Information Technology and Systems
e-ISSN: 3031-1187
Homepage: https://sanscientific.com/journal/index.php/its
1(1) 12-25 (2023)
https://doi.org/10.58777/its.v1i1.91

Research Paper

Analysis of Employee Satisfaction with Helpdesk Websites using Service Quality in Construction Companies

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Received: September 2023; Accepted: November 2023

Abstract
The analysis of employee satisfaction with the building construction company's helpdesk website reveals critical areas for improvement in meeting employee needs and expectations for obtaining necessary information. The study utilizes quantitative research methods, employing questionnaire surveys to collect data. Results indicate significant influences on user satisfaction from dimensions like reliability (0.39), responsiveness (0.42), and assurance (0.28) within the helpdesk service system. However, the empathy dimension (0.05) nearly meets expectations, while the tangibles dimension (0.59) shows no substantial influence on user quality. The research emphasizes that aspects affecting helpdesk effectiveness include technical functionalities, time management, response efficiency, and ease of system utilization. Notably, tangible attributes have a negative impact on helpdesk effectiveness. Consequently, improving timely and effective responses is crucial to meeting employee needs. Additionally, ensuring a user-friendly and intuitive interface for the helpdesk system is vital for employee comprehension and utilization. The study underscores the necessity for building construction companies to focus on enhancing service quality to align with employee desires, particularly by addressing technical aspects, response efficiency, and system usability, while also minimizing negative influences from tangible attributes.

Keywords: Applications, Employees, Helpdesk, Servqual Method

Abstrak
Analisis kepuasan karyawan terhadap website helpdesk perusahaan konstruksi bangunan menunjukkan fokus utama pada kualitas layanan yang diberikan, apakah sudah memadai atau tidak dalam memenuhi kebutuhan karyawan untuk mendapatkan bantuan dan informasi yang dibutuhkan. Penelitian ini menggunakan metode kuantitatif dengan pengumpulan data melalui survei kuesioner. Hasil penelitian menunjukkan adanya pengaruh signifikan dari beberapa dimensi terhadap kepuasan pengguna terhadap sistem layanan helpdesk, seperti reliabilitas (0.39), responsifitas (0.42), dan jaminan (0.28). Sementara itu, dimensi empati (0.05) hampir memenuhi harapan dengan nilai gap positif yang kecil. Namun, untuk dimensi "tangibles" (0.59), tidak terdapat pengaruh signifikan terhadap kualitas pengguna. Penelitian menekankan bahwa faktor-faktor yang mempengaruhi efektivitas sistem helpdesk meliputi aspek teknis, manajemen waktu, respons yang efisien, dan kemudahan penggunaan sistem. Atribut fisik dan visual memiliki dampak negatif pada efektivitas helpdesk. Oleh karena itu, penting bagi perusahaan untuk memastikan respon yang tepat waktu dan efektif dari helpdesk guna memenuhi kebutuhan karyawan. Selain itu, antarmuka yang ramah pengguna dan intuitif pada helpdesk juga perlu diperhatikan agar karyawan dapat dengan mudah memahami dan menggunakan sistem tersebut.

Keywords: Aplikasi, Helpdesk, Karyawan, Metode Servqual

How to cite: Fadilah, M. R., Handrianto, Y., (2023). Analysis of Employee Satisfaction with Helpdesk Websites using Service Quality in Construction Companies, Using the PIECES Method, *Information Technology and Systems (ITS) 1(1)*, 12-25

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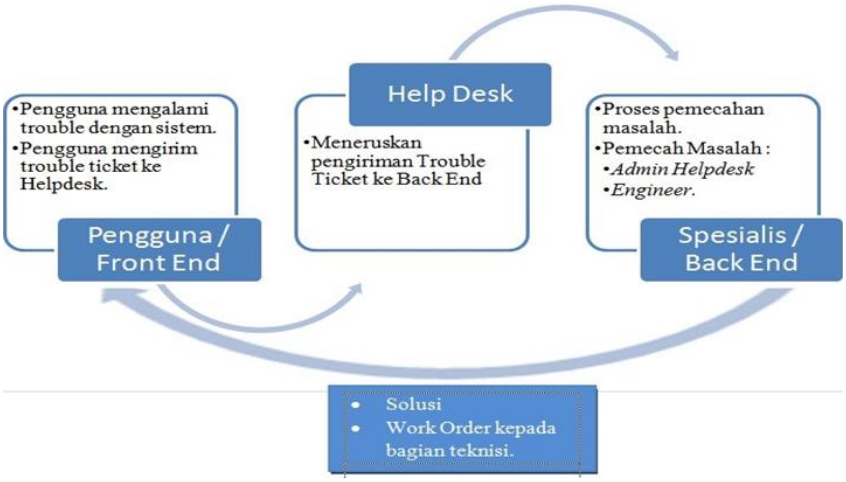
1. Introduction

Technological developments in the construction industry in recent years, the building construction industry has experienced rapid developments in the use of technology, including in terms of supporting internal operations and efficiency. One increasingly important technology aspect is helpdesk websites or online customer support systems in various construction company functions, such as project management, planning, and technical support. Employees are a valuable asset in a construction company. The Role of Employees in Construction Companies is that they are involved in various tasks and responsibilities that influence the success of construction projects (Evelina 2017). The quality of employee performance and their satisfaction has a direct impact on productivity and project outcomes. In using a helpdesk website, customer support is a key factor influencing employee experience. To support the customer service function, the helpdesk of the website must provide easy access, accurate information, and efficient solutions related to the needs and problems that employees may face. The helpdesk is a service division that assists in resolving problems related to using Information and Communication Technology (ICT) in an organization (Padel and Sutabri, 2023). Helpdesk provides various types of services available to organizations when using ICT services. Services provided by the unit include installation, software troubleshooting, computer maintenance, and servicing. The repository system provides tickets to monitor steps taken and process improvements to facilitate IT staff process improvements (Adam, Moedjahedy, and Lengkong 2020). Helpdesk is a unit or part of a company that handles or answers technical questions. The helpdesk to answer industry questions and answers can be sent via telephone and email (Sudrajat and Hidayat 2020). Helpdesk is an important part of information technology management whose aim is to provide timely, responsive, and quality technical support to users or customers. The way the helpdesk works, according to (Likhar and Purwanto 2021), is as follows:



Source: (Likhar and Purwanto 2021)

Figure 1. How the Helpdesk Works

According to Gregorius, the web is a collection of interconnected web pages whose files are linked together. A website consists of a page or pages and a collection of pages called the home page. The main page is at the top, and related pages are at the bottom. Typically, each page below the home page containing hyperlinks to other page sections is called a subpage (Anamisa and Mufarroha, 2020). t can be concluded that the web is a global communication system allowing users to access and share information via computer networks. It consists of several websites connected by hyperlinks.

A model called Servqual (Service Quality) was developed to help managers analyze the root causes of quality problems and understand opportunities to improve service quality, including

physical evidence (Tangibles), reliability (Reliability), responsiveness (Responsiveness), guarantee (Assurance), and caring (Empathy). Service quality measurement in the Servqual model is based on a multi-part scale designed to measure customer expectations and perceptions and their differences in the five main service quality dimensions (Syarifudin and Hidayat 2019). Parasuraman said 22 service quality determinants are summarized in five main factors, also known in Servqual: tangibles, reliability, responsiveness, assurance, and empathy (Haryanti and Baqi 2019). Service quality has long influenced customer satisfaction in various business sectors (Isyanto and Wijayanti, 2022). In the construction industry, service quality principles have also become relevant, although with special emphasis on employee needs.

The construction industry often faces challenges, such as time pressure, costs, and changing client demands. In facing this challenge, construction companies must ensure that customer support systems, especially helpdesk websites, can effectively facilitate communication and solve problems quickly. Although helpdesk websites are increasingly commonly used in the construction industry, research on measuring employee satisfaction and service quality in this context still needs to be completed. Therefore, further research is needed to understand the extent to which helpdesk websites meet the needs of employees in building construction companies and to identify areas of improvement that may be needed. Research conducted by (Kaya et al. 2019) found that website familiarity has a significant positive moderating effect on the relationship between e-satisfaction and e-loyalty, while e-service quality has a positive effect on e-loyalty directly and indirectly through e-satisfaction.

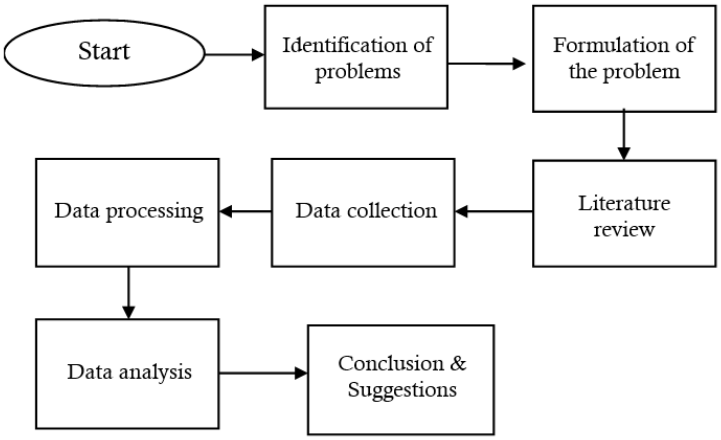
Parasuraman states, "Service Quality is a function of the differences between expectation and performance along the quality dimensions." That is, service quality is the difference between customer expectations and reality. Are expectations less in-line with the reality customers receive or vice versa (Sulaiman and Meliza, 2023)? Kurtz and Boone state, "Customer satisfaction is the ability of a product or service to meet or exceed purchaser expectations." According to (Sulaiman and Meliza 2023), satisfaction arises When customers buy and use a product that meets or exceeds their needs and expectations. Kotler states, "A person's satisfaction or disappointment arises when they compare their impression of the product's performance (results) and their expectations."

The background to this problem highlights the need to investigate the extent to which helpdesk websites in building construction companies are adequate in providing quality services to employees and whether the concept of service quality can be used to increase employee satisfaction in this context. With a better understanding of these issues, construction companies can improve their services and increase employee performance and satisfaction. Building construction companies have helpdesk service applications to assist their business processes. Of course, this application will cause employee complaints about using the program. Employee complaints include slow response times to the helpdesk system, poor system reliability, difficulty in using the helpdesk system, and the need for technical assistance.

2. Design/Methods

Research Stages

The research stages in the study "Analysis of Employee Satisfaction with Helpdesk Websites Using Service Quality in Building Construction Companies" can involve a series of methodological and analytical steps, which include:



Source: Data processed (2023)

Figure 2. Flow of Research Stages

Problem identification is the first step in the research process. This phase is based on problem formulation based on the problem context. Defining the problem formulation based on the helpdesk service structure and employee satisfaction surveys to measure and analyze employee satisfaction with PT's helpdesk service structure. Wijaya Kariya Beton Tbk. Carried out to find research and theory information relevant to current research, which comes from books and internet journal articles. In addition, researchers carried out evaluations, helpdesk service quality methodology (Servqual), validity tests, reliability tests, and gap analysis.

This method is carried out by collecting data on the company using research tools, namely observation, interviews, and distributing questionnaires. Researchers distributed questionnaires to respondents or employees of PT. Wijaya Karya Beton Tbk from various divisions have used the helpdesk service system. The statements distributed through the questionnaire are related to employee satisfaction with the helpdesk service system provided by the company using the five Service Quality (Servqual) method dimensions: The Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

In this research, researchers applied the Simple Random Sampling method, where simple random sampling is a random sampling of sample members from a population without paying attention to the population hierarchy. At this stage, a survey instrument was implemented consisting of five dimensions contained in the Servqual method, a Likert scale, and a questionnaire description based on the dimensions of Tangibles: Reliability, Responsiveness, Assurance, and Empathy. The data adequacy test is an effort to ensure that the information collected is sufficient or vice versa. Likert scale: Using the Likert scale in the questionnaire, users provide ratings of the helpdesk service system and measure the user's perspective. Validity and Reliability Tests: Validity tests are intended to prove the accuracy and correctness of research instruments. Reliability testing aims to ensure the suitability of a measuring instrument, regardless of whether it can be used reliably or after repeated measurements. Service Quality (Servqual) Here, the researcher describes the five dimensions used: Tangibles, Reliability, Responsiveness, Assurance, and Empathy.

Data analysis

Analysis Using the Service Quality (Servqual) Method, the data collected was analyzed using five dimensions of the Servqual method: direct evidence (Tangibles), reliability (Reliability), responsiveness (Responsiveness), guarantee (Assurance), and empathy (Empathy). Conclusions and suggestions, conclusions and suggestions are the final steps in describing the research process by drawing appropriate conclusions on the analysis of employee satisfaction regarding helpdesk services at PT. Wijaya Karya Beton Tbk.

Population and sample: Population refers to a generalizable domain of specific objects or subjects designated by the researcher for study. This population shows certain numbers and characteristics; researchers conclude the research (Siyoto and Sodik 2015). A sample is a part of a population with the same number and characteristics. Samples represent a population when the population under study is too large to survey the entire population. Sampling is usually carried out according to certain procedures and must reflect the population as a whole (Siyoto and Sodik 2015). Based on the results of interviews with PT. Wijaya Karya Beton Tbk, if the total number of helpdesk service system users is 500, then use a margin of error of 10% and obtain the following results:

$$n = \frac{500}{1+(500.0{,}1^2)} = 83{,}33 \quad (1)$$

So, the sample size required for a population of 500 users with a margin of error of 10% is around 83 users and rounded up to 85 users. The data analysis method was applied to research employee satisfaction levels with the helpdesk service system at PT. WIKA Beton is as follows:

1) Validity test
Done by utilizing the Product Moment relational technique. According to (Oktamala and Zuraidah 2021), the following is the Product Moment formula used:

$$r_{xy} = \frac{N\sum XY - \sum X \sum Y}{\sqrt{N\sum x^2 - (\sum x)^2 (\sum Y^2 - (\sum Y)^2}}$$

2) Reliability Test
Reliability testing is the study of the consistency of results obtained in repeated studies. According to (Oktamala and Zuraidah 2021), the reliability test in the research applied Cronbach's Alpha formula.

$$r_n = \frac{n}{n-1}\left(1 - \frac{\sum_1^n - s_i^2}{s_t^2}\right)$$

3) Servqual Analysis
Aims to assess service quality based on the difference between customer expectations and perceptions. The method consists of two main stages: assessing customer perceptions of service quality and identifying customer expectations.
   a) The following equation calculates customer perceptions and service quality expectations:
   ∑yi = (∑STT x 1) + (∑TT x 2) + (∑CT x 3) + (∑T x 4) + (∑ST x 5)

   b) Calculating the average response of respondents to confession statements can be calculated using the following equation:
   $$\overline{Y\iota} = \frac{\Sigma Pi}{n}$$

   c) The average response of respondents to the expected statement can be calculated using the following formula:
   $$\overline{H\iota} = \frac{\Sigma Hi}{n}$$

   d) The calculation of the gap value uses the following equation:
   $$G = \overline{P\iota} - \overline{H\iota}$$

3. Results and Discussion

From the questionnaires received, 85 respondents were used for data analysis. Although the results of this research have been discussed in more detail previously, the author first describes the respondents based on gender, age, division, latest education, whether you use helpdesk service applications, how often you use helpdesk service applications, how long have you used helpdesk service applications. Various information about the results of the research and respondent statements were obtained from the results of distributing the requested questionnaires.

1) Validity Test

This validity test was carried out using SPSS version 26. The calculation results are expressed as the Pearson Product-Moment Correlation Coefficient, which measures the linear relationship between the attribute scores for each statement and the overall score. If an attribute is invalid, it is not considered in the following calculations. The following are the appropriate calculation results based on data measurements using SPSS 26:

1. Tangibles Dimension

Table 1. Tangibles Dimension Validity Test

Statement	r-count	Statement	r-count	r-table	Information
X1	0,446	Y1	0,379		Valid
X2	0,579	Y2	0,501		Valid
X3	0,469	Y3	0,459		Valid
X4	0,434	Y4	0,439		Valid
X5	0,541	Y5	0,520	0,213	Valid
X6	0,375	Y6	0,544		Valid
X7	0,377	Y7	0,321		Valid
X8	0,502	Y8	0,593		Valid
X9	0,523	Y9	0,392		Valid
X10	0,544	Y10	0,509		Valid

Source: Data processed (2023)

2. Reliability Dimension

Table 2. Validity Test of Reliability Dimensions

Statement	r-count	Statement	r-count	r-table	Information
X11	0,453	Y11	0,430		Valid
X12	0,636	Y12	0,586		Valid
X13	0,642	Y13	0,568	0,213	Valid
X14	0,597	Y14	0,475		Valid
X15	0,529	Y15	0,508		Valid
X16	0,511	Y16	0,496		Valid

Source: Data processed (2023)

3. Dimensions of Responsiveness

Table 3. Validity Test of Responsiveness Dimensions

Statement	r-count	Statement	r-count	r-table	Information
X17	0,785	Y17	0,787		Valid
X18	0,462	Y18	0,300		Valid
X19	0,702	Y19	0,628	0,213	Valid
X20	0,338	Y20	0,478		Valid
X21	0,538	Y21	0,735		Valid

Source: Data processed (2023)

4. Assurance Dimension

Table 4. Validity Test of Assurance Dimensions

Statement	r-count	Statement	r-count	r-table	Information
X22	0,656	Y22	0,662		Valid
X23	0,488	Y23	0,419	0,213	Valid
X24	0,506	Y24	0,617		Valid
X25	0,644	Y25	0,676		Valid

Source: Data processed (2023)

5. Empathy Dimensions

Table 5. Validity Test of Empathy Dimensions

Statement	**r-count**	**Statement**	**r-count**	**r-table**	**Information**
X26	0,908	Y26	0,570		Valid
X27	0,798	Y27	0,544	0,213	Valid
X28	0,843	Y28	0,566		Valid
X29	0,64	Y29	0,458		Valid

Source: Data processed (2023)

Based on the questionnaire validity test calculations for the dimensions of tangibles, reliability, responsiveness, assurance, empathy, and expectations, it can be concluded that all the statements submitted by the researcher are valid. This ifinding s because each questionnaire in tangibles, reliability, responsiveness, assurance, and empathy expectations has a calculated r-value greater than the r-Table value used as a reference.

Reliability Test

The reliability test stage tests how consistent the respondent's response to an utterance is that the respondent understands certain phrases.

Service Quality Data Analysis

Calculation of Response Frequency in the Expectations and Perceptions Questionnaire

a) Hope or Expectation Dimension

The level of response of respondents to expectations or hopes for employee satisfaction with the PT helpdesk system. Wijaya Karya Beton Tbk was decided based on the results of distributing questionnaires. Below is a summary of respondents' level of reaction to specific service expectations aspect by aspect.

Table 6. Summary of Hope Dimension Questionnaire Responses

Statement	STS	TS	N	S	SS	Total
X1			1	51	33	85
X2			1	34	50	85
X3			2	56	27	85
X4				32	53	85
X5		1	2	54	28	85
X6		1		30	54	85
X7				56	29	85
X8		1		33	51	85
X9		1	3	54	27	85
X10		2	2	31	50	85
X11		1	1	51	32	85
X12		1	3	29	52	85
X13	1	2	1	51	30	85
X14			3	33	49	85

X15	1		4	50	30	85
X16			2	34	49	85
X17	1	1	1	50	32	85
X18		1	3	34	47	85
X19	1		1	49	34	85
X20			1	37	47	85
X21				54	31	85
X22	1		2	35	47	85
X23	1		1	52	31	85
X24			1	36	48	85
X25			3	49	33	85
X26			1	35	49	85
X27				52	33	85
X28			1	40	44	85
X29			1	47	37	85

Source: Data processed (2023)

In the analysis of the Tangibles dimension, statement X6 received the most responses, namely 54 answers in the SS (Strongly Agree) category. In contrast, statement X5, In the Reliability dimension, statement X12 received the most responses with 52 answers in the SS (Strongly Agree) category. In contrast, statements X13 and X15 only had one answer in the STS (Strongly Disagree) category. In the Responsiveness dimension, statement X17 received the most responses, namely 50 answers in the S category (Agree), while statements X17 and X19 only had one answer in the STS category (Strongly Disagree). In the Assurance dimension, statement X23 received the most responses with 52 answers in the S category (Agree), while statements X22 and X23 only had one answer in the STS category (Strongly Disagree). In the Empathy dimension, statement X27 received the most responses, namely 52 answers in category S (Agree), while statements X26, X28, and X29 only had one answer in category N (Neutral).

b) Perception Dimension

The level of respondents' responses to employee performance or perceptions of satisfaction in the PT helpdesk system. Wijaya Karya Beton Tbk was decided based on the results of distributing questionnaires. Below is a summary of respondents' level of reaction to specific service perceptions aspect by aspect.

Table 7. Summary of Perception Dimension Questionnaire Responses

Statement	STS	TS	N	S	SS	Total
Y1				29	56	85
Y2			1	52	32	85
Y3		1		25	59	85
Y4				50	35	85
Y5			3	24	58	85
Y6	1		1	52	31	85
Y7			1	24	60	85
Y8		1		53	31	85
Y9		1		29	55	85
Y10	1	2	1	46	35	85
Y11	1			26	58	85
Y12		2		50	33	85
Y13	1	2		31	51	85
Y14			2	44	39	85
Y15		1	2	32	50	85
Y16			1	47	37	85
Y17		2		33	50	85
Y18	1			46	38	85

Y19	1		30	54	85
Y20	1		50	34	85
Y21	1	1	34	49	85
Y22	1	3	41	40	85
Y23	2		29	54	85
Y24		1	48	36	85
Y25	1	3	26	55	85
Y26		1	43	41	85
Y27			32	53	85
Y28		1	42	42	85
Y29			35	50	85

Source: Data processed (2023)

In the analysis based on the Tangibles dimension, statement Y7 stands out with the highest number of respondents, namely 60 answers in the SS (Strongly Agree) category. In contrast, statements Y6 and Y10 only received one answer in the STS (Strongly Disagree) category. Regarding the Reliability dimension, statement Y11 received the most responses, namely 58 answers in the SS (Strongly Agree) category, while statements Y11 and Y13 only had one answer in the STS (Strongly Disagree) category. When looking at the Responsiveness dimension, statements Y17 and Y20 reached the highest number of respondents, with 50 answers in the S (Agree) and SS (Strongly Agree) categories. In contrast, statement Y18 only had one answer in the STS (Strongly Disagree) category. In the Assurance dimension, statement Y23 stands out with the highest number of respondents, namely 54 answers in the SS (Strongly Agree) category. In contrast, statements Y22 and Y25 only received one answer in the STS (Strongly Disagree) category. Finally, in the Empathy dimension, statement Y27 received the most responses, with 53 answers in the SS (Strongly Agree) category, while statements Y26 and Y28 only had one answer in the N (Neutral) category.

1) Calculation of Response Frequency in the Expectations and Perceptions Questionnaire
   Respondent weights and average responses to satisfaction expectations and perceptions dimensions produce results namely:

Table 8. Weighted Values and Average User Satisfaction of Expectation Dimensions

Frequency of Answers to the Level of Satisfaction Expectation Questionnaire								
Statement	STS	TS	N	S	SS	Total	Sxi	X
X1			1	51	33	85	372	4.376470588
X2			1	34	50	85	389	4.576470588
X3			2	56	27	85	365	4.294117647
X4				32	53	85	393	4.623529412
X5		1	2	54	28	85	364	4.282352941
X6		1		30	54	85	392	4.611764706
X7				56	29	85	369	4.341176471
X8		1		33	51	85	389	4.576470588
X9		1	3	54	27	85	362	4.258823529
X10		2	2	31	50	85	384	4.517647059
X11		1	1	51	32	85	369	4.341176471
X12		1	3	29	52	85	387	4.552941176
X13	1	2	1	51	30	85	362	4.258823529
X14			3	33	49	85	386	4.541176471
X15	1		4	50	30	85	363	4.270588235
X16			2	34	49	85	387	4.552941176
X17	1	1	1	50	32	85	366	4.305882353
X18		1	3	34	47	85	382	4.494117647
X19	1		1	49	34	85	370	4.352941176

X20		1	37	47	85	386	4.541176471
X21			54	31	85	371	4.364705882
X22	1	2	35	47	85	382	4.494117647
X23	1	1	52	31	85	367	4.317647059
X24		1	36	48	85	387	4.552941176
X25		3	49	33	85	370	4.352941176
X26		1	35	49	85	388	4.564705882
X27			52	33	85	393	4.623529412
X28		1	40	44	85	383	4.505882353
X29		1	47	37	85	376	4.423529412

Source: Data processed (2023)

Table 9. Weight Value and Average User Satisfaction of Perception Dimensions

Frequency of Answers to the Level of Perception of Satisfaction Questionnaire								
Statement	STS	TS	N	S	SS	Total	Sxi	X
Y1				29	56	85	396	4.658823529
Y2			1	52	32	85	371	4.364705882
Y3		1		25	59	85	397	4.670588235
Y4				50	35	85	375	4.411764706
Y5			3	24	58	85	395	4.647058824
Y6	1		1	52	31	85	367	4.317647059
Y7			1	24	60	85	399	4.694117647
Y8		1		53	31	85	369	4.341176471
Y9		1		29	55	85	393	4.623529412
Y10	1	2	1	46	35	85	367	4.317647059
Y11	1			26	58	85	395	4.647058824
Y12		2		50	33	85	369	4.341176471
Y13	1	2		31	51	85	384	4.517647059
Y14			2	44	39	85	377	4.435294118
Y15		1	2	32	50	85	386	4.541176471
Y16			1	47	37	85	376	4.423529412
Y17		2		33	50	85	386	4.541176471
Y18	1			46	38	85	375	4.411764706
Y19		1		30	54	85	392	4.611764706
Y20		1		50	34	85	372	4.376470588
Y21		1	1	34	49	85	386	4.541176471
Y22		1	3	41	40	85	375	4.411764706
Y23		2		29	54	85	390	4.588235294
Y24			1	48	36	85	375	4.411764706
Y25		1	3	26	55	85	390	4.588235294
Y26			1	43	41	85	380	4.470588235
Y27				32	53	85	393	4.623529412
Y28			1	42	42	85	381	4.482352941
Y29				35	50	85	390	4.588235294

Source: Data processed (2023)

2) Calculation of the Gap Value on Employee Satisfaction

Table 10. Average Respondent Responses and Gap Values for Expectation and Perception Dimensions

Statement	Average Score	Statement	Mean Score	Gap Score
X1	4.376470588	Y1	4.658823529	0.282352941
X2	4.576470588	Y2	4.364705882	-0.211764706
X3	4.294117647	Y3	4.670588235	0.376470588
X4	4.623529412	Y4	4.411764706	-0.211764706
X5	4.282352941	Y5	4.647058824	0.364705883

X6	4.611764706	Y6	4.317647059	-0.294117647
X7	4.341176471	Y7	4.694117647	0.352941176
X8	4.576470588	Y8	4.341176471	-0.235294117
X9	4.258823529	Y9	4.623529412	0.364705883
X10	4.517647059	Y10	4.317647059	-0.2
X11	4.341176471	Y11	4.647058824	0.305882353
X12	4.552941176	Y12	4.341176471	-0.211764705
X13	4.258823529	Y13	4.517647059	0.25882353
X14	4.541176471	Y14	4.435294118	-0.105882353
X15	4.270588235	Y15	4.541176471	0.270588236
X16	4.552941176	Y16	4.423529412	-0.129411764
X17	4.305882353	Y17	4.541176471	0.235294118
X18	4.494117647	Y18	4.411764706	-0.082352941
X19	4.352941176	Y19	4.611764706	0.25882353
X20	4.541176471	Y20	4.376470588	-0.164705883
X21	4.364705882	Y21	4.541176471	0.176470589
X22	4.494117647	Y22	4.411764706	-0.082352941
X23	4.317647059	Y23	4.588235294	0.270588235
X24	4.552941176	Y24	4.411764706	-0.14117647
X25	4.352941176	Y25	4.588235294	0.235294118
X26	4.564705882	Y26	4.470588235	-0.094117647
X27	4.623529412	Y27	4.623529412	0
X28	4.505882353	Y28	4.482352941	-0.023529412
X29	4.423529412	Y29	4.588235294	0.164705882

Source: Data processed (2023)

3) Calculation of Servqual Values Per Dimension Item

Table 11. Average Gap Value Per Item Dimension of Respondents' Responses

Statement of Expectations	Average Score	Perception Statement	Average Score
X1	372	Y1	396
X2	389	Y2	371
X3	365	Y3	397
X4	393	Y4	375
X5	364	Y5	395
X6	392	Y6	367
X7	369	Y7	399
X8	389	Y8	369
X9	362	Y9	393
X10	384	Y10	367
X *Tangibles*	377.9	Y *Tangibles*	382.9
X11	369	Y11	395
X12	387	Y12	369
X13	362	Y13	384
X14	386	Y14	377
X15	363	Y15	386
X16	387	Y16	376
X *Reliability*	375.6	Y *Reliability*	381.1
X17	366	Y17	386
X18	382	Y18	375
X19	370	Y19	392
X20	386	Y20	372
X21	371	Y21	386
X *Responsiveness*	375	Y *Responsiveness*	382.2
X22	382	Y22	375

X23	367	Y23	390
X24	387	Y24	375
X25	370	Y25	390
X *Assurance*	376.5	Y *Assurance*	382.5
X26	388	Y26	380
X27	393	Y27	393
X28	383	Y28	381
X29	376	Y29	390
X *Empathy*	385	Y *Empathy*	386

Source: Data processed (2023)

4) Determination of Servqual Score for each Dimension

Table 12. Average Gap Value Per Item Dimension of Respondents' Responses

Servqual Dimensions	Expectations of Satisfaction	Perception of Satisfaction	Gap Score	Ranking
Tangibles	44.46	45.05	0.59	1
Reliability	26.52	26.91	0.39	3
Responsiveness	22.06	22.48	0.42	2
Assurance	17,72	18.00	0.28	4
Empathy	18.12	18.16	0.05	5

Source: Data processed (2023)

Discussion

In the results of discussions based on research regarding the level of employee satisfaction with the helpdesk service system using the Servqual method, it was found that there was a significant difference between perceptions (the average score of the assessment results by employees) and expectations (the average score of expectations expected by employees) in each service dimension, namely Tangibles with a gap of 0.59, reliability with a gap of 0.39, responsiveness with a gap of 0.42, Assurance with a gap of 0.28, and Empathy with a gap of 0.05. This analysis shows that, overall, the actual level of satisfaction of employees with the helpdesk service system in Building Construction Companies is relatively high, with the average gap value indicating a positive difference between their perceptions and expectations. However, special attention needs to be paid to the Empathy dimension, which has a fairly small positive gap, illustrating the potential for further improvement. Therefore, to increase overall employee satisfaction, companies can focus improvement efforts on aspects that have significant differences between employee perceptions and expectations, namely Tangibles, Reliability, Responsiveness, and Assurance. By addressing these differences, companies can ensure that their helpdesk services better meet employee expectations, increase job satisfaction, and strengthen positive work relationships.

4. Conclusion

Analyzing employee satisfaction levels with the helpdesk service system in Construction Companies using the Servqual method shows that the Tangibles, Reliability, Responsiveness, and Assurance dimensions reveal significant differences between employee perceptions and expectations, indicating higher expectations than their perceptions. In contrast, the Empathy dimension shows smaller differences between perceptions and expectations, indicating that employees' perceptions are closer to their expectations.

These findings underscore the potential for improvements in the company's helpdesk service system. This information can guide companies to improve significant differences between employee perceptions and expectations, such as Tangibles, Reliability, Responsiveness, and Assurance. With this significant difference, the null hypothesis (H0) is rejected, indicating a significant difference in employee satisfaction with the helpdesk service system using the Service Quality method. On the other hand, the alternative hypothesis (H1) is accepted, confirming a

significant difference in employee satisfaction with the helpdesk service system using the Service Quality method.

Recommendation
The recommendation that can be given based on these results is to increase efforts in providing greater empathy to employees in handling their requests for help. In addition, companies can also maintain and improve the quality of physical evidence, reliability, responsiveness, and guarantees provided by the helpdesk service system to continue to meet or even exceed employee expectations. In this way, companies can increase employee satisfaction with the helpdesk service system and support employee productivity and overall job satisfaction.

Limitations and avenue for future research
Future research could expand the sample size, consider additional variables, and involve comparisons with similar companies to understand employee satisfaction with helpdesk service systems better. Additional research methods such as in-depth interviews, improvement impact evaluations, and organizational performance analysis can provide more comprehensive insights. Likewise, considering respondents' demographic aspects and analysis across time can provide a deeper understanding of the factors influencing employee perceptions. In this way, future research can provide more robust guidance for companies in improving their helpdesk services.

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