-laki

Berapakah usia Anda? *

○ kurang dari 17 tahun
○ 17-25 tahun
○ 25-45 tahun
○ 45-60 tahun
○ lebih dari 60 tahun

Apakah pekerjaan Anda? *

○ Pelajar (siswa/i/mahasiswa/i)
○ Pegawai negeri
○ Pegawai swasta
○ Pengusaha
○ Ibu rumah tangga
○ Other:

Lokasi Taman Baca Masyarakat yang dikunjungi *
contoh: TBM Keputih, TBM RW 004 Gebang Putih, TBM Semolowaru

Your answer

Kondisi Sosial dan Ekonomi Pengunjung

Pada bagian 2 kuesioner ini, Anda akan dihadapkan pada pertanyaan seputar data diri Anda sebagai responden termasuk kondisi ekonomi Anda. Peneliti hanya menggunakan identitas responden untuk kepentingan penelitian ini.

Apakah Anda sudah berkeluarga/ sudah menikah? *

- ⦿ Ya
- ◯ Tidak

Jumlah anggota keluarga dalam satu rumah? *

- ◯ 1 orang
- ◯ 2-4 orang
- ◯ 5-7 orang
- ◯ lebih dari 7 orang

Berapakah jumlah pendapatan seluruh anggota keluarga Anda dalam satu bulan? *

- ◯ kurang dari Rp 500.000
- ◯ Rp500.000 - Rp2.000.000
- ◯ Rp2.000.000 - Rp4.000.000
- ◯ Rp4.000.000 - Rp7.000.000
- ◯ Rp7.000.000 - Rp10.000.000
- ◯ lebih dari Rp10.000.000

Berapakah jumlah pengeluaran seluruh anggota keluarga Anda dalam satu bulan? *

Pengeluaran termasuk kebutuhan pokok, pendidikan, kesehatan, transportasi, dan rekreasi

- ◯ kurang dari Rp 500.000
- ◯ Rp500.000 - Rp2.000.000
- ◯ Rp2.000.000 - Rp4.000.000
- ◯ Rp4.000.000 - Rp7.000.000
- ◯ Rp7.000.000 - Rp10.000.000
- ◯ lebih dari Rp10.000.000

Apakah status rumah yang Anda tinggali saat ini? *

- ◯ Rumah pribadi
- ◯ Rumah dinas / kantor
- ◯ Sewa/kontrak/kos
- ◯ Other: _____

Bagaimana kondisi bangunan rumah yang Anda tempati saat ini? *

- ◯ Permanen
- ◯ Semi-permanen
- ◯ Other: _____

Berapa luas area tempat tinggal anda saat ini? *

- ◯ kurang dari 21 meter persegi
- ◯ 21 meter persegi
- ◯ 45 meter persegi
- ◯ 60 meter persegi
- ◯ lebih dari 60 meter persegi
- ◯ Other: _____

Back   Next

Kondisi Sosial dan Ekonomi Pengunjung(2)

Pada bagian 3 kuesioner ini, Anda akan dihadapkan pada pertanyaan seputar data diri Anda sebagai responden dari segi pendidikan dan minat belajar. Peneliti hanya menggunakan identitas responden untuk kepentingan penelitian ini.

Apakah pendidikan terakhir Anda? *

○ Diploma/ Sarjana S1/S2/S3

○ SMA

○ SMP

○ SD

○ Other: _____

Mana dari pilihan berikut yang pernah Anda ikuti *

☐ Perguruan tinggi

☐ Sekolah

☐ Kursus keterampilan

☐ Kursus bahasa asing

☐ Pelatihan dari pemerintah/perusahaan (berbayar)

☐ Pelatihan dari pemerintah/perusahaan (gratis)

☐ Belajar mandiri dari buku/internet/sumber lainnya

☐ Other: _____

Bagaimana perasaan Anda saat menerima materi pembelajaran atau pelatihan yang ada di lingkungan Anda (sekolah/kursus/dinas/kantor/taman baca)? *

○ Sangat tidak suka

○ Tidak suka

○ Netral/ biasa saja

○ Senang

○ Sangat senang

Bagaimana tingkat perhatian yang anda berikan ketika menerima materi pembelajaran/pelatihan di lingkungan Anda (sekolah/kursus/dinas/kantor/taman baca) *

○ Tidak memperhatikan

○ Jarang memperhatikan

○ Memperhatikan

○ Selalu memperhatikan

Seberapa sering anda mengikuti pembelajaran/pelatihan yang di lingkungan Anda (sekolah/kursus/dinas/kantor/taman baca)? *

○ Tidak pernah mengikuti

○ Hanya mengikuti yang SESUAI MINAT namun JARANG

○ Hanya mengikuti yang SESUAI MINAT dan SERING

○ SELALU mengikuti baik yang sesuai maupun yang tidak sesuai minat

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Apakah seluruh anggota KELUARGA Anda memberikan dukungan kepada Anda untuk mengikuti pembelajaran atau pelatihan di lingkungan Anda? *

○ Tidak mendukung secara moril (batin) dan materil (keuangan)

○ Mendukung secara moril (batin) saja

○ Mendukung secara materil (keuangan) saja

○ Mendukung secara moril (batin) DAN materil (keuangan)

Apakah LINGKUNGAN (teman/tetangga/guru/atasan) Anda memberikan dukungan kepada Anda untuk mengikuti pembelajaran atau pelatihan di lingkungan Anda? *

○ Tidak mendukung secara moril (batin) dan materil (keuangan)

○ Mendukung secara moril (batin) saja

○ Mendukung secara materil (keuangan) saja

○ Mendukung secara moril (batin) DAN materil (keuangan)

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Kualitas Pelayanan Taman Baca

Pada bagian 4 kuesioner ini, Anda akan dihadapkan pada pernyataan mengenai kualitas pelayanan Taman Baca Masyarakat Kota Surabaya. Anda perlu memberikan nilai untuk harapan pada masing-masing pernyataan pelayanan

Harapan: adalah nilai yang ANDA HARAPKAN pada Taman Baca untuk merealisasikan "Pelayanan" tersebut
Nilai 1 = Tidak penting sama sekali
Nilai 2 = Kurang penting
Nilai 3 = Cukup penting
Nilai 4 = Penting
Nilai 5 = Sangat penting

*jika hanya terdapat 4 pilihan pada layar anda, geser ke kiri sampai muncul pilihan ke-5

Menurut anda, seberapa penting area outdoor atau area bermain di Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting Kemudahan akses LOKASI Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting ruang baca yang MENARIK pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting Kelengkapan dan kondisi koleksi bacaan yang baik pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting koleksi buku pada Taman Baca untuk memenuhi dan sesuai dengan kebutuhan pengunjung? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting koleksi buku pada Taman Baca untuk ditata dengan baik dan rapih? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting ruang baca yang NYAMAN, BERSIH, TERANG dan BEBAS ASAP ROKOK? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting Taman Baca untuk mempunyai peralatan penunjang pembelajaran yang lengkap? *

contoh: pensil, papan tulis, krayon, pensil warna, kertas

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting ketersediaan TEMPAT SAMPAH pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting ketersediaan KONEKSI/AKSES INTERNET pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting kemudahan peminjaman dan pengembalian buku pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting waktu peminjaman dan pengembalian buku yang cukup pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting waktu operasional/ waktu buka yang tepat dan cukup pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting adanya apresiasi atau hadiah bagi pengunjung Taman Baca yang aktif? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting adanya aktivitas atau pelatihan keterampilan bagi masyarakat sekitar Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting adanya acara lomba atau pentas seni pada Taman Baca? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk selalu siap menjawab pertanyaan pengunjung? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk selalu membantu pengunjung mencari informasi yang diperlukan? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk dapat mengerti kebutuhan pengunjung? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk dapat menangani permintaan dan komplain pengunjung dengan baik? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk mempunyai pengetahuan yang baik? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk mempunyai keahlian untuk berinteraksi dengan pengunjung dan anak-anak? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk berkelakuan baik, ramah, sopan, dan dapat dipercaya? *

	1	2	3	4	5	
Sangat tidak penting	O	O	O	O	O	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk menanamkan nilai/rasa percaya diri pada pengunjung? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

Menurut anda, seberapa penting staff Taman Baca untuk dapat mengikuti perkembangan pembelajaran pengunjung pada tiap kunjungan? *

	1	2	3	4	5	
Sangat tidak penting	○	○	○	○	○	Sangat penting

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Kualitas Pelayanan Taman Baca (2)

Pada bagian 5 kuesioner ini, Anda akan dihadapkan pada pernyataan mengenai kualitas pelayanan Taman Baca Masyarakat Kota Surabaya. Anda perlu memberikan nilai untuk kenyataan pada masing-masing pernyataan pelayanan

Kenyataan: adalah nilai layanan yang ANDA TERIMA atau rasakan saat mengunjungi Taman Baca
Nilai 1 = Sangat tidak setuju
Nilai 2 = Tidak setuju
Nilai 3 = Netral
Nilai 4 = Setuju
Nilai 5 = Sangat setuju

*jika hanya terdapat 4 pilihan pada layar anda, geser ke kiri sampai muncul pilihan ke-5

Taman Baca yang Anda kunjungi mempunyai area outdoor atau area bermain yang baik *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai lokasi yang mudah diakses *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai ruang baca yang menarik *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai koleksi bacaan yang lengkap dan dalam kondisi baik *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai koleksi bacaan yang telah sesuai dengan kebutuhan anda *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai koleksi bacaan yang ditata dengan baik dan rapih *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai ruang baca yang nyaman, bersih, terang, dan bebas asap rokok *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai peralatan penunjang pembelajaran yang lengkap *

contoh: pensil, papan tulis, krayon, kertas, pensil warna

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi terdapat tempat sampah *

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai koneksi/ akses INTERNET yang baik *

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai kemudahan prosedur peminjaman dan pengembalian buku yang mudah *

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai waktu peminjaman buku yang cukup *

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi mempunyai waktu buka/operasional yang cukup *

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi pernah memberikan apresiasi bagi pengunjung yang aktif *

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi pernah/sering melakukan pelatihan keterampilan/ aktivitas lainnya yang sesuai dengan kebutuhan Anda *

contoh: pelatihan menulis cerpen, pelatihan membuat kerajinan, pelatihan menggunakan Microsoft word, dan lainnya

	1	2	3	4	5	
Sangat tidak setuju	O	O	O	O	O	Sangat setuju

Taman Baca yang Anda kunjungi pernah/sering mengadakan lomba atau pentas seni *

contoh: lomba membaca puisi, lomba membuat karya, dan lainnya

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi selalu siap menjawab pertanyaan anda dengan baik *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi selalu membantu Anda mencari informasi yang Anda perlukan *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi selalu mengerti kebutuhan Anda di taman baca *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi dapat menangani permintaan dan komplain dengan baik *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi mempunyai pengetahuan yang baik *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi mempunyai keahlian untuk berinteraksi dengan pengunjung dan anak-anak *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi berkelakuan baik, ramah, sopan, dan dapat dipercaya *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi selalu menanamkan nilai percaya diri pada pengunjung *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Staff Taman Baca yang Anda kunjungi dapat mengikuti perkembangan pembelajaran pengunjung pada tiap kunjungan *

	1	2	3	4	5	
Sangat tidak setuju	○	○	○	○	○	Sangat setuju

Saran Anda terhadap layanan Taman Baca Masyarakat Kota Surabaya

(contoh: waktu operasional diperpanjang, kegiatan lomba/ pelatihan yang diharapkan, diadakan bimbel, dan lainnya)

Your answer

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Appendix 2. Questionnaire Survey Documentation
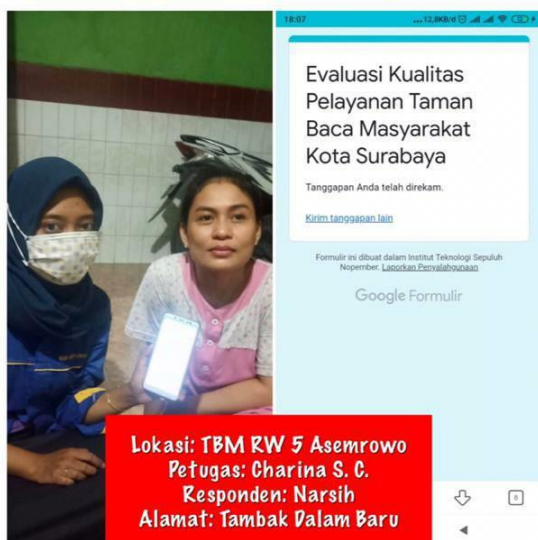
Appendix 3. Observation Documentation

Appendix 4. Recapitulation of Respondent Socioeconomic Assessment

Resp.	FM	IO	HA	B	A	ED	LI LA	LI EN	LI AT	LI F	LI FS	LI ES
1	3	2	1	2	5	4	2	3	3	1	4	4
2	3	2	1	2	3	4	2	5	4	3	4	3
3	3	1	1	2	2	4	2	4	3	3	4	4
4	2	1	1	2	3	3	1	5	3	3	4	4
5	3	1	1	2	1	4	2	4	3	4	4	3
6	3	1	1	1	1	3	1	4	4	4	4	3
7	1	1	1	2	2	3	1	5	4	3	4	4
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9	3	1	0	2	1	4	3	4	3	3	2	3
10	3	1	1	2	2	3	2	4	3	3	3	3
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14	3	2	0	2	1	3	3	4	3	2	3	3
15	2	0	1	2	1	4	2	3	3	2	3	3
16	2	1	1	2	1	3	1	4	4	3	4	3
17	3	2	1	2	3	4	6	4	4	3	4	3
18	3	1	1	1	2	3	1	5	4	4	3	3
19	3	2	0	2	1	4	2	4	3	2	3	3
20	3	1	1	2	1	3	3	4	3	2	2	2
21	3	1	0	1	1	4	2	4	3	3	3	3
22	3	0	0	2	1	3	2	5	4	2	4	4
23	2	1	1	1	1	2	2	5	4	3	3	3
24	3	1	0	2	2	4	3	5	3	3	4	3
25	1	1	1	2	2	4	3	4	3	3	3	3
26	3	0	1	2	4	3	2	5	4	4	4	4

Resp.	FM	IO	HA	B	A	ED	LI LA	LI EN	LI AT	LI F	LI FS	LI ES
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28	2	2	1	2	4	2	4	5	4	4	4	4
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30	2	1	1	1	1	2	2	5	4	3	3	3
31	2	2	1	2	1	3	1	4	3	2	4	3
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39	3	1	1	2	5	3	1	5	4	3	4	4
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42	2	2	1	2	4	4	2	4	4	4	4	4
43	3	2	1	2	2	3	1	4	3	4	4	3
44	3	2	1	2	5	3	4	3	3	3	3	3
45	3	2	0	1	1	2	1	3	3	2	3	3
46	3	1	0	2	2	2	1	5	4	4	4	4
47	2	0	1	2	1	3	1	3	2	2	3	3
48	2	2	0	2	2	3	2	5	4	4	4	3
49	3	1	1	2	2	2	1	4	4	4	4	4
50	3	2	1	2	5	3	5	1	4	2	4	3
51	2	1	1	2	2	3	4	4	3	4	4	3
52	2	2	1	2	5	4	4	4	4	2	4	3
53	2	1	1	2	5	3	2	4	3	3	3	3

Resp.	FM	IO	HA	B	A	ED	LI LA	LI EN	LI AT	LI F	LI FS	LI ES
54	2	1	1	2	5	2	3	5	3	3	4	3
55	3	2	1	2	5	4	5	5	3	4	4	4
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58	3	2	1	2	5	3	3	4	4	2	4	3
59	3	1	1	2	1	3	3	4	4	3	3	3
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61	2	2	1	2	3	1	2	4	3	2	2	2
62	2	2	1	2	5	4	5	4	3	2	4	3
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71	2	2	0	2	5	3	2	5	4	3	4	4
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73	3	1	1	2	3	3	1	5	4	4	4	4
74	3	3	1	2	3	4	2	4	3	2	4	4
75	3	1	1	2	3	2	2	4	3	2	3	3
76	3	2	0	2	1	2	2	5	4	4	4	4
77	2	1	1	1	2	3	2	5	4	4	1	3
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79	3	2	1	2	4	4	2	4	3	3	4	4
80	2	1	1	2	3	3	1	2	3	3	3	3

Resp.	FM	IO	HA	B	A	ED	LI LA	LI EN	LI AT	LI F	LI FS	LI ES
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82	3	2	1	2	4	3	1	5	3	3	4	3
83	2	2	0	1	1	3	1	3	3	2	4	4
84	2	0	1	2	3	3	1	4	3	3	3	3
85	3	1	0	2	3	3	1	4	3	3	3	3
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106	2	1	1	2	2	3	2	4	3	2	3	3
107	3	1	0	2	2	3	1	5	3	3	4	3

Resp.	FM	IO	HA	B	A	ED	LI LA	LI EN	LI AT	LI F	LI FS	LI ES
108	1	1	1	2	5	3	6	5	4	3	4	3
109	3	2	0	2	4	2	3	4	3	2	4	3
110	3	2	1	1	3	2	1	5	3	4	4	3
111	2	1	1	2	5	4	5	4	3	3	3	3
112	2	1	1	2	1	3	1	4	4	4	4	4
113	2	2	1	2	5	3	1	4	3	3	4	3
114	2	1	1	2	2	3	2	4	3	3	3	3
115	3	2	1	2	5	3	1	3	3	2	4	4
116	3	2	1	2	3	3	2	4	3	2	4	3
117	3	1	0	2	2	4	3	3	3	2	4	3
118	3	2	1	2	4	4	4	4	3	3	3	3
119	3	1	1	2	2	3	1	4	3	4	4	4
120	3	1	1	2	3	4	2	5	3	2	4	4
121	2	2	1	2	2	3	3	4	3	2	3	3
122	2	1	0	2	2	3	1	3	3	2	3	3
123	3	2	1	2	5	4	5	4	3	2	4	3
124	3	1	1	2	3	4	4	4	3	2	4	3
125	2	1	1	2	1	3	1	4	3	2	3	3
126	3	1	0	2	1	1	1	3	2	2	3	1
127	2	2	1	2	2	3	2	5	4	2	3	3
128	3	2	1	2	3	3	1	4	3	2	3	3
129	3	1	0	2	1	3	3	5	3	3	2	4
130	3	2	1	2	2	3	3	5	3	3	4	4
131	2	2	1	2	2	4	2	4	3	4	2	4
132	3	0	0	2	1	1	3	4	3	2	3	3
133	2	2	1	2	4	3	4	5	4	4	4	4
134	2	2	1	2	3	3	1	5	4	4	4	4

Resp.	FM	IO	HA	B	A	ED	LI LA	LI EN	LI AT	LI F	LI FS	LI ES
135	2	1	1	2	3	1	1	4	3	4	4	3
136	3	1	1	2	3	4	2	4	3	2	4	3
137	3	3	1	2	5	3	1	5	4	3	4	4
138	3	2	1	2	5	3	2	4	3	4	4	4
139	2	1	0	2	1	2	2	3	3	2	1	3
140	3	1	0	2	2	3	2	5	3	3	3	3
141	3	1	1	2	2	3	2	4	3	3	3	3
142	3	1	1	2	3	3	4	4	3	2	3	3
143	2	1	1	2	4	4	4	4	3	4	4	4
144	3	1	1	2	2	3	1	4	3	3	3	3
145	3	1	1	2	1	3	1	4	3	2	3	3
146	3	1	1	2	2	3	1	4	3	2	3	3
147	3	3	1	2	5	4	3	5	3	3	2	4
148	3	1	1	2	3	4	2	5	4	4	3	3
149	2	0	1	1	2	3	2	1	3	2	3	1
150	3	2	1	2	4	4	2	4	3	4	4	4
151	3	1	1	2	1	3	1	4	3	3	4	4
152	3	1	0	2	2	3	2	5	3	3	3	3
153	2	3	1	2	5	3	1	3	3	3	4	4
154	2	2	1	2	5	3	1	4	3	3	4	3
155	2	1	1	2	2	4	2	4	3	3	3	3
156	2	1	1	2	3	4	4	4	3	3	4	4
157	2	3	1	2	5	3	1	3	3	3	4	4

Appendix 4. Respondents Importance Assessment

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
1	4	4	5	4	4	5	5	4	5	3	4	4	4	4	4	3	4	4	4	4	4	5	5	4	4
2	4	4	5	4	5	5	5	5	5	5	5	5	5	4	5	4	5	5	5	5	5	5	5	5	5
3	5	5	5	5	5	5	5	4	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	5	3
4	4	5	4	5	5	5	5	5	5	4	5	4	5	5	5	5	5	5	5	4	5	4	5	5	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	4	5	5	5	5	5	5	5
6	5	5	5	5	5	5	5	5	5	4	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5
7	5	5	4	4	5	4	5	4	5	4	5	4	4	4	4	4	4	5	5	5	4	5	5	5	4
8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10	5	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3
11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
12	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
13	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
14	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
15	3	4	4	4	4	4	5	4	5	5	4	3	4	4	4	3	4	5	4	4	4	4	4	4	4
16	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
17	5	5	5	5	5	5	5	5	5	4	5	4	4	3	5	4	5	5	4	5	5	5	5	5	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
18	4	5	5	5	4	5	5	5	5	3	4	4	4	4	5	4	4	4	5	4	5	5	5	5	5
19	4	5	5	5	5	5	5	4	5	4	4	5	4	3	3	3	4	4	5	3	4	5	5	4	3
20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
21	4	4	4	5	5	4	4	4	4	5	5	5	5	4	4	3	4	4	4	4	4	4	5	4	4
22	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
23	4	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5
24	5	5	5	5	5	5	5	5	5	4	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5
25	5	5	5	5	5	5	5	4	5	5	5	5	4	4	4	5	4	5	5	5	5	5	5	5	5
26	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5
27	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
28	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
29	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
30	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5
31	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
32	4	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
33	5	5	5	5	5	5	5	5	5	5	5	5	3	2	3	3	5	4	4	4	4	4	4	4	4
34	5	5	5	5	5	5	5	5	5	4	5	5	5	4	4	4	5	5	5	5	5	5	5	5	5
35	5	4	5	5	4	4	5	3	5	5	4	4	5	5	4	3	5	4	4	4	5	5	5	5	5
36	5	5	5	5	5	5	5	5	5	5	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5
37	5	5	5	5	5	5	5	4	5	5	4	5	5	4	4	5	4	4	5	4	5	5	5	4	4

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
38	4	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5
39	5	5	4	4	5	5	5	4	5	4	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5
40	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
41	4	5	5	5	5	5	5	5	5	5	5	5	5	4	5	4	5	5	4	5	4	5	5	5	5
42	4	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5
43	4	4	5	5	5	5	5	5	5	4	5	5	5	5	4	5	5	4	4	5	5	5	5	5	5
44	4	4	5	5	5	5	5	4	5	3	5	4	5	5	4	1	5	5	5	5	5	5	5	5	5
45	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
46	4	5	5	4	5	5	5	5	5	5	4	5	5	4	4	5	5	5	5	5	5	5	5	5	5
47	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
48	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5
49	5	5	5	5	5	5	5	4	5	4	5	5	5	4	4	5	5	5	4	5	5	5	5	5	5
50	5	5	5	5	5	5	5	4	5	4	4	3	4	4	4	3	4	4	4	5	4	4	5	5	4
51	5	3	5	5	5	5	5	3	4	5	5	5	5	5	3	3	4	5	3	5	5	4	5	3	5
52	3	5	5	5	5	4	5	4	5	4	4	4	4	5	5	4	5	5	5	5	5	5	5	5	4
53	4	5	5	5	5	5	5	5	5	5	5	4	5	5	4	4	4	4	4	5	5	5	5	5	5
54	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
55	4	5	5	4	5	5	5	5	5	5	4	4	4	5	4	5	4	4	4	4	4	4	5	5	4
56	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
57	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
58	4	4	4	4	4	4	5	4	5	3	3	3	3	3	3	3	3	3	3	3	3	4	4	4	3
59	4	5	5	5	5	5	5	5	5	3	4	5	5	5	5	4	5	5	5	5	5	5	5	5	4
60	4	4	5	4	4	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5
61	5	5	5	5	5	5	5	5	5	4	5	4	4	4	4	4	5	5	4	4	4	5	5	5	4
62	4	4	4	4	3	4	5	4	4	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4
63	5	5	3	5	3	3	3	3	3	3	3	3	3	2	2	2	3	3	3	3	3	5	5	5	3
64	4	5	5	5	4	3	4	4	5	5	4	3	3	4	4	4	4	5	5	4	4	5	5	4	3
65	4	5	5	4	4	4	5	5	5	4	4	4	4	5	5	4	4	4	4	4	4	4	5	5	4
66	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
67	5	5	5	5	5	5	3	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5
68	4	4	4	4	4	4	4	3	4	5	3	3	3	3	4	4	3	4	4	4	4	4	4	4	4
69	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
70	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
71	5	5	5	5	5	5	5	4	4	5	5	4	4	3	4	4	4	4	4	4	5	4	5	4	5
72	5	5	5	5	5	5	5	5	4	4	5	5	4	5	5	4	4	4	5	4	5	4	4	4	4
73	5	4	4	4	5	5	5	5	5	5	4	4	4	5	3	3	4	4	5	5	5	5	5	5	5
74	3	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4
75	4	4	4	4	4	4	4	4	4	3	4	3	4	3	3	3	4	4	3	4	4	4	4	3	3
76	4	5	5	5	5	5	5	5	5	5	5	5	5	4	4	3	4	4	4	4	5	4	5	5	4
77	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
78	5	4	4	4	4	4	4	4	4	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
79	4	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	5	4	4
80	4	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
81	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
82	4	3	5	5	4	5	5	5	5	4	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5
83	4	4	4	4	4	4	4	3	4	4	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4
84	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
85	3	3	4	3	3	4	4	4	4	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4
86	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
87	5	5	5	4	5	4	4	4	4	3	4	4	4	4	4	5	4	4	4	4	4	4	5	4	4
88	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
89	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5
90	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
91	5	5	5	5	5	4	5	4	5	4	5	4	5	4	4	4	5	5	5	4	5	4	5	5	5
92	4	5	4	4	4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
93	4	4	4	4	4	5	5	5	5	4	4	5	4	3	3	2	3	4	4	4	4	4	4	4	4
94	4	5	4	4	4	4	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
95	4	5	5	5	5	4	5	4	5	5	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5
96	3	4	4	4	4	4	5	3	4	3	4	4	4	3	3	3	3	4	4	4	4	4	4	3	3
97	5	4	4	5	5	4	5	4	5	5	5	4	4	4	4	4	4	4	5	4	5	5	5	4	4

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
98	4	3	5	5	4	4	5	4	4	5	4	5	5	4	4	4	5	5	5	5	5	5	4	4	4
99	5	5	5	5	5	5	5	5	5	5	5	3	4	3	4	3	5	5	5	4	5	5	5	5	5
100	5	5	5	5	5	4	5	4	5	5	4	4	5	4	4	4	5	5	5	4	4	5	5	5	5
101	4	5	5	4	5	4	5	4	4	4	4	4	4	4	3	3	4	4	2	3	4	4	5	5	4
102	5	5	5	5	5	5	5	5	5	5	5	4	5	4	5	5	5	5	4	5	5	5	5	5	5
103	4	5	5	5	5	5	5	4	5	5	5	5	5	4	5	4	4	4	5	4	5	5	5	4	4
104	5	4	5	5	5	4	5	4	5	5	4	4	4	5	5	4	4	4	4	4	4	5	5	5	4
105	5	4	5	4	4	4	4	4	5	5	4	4	4	4	4	4	4	4	4	5	4	4	4	4	4
106	4	5	5	5	5	5	5	4	4	5	4	4	4	4	4	4	4	3	3	3	4	4	5	4	4
107	4	5	3	5	4	5	5	5	5	5	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5
108	5	3	4	5	5	3	5	3	4	5	5	3	3	5	3	3	4	4	4	3	4	3	4	3	3
109	5	5	4	4	4	4	5	4	5	3	5	4	4	5	4	5	3	5	4	4	5	5	5	5	4
110	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
111	5	5	5	5	5	4	5	4	5	3	5	4	5	4	2	2	3	3	3	3	5	5	5	4	4
112	4	5	3	4	5	5	5	4	3	1	4	4	4	4	5	1	4	4	4	3	5	5	5	3	4
113	5	5	5	4	5	4	4	4	4	3	4	4	4	4	4	5	4	4	4	4	4	4	5	4	4
114	5	4	4	4	4	5	5	4	4	5	4	4	4	4	4	4	4	4	4	4	5	5	5	5	4
115	4	4	5	5	5	5	5	4	5	5	4	4	4	4	4	5	4	3	4	4	4	4	4	4	4
116	4	5	5	5	5	5	5	3	5	5	4	4	4	4	4	4	4	5	4	5	5	5	5	5	5
117	4	5	5	5	5	5	5	4	5	5	5	5	4	3	3	4	4	4	4	4	4	4	5	4	4

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
118	5	4	4	5	5	5	5	5	4	5	5	5	4	4	4	4	4	4	5	4	4	5	4	5	4
119	5	5	5	5	4	4	5	5	5	5	4	5	4	5	4	4	4	4	4	4	4	4	4	5	4
120	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
121	5	5	4	4	4	5	5	4	5	5	5	5	4	3	2	2	4	4	3	3	4	5	5	5	3
122	5	5	5	4	4	4	5	4	5	5	4	5	4	5	4	4	5	4	5	5	5	5	5	5	4
123	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
124	5	4	5	5	5	5	5	5	5	5	5	4	4	4	5	4	5	5	4	5	4	4	5	5	4
125	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	4	4	4	3	4	5	5	5	5	4
126	3	4	4	3	4	4	5	4	5	3	3	3	4	3	4	3	3	4	4	3	4	4	3	3	3
127	5	5	4	4	4	5	5	4	5	5	5	5	4	2	3	2	4	4	4	4	4	5	5	4	3
128	4	4	4	5	5	4	5	5	5	5	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4
129	4	4	5	4	4	5	4	5	4	5	5	4	4	3	5	4	4	3	4	4	5	4	5	4	4
130	5	5	5	5	5	5	4	4	5	4	5	5	5	4	5	4	5	5	5	5	5	5	5	5	4
131	5	4	4	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4
132	4	5	5	4	4	4	5	3	4	3	4	4	4	3	3	3	4	4	4	4	4	5	5	4	3
133	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
134	5	5	5	5	5	5	5	4	4	5	5	4	5	3	4	4	5	5	4	4	4	4	5	4	4
135	5	4	5	3	4	5	5	4	4	4	5	4	4	5	4	5	5	4	5	4	5	5	5	5	5
136	4	5	4	5	5	5	5	5	4	4	4	4	4	4	4	4	4	4	5	4	4	5	5	5	4
137	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
138	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
139	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	3	3	4	3	3	4	5	4	1
140	5	5	3	5	5	5	5	5	5	5	4	5	5	3	3	5	5	5	5	5	5	5	5	5	5
141	5	5	5	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5
142	4	4	4	3	3	3	4	3	4	5	3	3	4	4	3	3	3	3	3	3	3	3	3	3	3
143	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	5	5	5	5
144	3	4	5	5	5	5	5	4	5	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5	5
145	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
146	4	5	4	4	4	5	5	3	4	4	4	4	4	4	4	3	5	5	4	5	5	5	5	4	4
147	5	5	3	4	4	4	5	5	4	5	4	4	5	4	4	4	5	5	4	4	4	4	4	4	5
148	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	4	4
149	5	5	4	5	4	4	5	5	4	5	4	4	5	4	5	4	5	5	5	4	5	5	5	5	4
150	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
151	4	5	5	5	5	5	5	5	5	5	5	5	5	3	4	4	5	5	4	4	5	5	5	4	4
152	5	5	3	5	5	5	5	5	5	5	4	5	5	3	3	5	5	5	5	5	5	5	5	5	5
153	5	5	5	4	5	4	4	4	4	3	4	4	4	4	4	5	4	4	4	4	4	4	5	4	4
154	4	4	5	4	4	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5
155	4	4	5	4	4	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5
156	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
157	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	4	4	5	5	5	5	5	5	5	5

Appendix 5. Respondent Perceived Service Assessment

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
1	5	5	5	4	5	4	5	4	4	4	5	5	5	4	5	4	5	5	5	5	4	5	4	5	5
2	4	4	4	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
3	5	5	5	3	3	5	5	5	5	4	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5
4	4	4	5	5	5	4	5	5	4	3	5	4	3	4	5	5	5	5	4	5	5	4	5	5	5
5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	5	5	5	5	5	5
6	3	5	5	3	4	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	4	5	4	5	5
7	5	5	5	4	4	5	5	4	5	4	5	5	5	5	4	3	5	5	5	5	5	5	5	5	5
8	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
9	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
10	4	4	4	5	5	4	5	4	4	4	5	5	5	4	4	4	4	5	4	5	5	4	5	5	5
11	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
12	2	3	4	3	3	4	4	3	4	2	4	4	2	4	4	4	5	5	4	4	4	5	5	4	4
13	3	4	4	5	4	5	5	3	5	3	3	3	5	4	4	4	5	5	5	5	5	5	5	5	5
14	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
15	2	4	3	4	4	4	2	3	4	2	3	4	4	3	3	2	4	4	3	4	3	4	4	4	4
16	5	5	5	5	5	5	5	5	5	5	5	5	5	4	3	3	5	5	5	5	5	5	5	4	5
17	4	4	4	3	3	4	4	4	4	4	4	4	4	3	4	3	4	4	4	4	4	5	4	5	4
18	3	4	4	4	4	4	4	4	4	4	4	4	4	3	3	4	4	4	4	4	4	4	5	5	4
19	5	5	5	4	3	5	5	4	5	4	4	4	4	4	5	4	4	4	4	4	4	4	5	4	4
20	4	4	4	4	3	4	4	3	4	3	4	4	4	4	3	3	3	3	3	3	4	4	4	4	4
21	2	4	4	4	4	4	4	4	4	1	5	4	4	4	5	4	4	5	5	5	4	4	4	4	4
22	5	5	5	4	4	5	4	5	4	5	5	5	5	5	3	5	5	5	5	5	5	5	5	4	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
23	5	5	5	4	4	4	5	4	5	5	5	5	5	5	3	5	5	5	5	4	4	5	5	5	5
24	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
25	5	5	5	4	4	5	5	4	5	4	5	5	5	4	4	3	5	5	5	4	4	5	5	5	5
26	4	4	4	4	4	4	4	4	4	4	4	5	5	4	3	4	5	5	5	4	5	5	4	4	5
27	4	5	4	5	4	4	4	3	4	5	4	5	3	4	3	5	4	4	5	5	4	4	5	5	4
28	4	5	4	5	4	4	4	5	4	5	4	5	3	5	3	5	4	4	5	5	4	4	5	5	4
29	4	5	5	3	4	5	5	3	5	5	5	5	5	4	3	4	5	5	4	5	4	5	4	4	5
30	5	5	5	5	5	5	5	5	5	5	5	5	4	5	3	5	5	5	5	5	5	5	5	5	5
31	5	5	5	5	5	5	3	3	5	5	5	5	5	5	5	5	5	5	5	5	4	5	4	4	5
32	4	4	4	4	4	4	5	4	4	5	4	5	4	3	4	3	4	4	4	4	4	4	4	4	4
33	4	3	4	3	3	4	5	3	4	2	3	3	4	4	5	2	5	5	4	4	4	3	4	4	4
34	4	5	5	4	3	5	5	4	5	1	4	4	5	5	4	3	5	5	4	5	4	5	5	5	5
35	5	4	5	5	3	5	5	5	5	2	4	5	5	5	5	4	5	4	4	5	3	5	5	5	4
36	5	5	5	5	3	5	5	3	5	5	4	4	5	4	3	5	5	5	5	5	5	5	5	4	5
37	5	5	4	4	3	5	5	4	5	4	5	5	5	4	4	5	4	5	4	4	4	4	5	4	4
38	5	5	5	5	5	5	4	4	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	4	5
39	5	5	5	3	3	5	5	4	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5
40	5	5	5	5	5	5	5	5	5	5	5	3	5	5	5	3	5	5	5	5	5	5	5	5	5
41	4	5	4	5	4	5	4	4	3	5	4	4	4	4	4	4	4	4	4	4	5	5	3	5	5
42	4	5	5	3	4	5	5	4	5	3	5	4	5	3	3	4	5	5	5	5	3	5	5	5	5
43	4	5	5	3	3	5	5	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
44	1	3	5	5	3	5	3	3	4	5	4	4	4	5	5	4	3	4	5	4	5	4	3	4	5
45	4	4	4	5	5	5	5	3	5	5	5	5	4	5	3	5	5	5	5	5	4	5	5	4	5
46	4	5	4	3	4	5	5	5	5	5	5	5	4	4	5	4	5	5	5	4	5	5	5	5	5
47	5	5	5	5	4	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5
48	5	5	5	5	5	5	5	4	5	2	5	4	5	5	5	5	5	4	5	4	5	5	5	5	5
49	4	5	5	5	4	3	5	4	5	3	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
50	4	4	5	5	5	4	5	4	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5
51	5	4	4	4	4	5	5	3	3	3	5	5	5	5	4	3	4	4	3	4	5	4	4	4	5
52	4	4	4	4	3	4	4	4	4	2	4	4	3	4	3	4	4	4	4	4	4	4	4	4	4
53	4	5	4	4	4	5	5	4	5	5	5	5	4	4	4	5	5	5	5	5	5	5	5	5	5
54	3	5	4	3	3	5	5	4	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5
55	4	4	4	4	4	4	5	5	5	4	4	4	3	5	4	4	4	4	4	4	4	4	5	4	4
56	4	5	3	4	4	5	5	5	5	2	4	4	4	5	4	4	4	4	4	4	4	5	5	4	4
57	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
58	4	4	4	5	4	4	5	5	5	3	5	4	4	3	3	4	5	5	5	4	5	5	5	5	4
59	4	5	5	4	3	5	5	5	5	3	5	5	5	5	4	4	5	5	5	5	5	5	5	5	5
60	4	5	5	4	5	5	4	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	4
61	5	5	5	5	5	5	5	5	4	4	5	5	3	4	4	4	5	5	5	4	4	4	5	5	4
62	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4
63	4	4	4	3	2	4	3	2	5	5	5	2	4	4	1	3	4	4	3	4	4	5	5	5	4
64	4	4	5	3	3	4	5	4	5	2	3	3	4	5	4	4	5	4	4	3	4	5	5	3	4
65	4	4	4	4	4	4	4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	4
66	5	3	5	3	3	5	5	4	5	3	5	5	5	5	5	4	5	4	5	5	5	5	5	5	5
67	5	5	3	3	3	3	4	2	3	3	4	4	4	4	3	4	5	5	5	5	5	5	5	4	3
68	4	4	3	3	3	4	3	3	4	1	4	4	3	4	3	4	5	5	4	4	4	4	5	5	5
69	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	3	4	4	4	4	4	3
70	4	4	4	3	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4
71	4	4	5	5	5	5	4	5	4	4	5	5	4	5	4	5	5	5	4	4	5	5	5	5	5
72	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	4	5	4	4	4	4	4	4
73	4	5	5	3	3	5	5	5	5	3	4	4	4	5	4	4	5	5	5	5	5	5	5	5	5
74	4	4	4	4	4	4	4	3	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
75	4	4	3	3	3	4	4	3	5	4	4	4	4	3	3	3	4	4	4	4	4	4	5	3	4
76	4	5	5	4	3	5	4	5	5	5	5	5	5	5	4	4	4	5	5	5	5	5	5	5	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
77	5	5	5	4	4	5	4	5	5	3	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5
78	3	4	4	4	4	4	4	3	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4
79	5	5	5	3	3	5	5	4	5	4	5	4	5	4	4	4	5	5	4	5	5	5	5	5	5
80	3	4	4	4	4	4	5	3	5	2	4	4	4	4	3	4	4	4	4	4	4	4	5	4	4
81	4	5	5	3	4	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5
82	5	5	5	3	4	5	4	4	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	4	4
83	4	4	3	3	3	4	4	3	4	4	3	3	3	4	3	3	4	4	4	4	4	4	4	4	4
84	5	5	5	5	5	5	5	5	5	4	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5
85	4	4	4	3	3	4	4	4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
86	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
87	5	5	5	4	4	5	5	4	4	3	5	5	3	5	4	4	5	4	4	5	5	5	5	4	5
88	4	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	4	4	4	4	4	4	4	4
89	4	5	5	4	5	5	5	4	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
90	5	5	5	5	5	4	4	4	5	5	5	5	5	5	5	5	5	5	4	4	5	4	4	5	5
91	5	5	5	4	4	5	5	5	5	3	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5
92	3	4	4	4	4	4	5	4	4	4	4	4	4	4	4	3	5	4	4	4	4	4	4	4	4
93	5	5	4	4	3	4	5	5	4	4	5	4	5	3	3	2	5	4	4	4	4	5	5	4	4
94	4	5	3	4	5	5	3	5	5	5	5	5	5	3	4	3	5	5	5	5	5	5	5	5	5
95	5	5	5	5	5	5	5	5	4	5	5	5	4	5	3	4	4	4	4	5	5	5	5	5	5
96	4	4	4	3	3	4	3	4	4	3	4	4	5	4	3	3	5	5	5	5	5	5	5	4	5
97	3	4	5	4	3	5	4	5	5	5	5	4	4	5	5	4	4	4	4	4	4	5	5	4	4
98	4	4	5	4	4	5	5	4	5	5	4	4	3	5	4	3	5	5	4	5	4	4	4	5	5
99	5	5	5	4	4	4	5	4	5	4	5	5	3	4	5	5	5	4	4	5	5	5	5	5	5
100	5	5	5	4	4	4	5	4	5	5	4	4	3	5	4	4	5	5	4	4	5	5	5	5	5
101	5	5	5	4	4	4	5	4	4	4	3	3	5	4	4	4	4	5	5	5	5	4	4	5	4
102	3	5	5	5	5	5	5	4	5	5	5	5	5	4	3	3	5	4	5	5	5	5	5	5	5
103	3	5	4	4	4	4	4	4	4	2	4	4	4	4	2	4	4	4	4	4	5	5	5	4	4

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
104	4	4	4	3	4	4	5	3	5	5	4	4	4	5	4	4	4	4	4	4	4	5	5	5	4
105	5	5	4	5	4	5	4	3	4	5	4	4	4	4	4	4	4	5	5	4	3	4	4	4	3
106	2	5	3	3	4	4	5	4	4	4	5	4	4	4	5	4	4	5	4	4	4	4	5	4	4
107	5	5	5	5	5	5	5	5	5	5	5	5	3	5	4	3	5	5	5	5	5	5	5	5	5
108	4	4	4	3	4	4	4	3	4	3	4	3	3	4	3	3	4	4	4	4	4	4	4	4	3
109	5	4	4	4	4	4	3	4	3	5	5	4	4	5	4	4	5	5	5	5	5	5	5	5	5
110	5	5	5	3	4	5	5	3	5	1	5	5	3	4	4	4	5	5	5	5	4	4	5	4	4
111	4	5	3	4	3	4	4	4	4	4	4	4	4	4	3	3	4	4	4	4	4	4	4	4	4
112	4	4	4	5	4	5	5	4	4	3	4	4	4	4	3	3	4	4	4	4	5	4	4	3	4
113	5	5	5	4	4	5	5	4	4	3	5	5	3	5	4	4	5	4	4	5	5	5	5	4	5
114	3	5	4	4	5	5	5	5	5	4	5	5	3	5	3	3	5	5	5	5	5	5	5	5	5
115	4	4	5	3	3	5	4	4	5	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
116	5	5	5	3	4	5	5	5	5	5	5	5	5	4	3	3	5	5	5	5	5	5	5	5	5
117	4	4	5	3	2	5	3	3	5	1	5	4	5	5	4	4	5	5	5	5	5	5	5	5	5
118	5	5	5	4	5	5	4	4	4	5	5	4	3	4	5	5	5	5	4	4	5	4	5	4	5
119	5	4	5	4	4	5	5	4	5	5	4	4	4	4	4	5	5	5	4	4	4	5	4	4	4
120	5	5	5	5	5	5	5	5	5	3	5	5	5	5	4	3	5	5	5	5	5	5	5	5	5
121	5	5	5	4	4	5	5	5	5	2	4	4	5	4	4	4	5	4	5	5	4	5	5	5	4
122	5	5	5	3	4	4	5	3	5	4	4	4	4	5	4	4	5	5	4	4	4	5	5	5	5
123	5	5	4	5	5	4	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5
124	5	5	4	4	5	5	4	4	5	3	4	4	5	5	4	5	5	5	5	5	5	5	5	5	4
125	5	5	5	5	5	5	5	5	5	5	5	5	5	4	3	4	4	4	4	5	5	4	5	4	5
126	3	4	4	3	4	4	4	4	4	3	4	4	3	3	3	3	4	4	3	3	4	3	4	3	3
127	5	5	4	4	5	5	5	5	5	1	5	5	5	4	4	4	5	4	4	4	4	4	5	4	4
128	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
129	2	4	3	4	3	5	5	3	5	5	5	5	4	5	4	3	5	5	4	3	5	3	4	4	5
130	5	5	4	4	4	5	5	3	5	5	5	5	3	5	5	5	5	5	5	4	5	5	5	5	4

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
131	3	3	3	3	4	3	4	4	4	3	4	4	4	3	4	4	4	5	4	4	5	4	4	5	4
132	4	4	4	4	4	4	4	3	4	3	4	4	4	3	3	3	4	4	3	4	4	5	5	5	3
133	5	5	5	5	5	5	5	3	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
134	4	4	5	3	3	5	5	4	5	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5
135	2	4	4	3	3	5	4	4	5	5	4	4	5	4	3	4	5	5	5	5	5	5	5	4	5
136	4	5	4	4	3	5	5	5	4	3	5	4	4	4	4	3	4	3	4	4	3	5	5	4	4
137	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5
138	5	5	5	3	5	5	5	4	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5
139	1	5	5	4	3	4	5	3	5	3	5	5	5	1	5	1	3	3	3	3	3	5	5	3	3
140	5	5	5	5	5	5	5	3	5	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
141	3	3	4	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
142	3	3	3	3	3	3	3	3	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
143	4	3	4	3	4	5	3	3	4	3	5	4	4	5	4	4	4	4	4	5	4	4	4	5	4
144	3	5	5	4	3	5	5	5	5	4	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5
145	5	5	5	5	5	5	3	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
146	2	4	3	4	3	5	5	3	5	2	5	5	5	4	3	4	4	4	4	5	5	5	5	4	4
147	3	4	4	4	4	4	4	4	4	4	4	4	3	4	3	4	4	4	4	4	4	4	4	4	5
148	3	5	4	4	4	5	5	4	5	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
149	3	5	4	2	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
150	5	5	5	5	5	5	5	4	5	5	5	5	2	5	5	5	5	5	4	4	5	5	4	5	5
151	4	4	4	5	4	4	5	4	5	4	5	4	4	4	4	4	5	3	5	3	5	5	4	4	4
152	5	4	5	5	5	5	5	4	5	3	5	5	5	5	5	4	4	5	5	5	5	5	5	5	5
153	5	5	5	4	4	5	5	4	4	3	5	5	3	5	4	4	5	4	4	5	5	5	5	4	5
154	4	5	5	4	4	5	4	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	4
155	4	5	5	5	4	5	4	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	4
156	3	5	5	4	5	5	5	5	5	3	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5

Resp.	TA1	TA2	TA3	TA4	TA5	TA6	TA7	TA8	TA9	TA10	REL1	REL2	REL3	REL4	REL5	REL6	RES1	RES2	RES3	AS1	AS2	AS3	AS4	AS5	EM1
157	5	5	5	5	4	5	5	5	5	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

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