

APPENDICES

Appendix A

Summary of Previous Studies

No.	Author(s)	Year	Research Focus	Relevance to Current Study
1	Dhisasmito & Kumar	2020	Service quality and customer loyalty in coffee shops	Supports the importance of service quality in the coffee-shop industry
2	Özkan et al.	2020	Service quality, customer satisfaction, perceived value, and loyalty	Supports the relationship among service quality, perceived value, and satisfaction
3	Riswara, Wagiman, & Purwadi	2021	Service quality and customer satisfaction in coffee shops in Yogyakarta	Directly relevant to the Yogyakarta coffee-shop context
4	Mufhtie, Suhud, & Aditya	2022	Service quality and customer satisfaction in a local coffee shop	Supports the relationship between service quality and customer satisfaction
5	McDougall & Levesque	2000	Service quality, perceived value, and customer satisfaction	Supports the role of perceived value in satisfaction
6	Cronin et al.	2000	Quality, value, satisfaction, and behavioral intentions	Supports relationships among quality, value, and satisfaction
7	Zygiaris et al.	2022	Service quality and customer satisfaction	Provides recent empirical support for service-quality/satisfaction relationships

Source: Compiled from the author's own synthesis of the reviewed studies.

Appendix B

Likert Scale Response Categories

Score	Response Category
1	Strongly Disagree
2	Disagree
3	Neutral

4	Agree
5	Strongly Agree

Source: Adapted from Likert (1932).

Appendix C

Operationalization of Variables

Variable	Code	Measurement Indicator	Scale
Tangibility (X1)	TA1	Cleanliness and tidiness of the Fore Coffee outlet	Likert 1–5
	TA2	Attractiveness of the outlet's design and layout	Likert 1–5
	TA3	Professional appearance of Fore Coffee staff	Likert 1–5
	TA4	Clarity and attractiveness of the menu and promotional materials	Likert 1–5
	TA5	Quality and condition of service equipment and facilities	Likert 1–5
Reliability (X2)	REL1	Consistency of beverage quality across visits	Likert 1–5
	REL2	Accuracy in fulfilling customer orders	Likert 1–5
	REL3	Timeliness of service delivery	Likert 1–5
	REL4	Reliability of the Fore Coffee mobile application for ordering	Likert 1–5
	REL5	Fulfilment of promotional and loyalty programme commitments	Likert 1–5
Responsiveness (X3)	RES1	Speed and efficiency of service at the counter or through the application	Likert 1–5

	RES2	Staff willingness and proactiveness in assisting customers	Likert 1–5
	RES3	Promptness in handling customer complaints or problems	Likert 1–5
	RES4	Responsiveness of the order-tracking feature in the mobile application	Likert 1–5
	RES5	Proactive communication regarding order status, delays, or changes	Likert 1–5
Assurance (X4)	AS1	Baristas' knowledge and expertise in preparing beverages	Likert 1–5
	AS2	Staff courtesy, friendliness, and respectful attitude	Likert 1–5
	AS3	Customer confidence in the safety, hygiene, and quality of Fore Coffee products	Likert 1–5
	AS4	Transparency and clarity of product information	Likert 1–5
	AS5	Overall customer trust in the Fore Coffee brand and its services	Likert 1–5
Empathy (X5)	EMP1	Staff willingness to understand and accommodate individual customer preferences	Likert 1–5
	EMP2	Availability of order personalization and customization	Likert 1–5
	EMP3	Warm, friendly, and approachable staff interactions	Likert 1–5
	EMP4	Staff ability to make customers feel valued and cared for	Likert 1–5
	EMP5	Staff sensitivity and responsiveness to customers' needs throughout the service	Likert 1–5

		process	
Perceived Value (Z)	PV1	Perception that the price paid is appropriate in relation to the quality received	Likert 1–5
	PV2	Perception that Fore Coffee's prices are competitive and reasonable compared with similar coffee shops	Likert 1–5
	PV3	Functional benefits of Fore Coffee products and services in fulfilling customer needs	Likert 1–5
	PV4	Emotional value and positive experience gained from purchasing at Fore Coffee	Likert 1–5
	PV5	Social value and positive impression associated with visiting or consuming Fore Coffee products	Likert 1–5
	PV6	Perception that the money and time spent at Fore Coffee are well invested	Likert 1–5
Customer Satisfaction (Y)	CS1	Overall satisfaction with the service experience at Fore Coffee Yogyakarta	Likert 1–5
	CS2	Satisfaction with the taste and quality of Fore Coffee products	Likert 1–5
	CS3	Satisfaction with the process and manner in which the service is delivered	Likert 1–5
	CS4	Satisfaction with the physical service environment and the convenience of the Fore Coffee mobile application	Likert 1–5

	CS5	Willingness to revisit Fore Coffee and recommend it to others as an outcome associated with a favourable overall evaluation of the experience	Likert 1–5
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Source: Researcher, adapted from Parasuraman et al. (1988), Zeithaml (1988), and Oliver (1980).

Appendix D Goodness-of-Fit Criteria

Goodness-of-Fit Index	Cut-off Value	Interpretation
RMSEA	< 0.10	Acceptable fit
RMR	< 0.10	Acceptable fit
CFI	> 0.90	Acceptable fit
TLI	> 0.90	Acceptable fit
RFI	> 0.90	Acceptable fit
NFI	> 0.90	Acceptable fit
Probability (p-value)	> 0.05	Acceptable fit

Appendix E Gender Characteristics of Respondents

Gender	Frequency	Percentage
Female	120	52.2%
Male	110	47.8%
Total	230	100.0%

Source: Primary data collected through the questionnaire, processed by the researcher.

Appendix F
Age Characteristics of Respondents

Age Group	Frequency	Percentage
18–22 years	83	36.1%
23–27 years	84	36.5%
28–35 years	48	20.9%
Above 35 years	15	6.5%
Total	230	100.0%

Source: Primary data collected through the questionnaire, processed by the researcher.

Appendix G
Educational Background of Respondents

Educational Background	Frequency	Percentage
Senior High School or equivalent	87	37.8%
Diploma (D3)	29	12.6%
Bachelor's Degree (S1)	105	45.7%
Master's/Doctoral Degree (S2/S3)	9	4.0%
Total	230	100.0%

Appendix H
Occupational Characteristics of Respondents

Occupation	Frequency	Percentage
Private-sector employees	83	36.1%
Students	70	30.4%
Civil servants/military/police	42	18.3%
Entrepreneurs	35	15.2%
Total	230	100.0%

Source: Primary data collected through the questionnaire, processed by the researcher.

Appendix I
Monthly Expenditure of Respondents

Monthly Expenditure	Frequency	Percentage
Below Rp1,000,000	9	3.9%
Rp1,000,000–Rp2,500,000	71	30.9%
Rp2,500,000–Rp5,000,000	102	44.3%
Above Rp5,000,000	48	20.9%
Total	230	100.0%

Source: Primary data collected through the questionnaire, processed by the researcher.

Appendix J
Fore Coffee Visit Frequency

Visit Frequency per Month	Frequency	Percentage
Once	23	10.0%
2–3 times	89	38.7%
4–5 times	74	32.2%
More than 5 times	44	19.1%
Total	230	100.0%

Source: Primary data collected through the questionnaire, processed by the researcher.

Appendix K
Most Frequently Visited Fore Coffee Outlet

Outlet	Frequency	Percentage
Kaliurang	50	21.7%
Ambarrukmo	48	20.9%
Seturan	45	19.6%
Godean	44	19.1%
Pakuwon	43	18.7%
Total	230	100.0%

Source: Primary data collected through the questionnaire, processed by the researcher.

Appendix L
Standardized Loading Factor Results

Construct	Indicator	Standardized Loading
Tangibility	TA1	0.868
	TA2	0.848
	TA3	0.854
	TA4	0.866
	TA5	0.857
Reliability	REL1	0.857
	REL2	0.884
	REL3	0.851
	REL4	0.872
	REL5	0.860
Responsiveness	RES1	0.872
	RES2	0.868
	RES3	0.850
	RES4	0.865
	RES5	0.855
Assurance	AS1	0.865
	AS2	0.835
	AS3	0.839
	AS4	0.876
	AS5	0.857
Empathy	EMP1	0.860
	EMP2	0.860
	EMP3	0.841
	EMP4	0.862
	EMP5	0.883

Perceived Value	PV1	0.860
	PV2	0.834
	PV3	0.850
	PV4	0.853
	PV5	0.859
	PV6	0.853
Customer Satisfaction	CS1	0.866
	CS2	0.803
	CS3	0.828
	CS4	0.862
	CS5	0.843

Appendix M
AVE and Construct Reliability Results

Construct	AVE	Construct Reliability
Tangibility	0.7372	0.9335
Reliability	0.7480	0.9369
Responsiveness	0.7431	0.9353
Assurance	0.7302	0.9312
Empathy	0.7418	0.9349
Perceived Value	0.7251	0.9406
Customer Satisfaction	0.7068	0.9233

Source: Processed primary data using AMOS, 2026.

Appendix N
Discriminant Validity Using the Fornell–Larcker Criterion

Construct	Tangibility	Reliability	Responsiveness	Assurance	Empathy	Perceived Value	Customer Satisfaction

Tangibility	0.859	0.685	0.663	0.622	0.607	0.716	0.836
Reliability	0.685	0.865	0.643	0.625	0.628	0.696	0.818
Responsiveness	0.663	0.643	0.862	0.632	0.633	0.701	0.815
Assurance	0.622	0.625	0.632	0.855	0.628	0.701	0.800
Empathy	0.607	0.628	0.633	0.628	0.861	0.694	0.796
Perceived Value	0.716	0.696	0.701	0.701	0.694	0.852	0.875
Customer Satisfaction	0.836	0.818	0.815	0.800	0.796	0.875	0.841

Source: Processed primary data using AMOS, 2026.

Appendix O

Goodness-of-Fit Results

Goodness-of-Fit Index	Model Value	Criterion	Result
RMSEA	0.000	< 0.10	Fit
P-value	0.693	> 0.05	Fit
TLI	1.003	> 0.90	Fit
CFI	1.000	> 0.90	Fit
RMR	0.020	< 0.10	Fit
RFI	0.927	> 0.90	Fit
NFI	0.934	> 0.90	Fit

Source: Processed primary data using AMOS, 2026.

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Appendix P
Results of Direct Effect Hypothesis Testing

Hypothesis	Relationship	Estimate	S.E.	C.R.	P-value	Decision
H1	Tangibility → Perceived Value	0.226	0.070	3.236	0.001	Supported
H2	Reliability → Perceived Value	0.159	0.070	2.287	0.022	Supported
H3	Responsiveness → Perceived Value	0.177	0.068	2.595	0.009	Supported
H4	Assurance → Perceived Value	0.207	0.063	3.272	0.001	Supported
H5	Empathy → Perceived Value	0.205	0.065	3.136	0.002	Supported
H6	Perceived Value → Customer Satisfaction	0.227	0.052	4.358	<0.001	Supported
H7	Tangibility → Customer Satisfaction	0.218	0.045	4.827	<0.001	Supported
H8	Reliability → Customer Satisfaction	0.177	0.044	4.014	<0.001	Supported
H9	Responsiveness → Customer Satisfaction	0.171	0.044	3.920	<0.001	Supported
H10	Assurance → Customer Satisfaction	0.162	0.041	3.969	<0.001	Supported

H11	Empathy → Customer Satisfaction	0.167	0.042	3.994	<0.001	Supported
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Source: Processed primary data using AMOS, 2026.

Appendix Q

Coefficient of Determination

Endogenous Variable	R ²	Explained Variance
Perceived Value	0.696	69.6%
Customer Satisfaction	0.950	95.0%

Source: Processed primary data using AMOS, 2026.

Appendix R

Results of Mediation Effect Testing

Hypothesis	Mediation Relationship	Indirect Effect	Sobel Statistic	Decision	Mediation Type
H12	Tangibility → Perceived Value → Customer Satisfaction	0.0513	2.5981	Supported	Partial Mediation
H13	Reliability → Perceived Value → Customer Satisfaction	0.0361	2.0251	Supported	Partial Mediation
H14	Responsiveness → Perceived Value → Customer Satisfaction	0.0402	2.2297	Supported	Partial Mediation
H15	Assurance → Perceived Value → Customer Satisfaction	0.0470	2.6166	Supported	Partial Mediation

H16	Empathy → Perceived Value → Customer Satisfaction	0.0465	2.5455	Supported	Partial Mediation
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Source: Processed primary data using AMOS, 2026.

Appendix S
Coefficient of Determination

Endogenous Variable	R ²	Explained Variance
Perceived Value	0.696	69.6%
Customer Satisfaction	0.950	95.0%

Source: Processed primary data using AMOS, 2026.

Appendix T
Results of Mediation Effect Testing

Hypothesis	Mediation Relationship	Indirect Effect	Sobel Statistic	Decision	Mediation Type
H12	Tangibility → Perceived Value → Customer Satisfaction	0.0513	2.5981	Supported	Partial Mediation
H13	Reliability → Perceived Value → Customer Satisfaction	0.0361	2.0251	Supported	Partial Mediation
H14	Responsiveness → Perceived Value → Customer Satisfaction	0.0402	2.2297	Supported	Partial Mediation

H15	Assurance → Perceived Value → Customer Satisfaction	0.0470	2.6166	Supported	Partial Mediation
H16	Empathy → Perceived Value → Customer Satisfaction	0.0465	2.5455	Supported	Partial Mediation

Source: Processed primary data using AMOS, 2026.

Appendix U Hypothesis Summary

Hypothesis	Relationship	Estimate / Indirect Effect	C.R. / Sobel	P- value	Decision
H1	Tangibility → Perceived Value	0.226	3.236	0.001	Supported
H2	Reliability → Perceived Value	0.159	2.287	0.022	Supported
H3	Responsiveness → Perceived Value	0.177	2.595	0.009	Supported
H4	Assurance → Perceived Value	0.207	3.272	0.001	Supported
H5	Empathy → Perceived Value	0.205	3.136	0.002	Supported
H6	Perceived Value → Customer Satisfaction	0.227	4.358	<0.001	Supported

H7	Tangibility → Customer Satisfaction	0.218	4.827	<0.001	Supported
H8	Reliability → Customer Satisfaction	0.177	4.014	<0.001	Supported
H9	Responsiveness → Customer Satisfaction	0.171	3.920	<0.001	Supported
H10	Assurance → Customer Satisfaction	0.162	3.969	<0.001	Supported
H11	Empathy → Customer Satisfaction	0.167	3.994	<0.001	Supported
H12	Tangibility → Perceived Value → Customer Satisfaction	0.0513	2.5981	<0.05*	Supported; Partial Mediation
H13	Reliability → Perceived Value → Customer Satisfaction	0.0361	2.0251	<0.05*	Supported; Partial Mediation
H14	Responsiveness → Perceived Value → Customer Satisfaction	0.0402	2.2297	<0.05*	Supported; Partial Mediation

H15	Assurance → Perceived Value → Customer Satisfaction	0.0470	2.6166	<0.05*	Supported; Partial Mediation
H16	Empathy → Perceived Value → Customer Satisfaction	0.0465	2.5455	<0.05*	Supported; Partial Mediation

Source: Processed primary data using AMOS, 2026.

Appendix V Conclusion of Hypothesis Testing

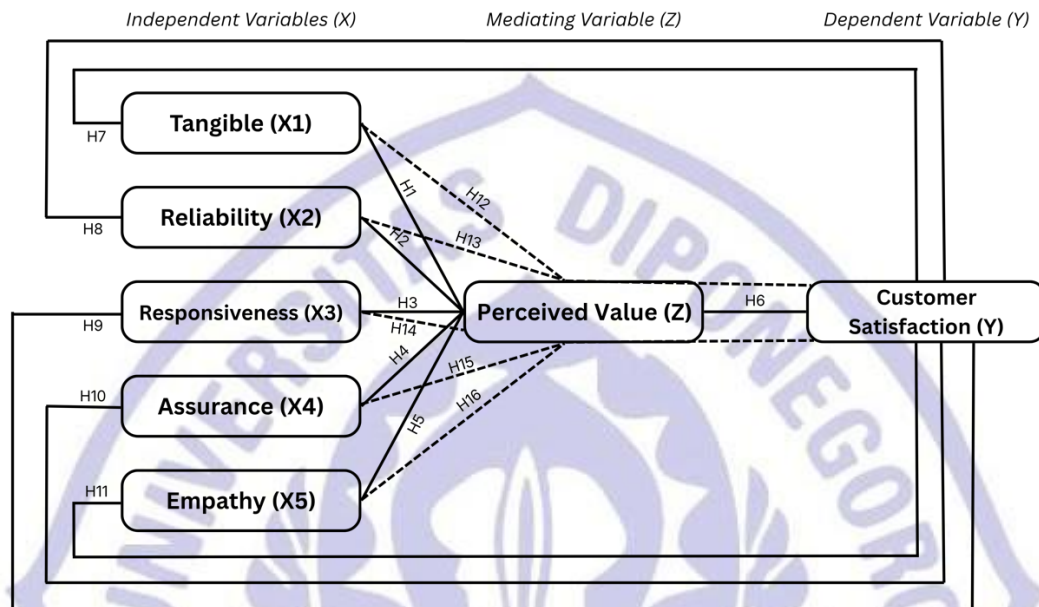
Hypothesis	Hypothesized Relationship	Empirical Result	Decision
H1	Tangibility → Perceived Value	Positive and significant	Supported
H2	Reliability → Perceived Value	Positive and significant	Supported
H3	Responsiveness → Perceived Value	Positive and significant	Supported
H4	Assurance → Perceived Value	Positive and significant	Supported
H5	Empathy → Perceived Value	Positive and significant	Supported
H6	Perceived Value → Customer Satisfaction	Positive and significant	Supported
H7	Tangibility → Customer Satisfaction	Positive and significant	Supported
H8	Reliability → Customer Satisfaction	Positive and significant	Supported

H9	Responsiveness → Customer Satisfaction	Positive and significant	Supported
H10	Assurance → Customer Satisfaction	Positive and significant	Supported
H11	Empathy → Customer Satisfaction	Positive and significant	Supported
H12	Tangibility → Perceived Value → Customer Satisfaction	Significant indirect effect; partial mediation	Supported
H13	Reliability → Perceived Value → Customer Satisfaction	Significant indirect effect; partial mediation	Supported
H14	Responsiveness → Perceived Value → Customer Satisfaction	Significant indirect effect; partial mediation	Supported
H15	Assurance → Perceived Value → Customer Satisfaction	Significant indirect effect; partial mediation	Supported
H16	Empathy → Perceived Value → Customer Satisfaction	Significant indirect effect; partial mediation	Supported

Source: Processed by the author (2026).

Appendix W

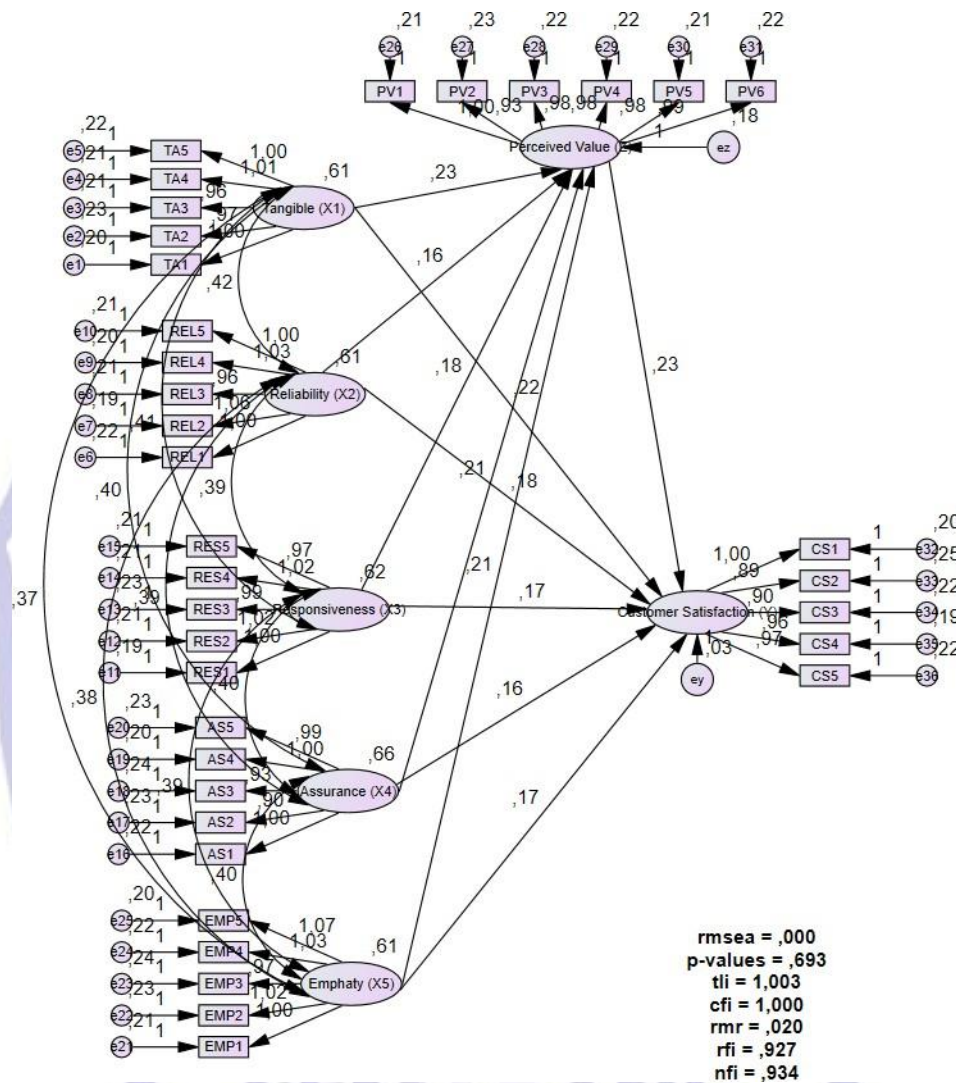
Conceptual Framework



Source: Developed by the author

Appendix X

Structural Model Estimated Using AMOS



Source: Processed by the author using AMOS (2026)