A Study of the Relationship between Quality, Customer Satisfaction, and Customer Loyalty in Public Transport of Ha Noi, Viet Nam

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Introduction (1)

Area

- : 3324.52 km
- Population : 7.2 millions
- Main travel mode: Motorcycle
- Public Transport:

Bus system - 71 routes

- 1,200 vehicles
- 420 millions pax/year.



Introduction (2)

Modal Share



□ Traffic Problems

- Traffic congestion
- Air pollution
- Traffic accidents

Hanoi has continued increase of serious transport problems, if **public transport share is not improved**.

Methodology

□ H1: Service quality has positive influences on customer satisfaction

- □ H2: Service quality has positive influences on customer loyalty
- H3: Customer satisfaction has positive influences on customer loyalty



Measurable Criteria

Punctuality

Network coverage

Customer care

Passenger information

Speed

Ticket availability

Safety

Security

Span of service

Stop comfort

Bus comfort

Fare

Environmental friendliness

QUALITY

Satisfaction of physical condition of bus stop

Satisfaction of journey

Overall satisfaction of performance Bus usage for every trips

Bus is the first choice





Data Collection and Analysis

500 questionnaires were distributed to passengers are using public transport.

□ Five point Likert-type scale was used:

- 5 very good/strongly agree
- 1 very bad/strongly disagree
- □ SPSS tool were used for data input and analysis
- SEM (Structural Equation Model) was used for development of trial relationship among quality, customer satisfaction and customer loyalty.





Key Findings: Respondents Characteristics

	Percentage				
Age					
Less than 24 year	58.54%				
24-34 year	25.61%				
35-55 year	13.21%				
More than 55 year	2.65%				
Income					
Under 2 million	49.06%				
2-4 million	17.93%				
4-6 million	20.75%				
Above 6 million	12.26%				
Purpose					
To or from work	21.69%				
To or from school	36.79%				
Leisure	18.87%				
Others	22.64%				

	Percentage
Trip length	
1-3 km	7.50%
3-5 km	21.70%
5-7 km	26.42%
More than 7 km	41.51%
Bus use frequency	
Everyday	23.59%
Three day per week	23.59%
Every week	40.57%
First time	9.43%
Average walking distance	
Less than 200 m	24.53%
200 – 400 m	29.25%
400 – 700 m	19.81%
More than 700 m	23.59%

Key Findings: Respondents' assessment

QUALITY	Mean	S.D
Q1-Punctuality and reliability	3.26	0.73
Q2-Network coverage	3.88	0.97
Q3-Customer care	3.44	0.65
Q4-Passenger information	3.88	0.73
Q5-Speed	3.39	0.99
Q6- Ticket availability	4.07	0.89
Q7-Safety	3.35	0.89
Q8-Security	3.01	1.06
Q9-Span of service	2.51	0.99
Q10-Envir. friendliness	2.97	0.99
Q11-Bus comfort	3.33	0.91
Q12-Stop comfort	3.42	0.94
Q13-Fare	4.37	0.77

SATISFACTION	Mean	S.D
Sa1-Satisfaction of physical condition of bus stops	3.04	0.72
Sa2-Satisfaction of journey	3.87	0.78
Sa3-Overall satisfaction of performance	3.70	0.85

1	5
Very bad/ strongly	Very good/
disagree	strongly agree

LOYALTY	Mean	S.D
Loy1: Bus usage for every trips	3.42	1.09
Loy2: Bus is the first choice	3.14	1.25

Key findings: Weights of Model (1)

Hypothesis				Estimation	S.E	Ρ
H1	Service quality —	→	Customer Satisfaction	3.23	.25	.02
H2	Service quality —	→	Customer Loyalty	0.48	.13	.01
H3	Customer Satisfaction	→	Customer Loyalty	0.39	0.2	.03

Key findings: Weights of Model (2)



Key findings: Important quality criteria (1)

Impact of quality on satisfaction and loyalty

Quality	Weight	Rank
Speed	1.11	1
Reliability	0.94	2
Security	0.48	3
Span of service	0.38	4
Stop comfort	0.376	5
Environmental friendliness	0.375	6
Customer care	0.33	7
Safety	0.31	8
Bus comfort	0.29	9
Fare	0.167	10
Network coverage	0.158	11
Ticket availability	0.147	12

Conclusions

- Quality is significantly associated with customer satisfaction and customer loyalty.
- □ Customer satisfaction have positive relationship with customer loyalty
- Regarding quality, reliability and speed have strongly influence on customer satisfaction and customer loyalty. Customers are satisfied with these attributes.
- Meanwhile, span of service and environment have relatively importance to customer satisfaction and customer loyalty. Customers are not satisfied with these attributes

Recommendations (1)

□ In the short term:

- Transport operators need to pay attention to span of service in operation process. They have plans to extend service hours in day.
- An improvement of environment may increase customer satisfaction.



Recommendations (2)

□ In the long term:

- A well-coordinated timetable and bus priority should be the primary concerns of the policy makers in Hanoi.
- The transport operators should include in their plans measures placing more emphasis on the service punctuality and speed improvement.



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Thank you very much for your attention!