

NATIONAL INSURANCE COMPANY¹

Tom Kurtis, Manager of Customer Service for National Insurance Company, and his assistant, Jill Baxter were getting ready to analyze data collected through a mail survey of a sample of National's customers. The primary purpose of the survey was to ascertain how customers perceived National's quality of service and to identify areas for improvement.

THE COMPANY

National Insurance Company is one of the leading insurance firms in the United States. It serves over 10 million customers who have insurance coverage from National for a variety of needs (e.g., home, health, auto, life). The company's customer base, after growing steadily for a number of years, had started to erode during the past two years. Jack Driver, president of National, was concerned about this downturn. Suspecting that there might be some shortfalls in the service National was providing its customers, Jack had asked Tom to conduct a study to determine the "image" that customers had about National's service.

THE SURVEY

In designing the content of the survey, Tom Kurtis drew upon insights he gained by reading a number of recent articles emphasizing the importance of service quality and suggesting approaches for measuring customers' perception of a company's service. In particular, one journal article that was based on extensive customer research suggested that there were five broad dimensions along which customers evaluated service quality.

1. **Tangibles**: The appearance of physical facilities, equipment, personnel, and communications materials.
2. **Reliability**: ability to perform the promised service dependably and accurately.
3. **Responsiveness**: willingness to help customers and provide prompt service.
4. **Assurance**: Knowledge and courtesy of employees and their ability to inspire trust and confidence.
5. **Empathy**: Caring, individualized attention the firm provides its customers.

The article also contained a number of illustrative questions pertaining to each of these dimensions and their relative importance. Tom Kurtis and Jill Baxter discussed the contents of this article vis-à-vis their Survey objectives and concluded that the suggestions in the article could be adapted for their study. Using the ideas in the article, they designed the questionnaire shown in Exhibit 1.

The items in Section 1 of the questionnaire pertain to customers' evaluation of National's service along five dimensions. Section 2 is designed to determine the relative importance of the five dimensions.

¹ This case was originally written by Professor A. Parasuraman of the University of Miami. Used by permission of the author.

Section 3 contains several questions relating to customers' overall experience with National. The final section focuses on respondents demographic characteristics.

THE SAMPLE

The questionnaire was mailed to a random sample of 1000 policyholders from National's customer base. On the basis of data available in the company's records on policyholders, the current customer base had the following profile:

Number of years with the company

Less than 1 year	8%
1 to less than 2 years	9%
2 to less than 5 years	18%
5 years or more	65%

Gender

Male	54%
Female	46%

Age

Under 25	5%
24 – 44	70%
45 – 64	15%
65 and over	10%

Exhibit 1 Survey Questionnaire

Note: The labels for the five dimensions in Sections 1 and 2 did not appear in the original questionnaire. They are included here to indicate the dimension to which each question pertains.

SECTION 1

Directions: The following set of statements relate to your feelings about National Insurance Company. For each statement, please show the extent to which you believe National has the feature described by the statement. Circling a “1” means that you strongly disagree that Nations has that feature, and circling a “7” means that you strongly agree. You may circle any of the numbers in between that show how strong your feelings are. There are no right or wrong answers; all we are interested in is a number that best shows your perceptions about National.

	Reliability	Strongly Disagree					Strongly Agree	
1.	When National promises to do something it does so.	1	2	3	4	5	6	7
2.	When you have a problem National shows a sincere interest in solving it.	1	2	3	4	5	6	7
3.	National performs the service right the first time.	1	2	3	4	5	6	7
4.	National provides the services at the time it promises to do so.	1	2	3	4	5	6	7
5.	National maintains error-free records.	1	2	3	4	5	6	7
Empathy								
6.	National treats you with care.	1	2	3	4	5	6	7
7.	National has operating hours convenient to all its policyholders.	1	2	3	4	5	6	7
8.	National has employees who give you personal attention.	1	2	3	4	5	6	7
9.	National has your best interest in mind.	1	2	3	4	5	6	7
10.	Employees of National understand your specific needs.	1	2	3	4	5	6	7

Continued

Exhibit 1 *Continued*

Tangibles		Strongly Disagree				Strongly Agree		
11.	National has modern looking equipment.	1	2	3	4	5	6	7
12.	National's physical facilities are visually appealing.	1	2	3	4	5	6	7
13.	National's employees are neat-appearing.	1	2	3	4	5	6	7
14.	Materials associated with service (such as pamphlets or statements) are visually appealing at National.	1	2	3	4	5	6	7
Responsiveness								
15.	Employees of National tell you exactly when services will be performed.	1	2	3	4	5	6	7
16.	Employees of National give you prompt service.	1	2	3	4	5	6	7
17.	Employees of National are always willing to help you.	1	2	3	4	5	6	7
18.	Employees of National are never too busy to respond to your requests.	1	2	3	4	5	6	7
Assurance								
19.	The behavior of employees of National instills confidence in you.	1	2	3	4	5	6	7
20.	You feel safe in your transactions with National.	1	2	3	4	5	6	7
21.	Employees of National are consistently courteous with you.	1	2	3	4	5	6	7
22.	Employees of National have the knowledge to answer your questions.	1	2	3	4	5	6	7

Continued

SECTION 2

Directions: Listed below are five features pertaining to insurance companies and the services they offer. We would like to know how important each of these features is to you when you evaluate an insurance company's quality of service. Please allocate a **total of 100 points** among the five features according to your impression about how important each feature is to you – the more important a feature is to you, the more points you should allocate to it. Please ensure that the points you allocate to the five features add up to 100.

Tangibles

1. The appearance of the insurance company's physical facilities, equipment, personnel, and communications materials. _____ points

Reliability

2. The insurance company's ability to perform the promised service dependably and accurately. _____ points

Responsiveness

3. The insurance company's willingness to help policy holders and provide prompt service. _____ points

Assurance

4. The knowledge and courtesy of the insurance company's employees and their ability to convey trust and confidence. _____ points

Empathy

5. The caring, individualized attention the insurance company provides to its policy holders. _____ points

Total points allocated

100 points

SECTION 3

For questions in this section, please circle the number that corresponds to your answer.

1. On a scale of **1 to 10**, how would you rate the overall quality of service provided by National?

Extremely Poor

1

2

3

4

5

6

7

8

9

10

Extremely Good

2. Would you recommend National to a friend interested in insurance services? Yes 1 No 2

Continued

Exhibit 1 *Continued*

SECTION 3 *Cont.*

3. **How long** have you been using the services of National?

Less than 1 year	1
1 to less than 2 years	2
2 to less than 5 years	3
5 years or more	4

4. Have you recently **had a problem with the service** you received from National?

Yes 1 No 2

5. If you did have a problem, was **it resolved to your satisfaction**?

Yes 1 No 2

FINAL SECTION

The following information is solely for statistical purposes and will be kept confidential. Please circle the number that corresponds to your answer.

1. Your **sex** is:

Male	1
Female	2

2. Your **marital** status is:

Single	1
Married	2
Widowed	3
Divorced	4

3. Your **age** is:

Under 25	1
25 – 44	2
45 – 64	3
65 or over	4

Thank you very much!

4. Your total annual family **income** is:

Under \$10,000	1
\$10,000 – \$19,999	2
\$20,000 – \$29,999	3
\$30,000 – \$49,999	4
\$50,000 – \$64,999	5
\$65,000 – or over	6

5. The highest level of **schooling** you have completed is:

High School or less	1
Some college	2
College graduate	3
Graduate school	4

Completed questionnaires were received from 285 respondents. Being aware that mail surveys typically have low response rates, Tom and Jill were quite satisfied with the response rate of 28.5%. However, they wanted to determine whether the sample of respondents differed in any significant way from National's customer base so that the appropriate precautions could be taken in interpreting the findings from the survey.

Assume that you have been asked to assist Tom and Jill in analyzing and interpreting the survey data. In addition to addressing the specific questions listed below, design and conduct other analyses that you think might generate insightful information. To carry out the various analyses, you can obtain from your instructor a copy of the data set and the coding scheme used in generating it.

QUESTIONS²

1. Develop and briefly discuss the demographic profile of the survey respondents.
2. Do the survey respondents differ significantly from National's customer base? If there are difference, what bearing do they have on interpreting the findings about customers' perceptions of National's service quality?
3. What is National's average service-perception rating along each of the five dimensions?
4. Which are the most and least critical service dimensions as perceived by customers?
5. What are the correlations between respondents' overall service-quality perception (on the 10-point scale) and their average ratings along each of the five dimensions? Are these correlations statistically significant?
6. Conduct a multiple regression analysis with overall service quality is the dependent variable. Interpret the results being careful to use technically correct language. What specific managerial inferences can you make from the results of this analysis?
7. Are there any significant differences between males and females in terms of how they perceive National's service quality?
8. Is there a significant relationship between customers' willingness to recommend National to a friend and the following?
 - a. Their overall service-quality perception
 - b. Any of their demographic characteristics

² Please see the case assignment from the instructor for assignment questions.

NATIONAL INSURANCE COMPANY

(In this data set there is just one record per respondent. Also, the data coded are the actual numbers representing the responses as shown on the questionnaire.)

Question Number	Variable Name
Section 1	
1	P1
2	P2
3	P3
4	P4
5	P5
6	P6
7	P7
8	P8
9	P9
10	P10
11	P11
12	P12
13	P13
14	P14
15	P15
16	P16
17	P17
18	P18
19	P19
20	P20
21	P21
22	P22

Question Number	Variable Name
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Section 2

1	TANIMP
2	RELIMP
3	RESIMP
4	ASRIMP
5	EMPIMP

Section 3

1	OQ
2	REC
3	USE
4	PROB
5	RESOLVE

Final Section

1	SEX
2	MSTAT
3	AGE
4	INC
5	ED

Calculated Variables (averages of corresponding P1-P22 variables)

reliavrg
 empavrg
 tangavrg
 respavrg
 assuravrg