

Chapter 2
Market Sensing:
Generating and Using Knowledge about the Market

Multiple Choice Questions

1. _____ is the process of generating knowledge about the market that individuals in the business use to inform and guide their decision making.
 - a. Market sensing
 - b. Market research
 - c. Information utilization
 - d. Information acquisition(a; Easy; p. 43-44; Analytic Skills)

2. The substantive facets of market sensing do NOT include _____.
 - a. defining the market
 - b. monitoring competition
 - c. knowledge gathering
 - d. assessing customer value(c; Easy; p. 45; Analytic Skills)

3. _____ is NOT a criterion for judging the validity of a segmentation scheme.
 - a. Measurable
 - b. Profitable
 - c. Actionable
 - d. Applicable(d; Easy; p. 48; Analytic Skills)

4. _____ is NOT a diagnostic component of Porter's framework for competitor analysis.
 - a. Market sensing
 - b. Future goals
 - c. Current strategy
 - d. Capabilities(a; Easy; p. 58-60; Analytic Skills)

5. A _____ is an organized approach for seeking, gathering, analyzing, and interpreting competitor data, and for disseminating the resulting information to guide decisions.
 - a. competitor analysis system
 - b. competitor intelligence system
 - c. sales potential forecast
 - d. market definition system(b; Moderate; p. 60; Analytic Skills)

6. _____ is the work process of obtaining an estimate of the worth in monetary terms of some present or proposed market offering or elements of it.
- Value assessment
 - Benchmarking
 - Monitoring competition
 - Sales forecasting
- (a; Easy; p. 64; Analytic Skills)
7. The value assessment method, _____, involves scientists or engineers within the supplier's own firm conducting laboratory tests on a product to provide an estimate of its value. Application of this method depends on detailed knowledge of the customer's usage system.
- internal engineering assessment
 - field value-in-use assessment
 - indirect survey questions
 - focus group value assessment
- (a; Moderate; p. 64; Analytic Skills)
8. With the value assessment method _____ supplier personnel (or their consultants) conduct interviews and often gather data at customer firm(s) to provide a comprehensive listing of benefit and cost elements associated with usage of the supplier's market offering compared with the incumbent or next-best-alternative offering.
- internal engineering assessment
 - field value-in-use assessment
 - indirect survey questions
 - focus group value assessment
- (b; Moderate; p. 64; Communication)
9. The value assessment method, _____, enables a supplier firm to fill critical gaps in its knowledge of the customer firm's usage system as it relates to the supplier's market offering. Note that a critical assumption of this method is that the customer has an accurate perception of the effects of the studied changes upon its usage system.
- internal engineering assessment
 - field value-in-use assessment
 - indirect survey questions
 - focus group value assessment
- (c; Moderate; p. 65; Analytic Skills)

10. The value assessment method _____ is a qualitative approach to gaining a better understanding of the perceptions and reactions of participants. In doing so, the research analyst also generates estimates of value. The participants typically are knowledgeable individuals within customer firms that are targets for the studied market offering, although a supplier firm also may be interested in the reactions of industry consultants or pundits.
- a. internal engineering assessment
 - b. field value-in-use assessment
 - c. indirect survey questions
 - d. focus group value assessment
- (d; Moderate; p.65; Analytic Skills)
11. In a field research survey, participants are given a description of a market offering, typically the present industry standard, that serves as a(n) benchmark offering. They then are asked how much more their firm would be willing to pay for selected additions (or increases) in attributes or features to this offering.
- a. benchmark
 - b. internal engineering assessment
 - c. focus group value
 - d. compositional
- (a; Moderate; p. 67; Analytic Skills)
12. To deliver superior value to targeted market segments and customer firms is a goal of _____.
- a. importance ratings
 - b. customer value management
 - c. value assessment methods
 - d. competitor intelligence systems
- (b; Moderate; p. 70; Analytic Skills)
13. Get an equitable return on the value delivered is a goal of _____.
- a. importance ratings
 - b. customer value management
 - c. value assessment methods
 - d. competitor intelligence systems
- (b; Moderate; p. 70; Analytic Skills)
14. _____ are data-driven estimates of what a present or prospective market offering is worth in monetary terms to targeted customers relative to the next-best alternative offering for those customers.
- a. customer value models
 - b. competitive intelligence models
 - c. market segmentation models
 - d. best practices models
- (a; Moderate; p. 71, 89; Analytic Skills)

15. When comparing one product offering to the next-best-alternative, value elements where there are no apparent differences between the two offerings are termed _____.
- a. points of parity
 - b. points of difference
 - c. value word equations
 - d. points of contention
- (a; Moderate; p. 73; Analytic Skills)
16. When comparing one product offering to the next-best-alternative, value elements where there are apparent differences are termed _____.
- a. points of parity
 - b. points of difference
 - c. value word equations
 - d. points of contention
- (b; Moderate; p.73-74; Analytic Skills)
17. A _____ express in words and simple mathematical operators (e.g., +, ÷) precisely how to assess the differences in functionality and performance between the studied offerings for a value element and how those differences are converted into worth in monetary terms.
- a. points of parity
 - b. points of difference
 - c. value word equations
 - d. points of contentions
- (c; Moderate; p. 74; Analytic Skills)
18. When comparing one product offering to the next-best-alternative the supplier may invite the customers to participate in the customer value research. The supplier's team members relate the list of value elements and which elements they regard as points of parity and points of difference. _____ are value elements about which the customer disagrees with the team's evaluations.
- a. points of parity
 - b. points of difference
 - c. value word equations
 - d. points of contentions
- (d; Moderate; p. 74; Analytic Skills)
19. The measure of customer _____ is share of purchases in the category.
- a. loyalty
 - b. delight
 - c. disinterest
 - d. value analysis
- (a; Moderate; p. 84; Analytic Skills)

20. To exceed rather than simply meet customer requirements and preferences is to create customer _____.

- a. loyalty
- b. delight
- c. disinterest
- d. value analysis

(b; Moderate; p. 85; Analytic Skills)

21. Two shortcomings of customer satisfaction measurement programs – they do not survey noncustomers and they don't provide a market assessment for supplier firms – can be remedied by a customer _____.

- a. loyalty survey
- b. delight test
- c. point of difference analysis
- d. customer value analysis

(d; Difficult; 85; Analytic Skills)

True/False Questions

22. The substantive facets of market sensing include defining the market, monitoring competition, assessing customer value, and gaining customer feedback.

(True; Easy; p. 45; Analytic Skills)

23. To gain a more detailed understanding of how customer requirements and preferences vary, business market managers use more progressive bases of segmentation, such as application, customer capabilities and business priorities, usage situation, and customer profitability.

(True; Moderate; p. 49; Analytic Skills)

24. Value assessment is the work process of obtaining the exact worth in qualitative benefits of some past market offering.

(False; Moderate; p. 64; Reflective Thinking)

25. Customer feedback provides the supplier with a chance to remedy problems that occur and to retain a customer's business. It does NOT give the supplier an early warning of changing customer requirements and preferences.

(False; Moderate; p. 81; Reflective Thinking)

26. The Net Promoter Score (NPS) is derived from the answers to a willingness-to-recommend question.

(True; Easy; p. 87; Reflective Thinking)

Essay

27. Business market managers would like to know which market segments will have the largest growth in total market demand over some time horizon of interest, such as the next year, three years, or five years. Barnett describes the four basic steps needed in any forecast of total market demand. What are the four steps?

Answer:

The four basic steps needed in any forecast of total market demand are:

1. Define the market.
2. Divide total industry demand into its main components.
3. Forecast the drivers of demand in each segment and project how they are likely to change.
4. Conduct sensitivity analyses to understand the most critical assumptions and to gauge risks to the baseline forecast.

(Moderate; p. 54; Reflective Thinking)

28. Explain customer value management and the two basic goals of customer value management.

Answer:

Customer value management is a progressive, practical approach that has two basic goals:

- Deliver superior value to targeted market segments and customer firms.
- Get an equitable return on the value delivered.

Customer value management relies upon customer value assessment to gain an understanding of customer requirements and preferences, and what it is worth in monetary terms to fulfill them. Although firms may be able to accomplish the first goal without any formal assessment of customer value, it is unlikely that they will be able to accomplish the second goal without it. Simply put, to gain an equitable or fair return on the value their offerings deliver, suppliers must be able to persuasively demonstrate and document the superior value they provide customers relative to the next-best alternative for those customers. When suppliers do not spend the time and money on customer value management, they are unaware of how much not doing it is costing them.

(Difficult; p. 70; Reflective Thinking)

29. Explain overall customer satisfaction according to the American Customer Satisfaction Index including the three measures.

Answer:

Overall customer satisfaction represents a cumulative evaluation of a firm's market offering rather than a person's evaluation of a specific transaction. The three measures of overall customer satisfaction include an overall satisfaction measure, a measure of the extent to which an offering's performance falls short or exceeds expectations, and a measure of the offering's performance relative to the customer's ideal product or service in the category.

(Difficult; p. 82-83; Reflective Thinking)

30. Explain the relationship between Jones and Sasser's ultimate measure of 'customer loyalty' and the 'supplier's share of customer's business'.

Answer:

Jones and Sasser's ultimate measure of customer loyalty is the same as the earlier concept, supplier's share of customer's business: that is, the percent of a customer's total purchase requirement for a market offering that the supplier obtains.

(Difficult; p. 84; Reflective Thinking)

31. What are the Net Promoter Score and the three clusters of customers?

Answer:

the Net Promoter Score (NPS), which is derived from the answers to this willingness-to-recommend question on a 10 point scale. Answers to this question to customer actions of referral and repurchase revealed three logical clusters. Promoters are customers who give a "9" or "10" rating. Passives are customers who are passively satisfied and give a "7" or "8" rating. Detractors are customers who give a "0" to "6" rating. The net promoter score is defined as the percentage of promoters minus the percentage of detractors.

(Difficult; p. 87; Reflective Thinking)

TSM Pharmaceutische Groothandel, B.V.

Scoring Instructions

1. What is the worth of the Integrated Stock Management (ISM) program to pharmacists relative to the incumbent card-based system? Build a customer value model to persuasively demonstrate this. (50)

Ten points each for the three value elements: inventory holding cost savings, processing time savings, and mistake reduction time savings. For each element, award up to five points for the word equation and up to five points for the substitution of the case data and calculation.

Value Elements:

Inventory Holding

$$\begin{aligned}\text{Cost Savings} &= (\text{monetary value of inventory}_{\text{card system}} - \text{monetary value of inventory}_{\text{ISM}}) \times \\ &\quad \text{weighted average cost of capital} \\ &= (\text{€}18,400 - \text{€}13,800) \times .12 \\ &= \text{€}552\end{aligned}$$

Processing Time Savings:

Processing Time

$$\begin{aligned}\text{Savings per Order} &= [(\text{number of order lines processed per day} \times \text{minutes to process an order line})_{\text{card system}} \\ &\quad - (\text{number of order lines processed per day} \times \text{minutes to process an order line})_{\text{ISM}}] \div 60 \text{ minutes per hour} \\ &= [(72 \times 2) - (62 \times .2)] \div 60 \\ &= 2.19 \text{ hours}\end{aligned}$$

Processing Time

$$\begin{aligned}\text{Savings per Year} &= \text{Processing Time Savings per Order} \times \text{Number of Orders per Year} \\ &= 2.19 \text{ hours} \times 6 \text{ days a week} \times 52 \text{ weeks a year} \\ &= 683.3 \text{ hours}\end{aligned}$$

Mistake Reduction Time Savings:

Mistake Reduction Time

$$\begin{aligned}\text{Savings per Order} &= [(\text{number of order mistakes}_{\text{card system}} - \text{number of order mistakes}_{\text{ISM}}) \\ &\quad \times \text{minutes to correct a mistake}] \div 60 \text{ minutes per hour} \\ &= [(12 - 3) \times 4] \div 60 \\ &= .6 \text{ hours}\end{aligned}$$

$$\begin{aligned}\text{Mistake Reduction Time Savings per Year} &= \text{Mistake Reduction Time Savings per Order} \times \\ &\quad \text{Number of Orders per Year} \\ &= .6 \text{ hours} \times 6 \text{ days a week} \times 52 \text{ weeks a year} \\ &= 187.2 \text{ hours}\end{aligned}$$

$$\text{ISM Time Savings per Year} = \text{Processing Time Savings per Year} + \text{Mistake Reduction time}$$

$$\begin{aligned}
& \text{Savings per Year} \\
& = 683.3 \text{ hours} + 187.2 \text{ hours} \\
& = 870.5 \text{ hours}
\end{aligned}$$

Monetary Worth of ISM Time Savings: Translating time savings into cost savings poses a challenge for TSM managers and pharmacists. The 870.5 hours of time savings represent about 55% of a pharmacist assistant's annual "standard" hours of 1584. As a pharmacist cannot layoff 55% of an assistant, one must wrestle with the issue of how to capitalize on these newly found hours. One can proceed by making one of the following two assumptions.

- 1. Assume all the hours saved are cost savings.** A less insightful approach is to believe that all the time savings can be translated directly into cost savings. Cost savings are simply calculated by multiplying time savings times "standard" hourly wage.

$$\begin{aligned}
\text{ISM-Delivered Cost Savings}_1 & = \text{ISM Time Savings per Year} \times (\text{Pharmacist Assistant} \\
& \quad \text{Annual Salary} \div \text{Hourly Wage}) \\
& = 870.5 \text{ hours} \times (\text{€}28000 \div 1584) \\
& = 870.5 \text{ hours} \times \text{€}17.68 \text{ per hour} \\
& = \text{€}15390.44
\end{aligned}$$

- 2. Assume that only overtime hours are recoverable. Treat surplus time savings as a "placeholder".** Pharmacists can use the 870.5 hours to eliminate all "scheduled" overtime. The typical pharmacy pays assistants 8 hours of scheduled overtime per week at the wage rate of "time and a quarter". Calculations would run as follows.

$$\begin{aligned}
\text{ISM-Delivered Cost Savings}_2 & = \text{Pharmacist Assistant Overtime Hours per Year} \times \\
& \quad \text{Pharmacist Assistant Overtime Hourly Wage} \\
& = (8 \text{ hours per week} \times 52 \text{ weeks}) \times (\text{€}17.68 \text{ per hour} \times 1.25) \\
& = 416 \text{ hours} \times \text{€}22.10 \\
& = \text{€}9193.60
\end{aligned}$$

$$\begin{aligned}
\text{Surplus Hours} & = \text{ISM-Delivered Time Savings per Year} - \text{Overtime per Year} \\
& = 870.5 - (8 \text{ hours per week} \times 52 \text{ weeks per year}) \\
& = 870.5 - 416 \\
& = 454.5 \text{ hours}
\end{aligned}$$

These surplus hours may be treated as a "placeholder" in the customer value model. A pharmacist may use these surplus hours in a number of ways. First, the pharmacist may ask assistants to spend more time with patients developing closer personal relationships. Hopefully, this will translate into greater customer satisfaction and loyalty. Second, the pharmacist might build more "slack" into the workday to reduce assistant "job-related stress". This might improve employee morale and reduce assistant turnover.

Third, the pharmacist might use these surplus hours to pursue new customers. The 454.5 hours represents approximately 29% of a pharmacist assistant's standard hours per year. A "rule of thumb" among Dutch pharmacists is that the typical assistant can handle about 1500 customers. Thus, the surplus hours would enable a pharmacy to take on about 435 more customers. The worth of a new customer per year can be estimated as follows.

$$\text{Worth of a Customer} = (\text{Annual Pharmacy Turnover} \times \text{Gross Profit}) / (\text{Number of}$$

$$\begin{aligned}
 & \text{Pharmacy Customers)} \\
 & = (\text{€2million} \times 25\%) / 9000 \\
 & = \text{€55.55 per year}
 \end{aligned}$$

Thus, if a pharmacy could gain 435 more customers, it would increase annual gross profits by €24,164.

Value Summary

ISM-Delivered Time Savings per Year:

Processing Time Savings per Year	683.3 hours
Mistake Reduction Time Savings per Year	<u>187.2 hours</u>
ISM Time Savings per Year	870.5 hours

ISM-Delivered Cost Savings per Year:

Monetary Worth of ISM Time Savings	€ 15,390.44
Inventory Holding Cost Savings	<u>€ 552.00</u>
ISM Cost Savings per Year	€ 15942.44

Assumption 1: Assumption 2:

	<u>Use All Hours</u>	<u>Reduce Overtime</u>
Monetary Worth of ISM Time Savings	€ 15,390.44	€ 9193.60
Inventory Holding Cost Savings	<u>€ 552.00</u>	<u>€ 552.00</u>
ISM Cost Savings per Year	€ 15942.44	€ 9745.60

Case Data Used in Calculations

You can find the data used in the word equations on these pages of the case study.

average annual turnover per pharmacy = €2 million (page 2)

average pharmacy gross profit on annual turnover = 25% (page 2)

number of days pharmacy open per year = 6 days a week x 52 weeks a year = 312 days (page 3)

average patients per pharmacy = 9000 (page 2)

average number of pharmacist assistants employed per pharmacy = 6 (page 2)

average number of customers per pharmacist assistant = $9000/6 = 1500$ (page 2)

average annual salary of pharmacist assistant = €28000 (page 3)

annual “standard” hours pharmacist assistant works = 1584 hours per year (page 3)

pharmacist assistant hourly wage for “standard” hours = $\text{€}28000 / 1584 = \text{€}17.68$ per hour (page 3)

average scheduled overtime hours paid per pharmacy per year = 8 hours a week x 52 weeks a year = 416 hours (page 3)

average pharmacist assistant hourly “overtime” wage (time and a quarter) = €22.10 per hour (page 3)

number of order lines processed per day_{card system} = 72 lines (page 5)

number of orders processed per day_{ISM} = 62 lines (page 5)

minutes to process an order line_{card system} = 2 minutes (page 5)

minutes to process an order line_{ISM} = .2 minutes (page 5)

number of order mistakes_{card system} = 12 mistakes (page 5)

number of order mistakes_{ISM} = 3 mistakes (page 5)

minutes to correct a mistake = 4 minutes (page 5)

average monetary value of pharmacy inventory_{card system} = €18,400 (page 5)

average monetary value of pharmacy inventory_{ISM} = €13,800 (page 5)

weighted average cost of capital = 12% (page 5)

2. What price should TSM Pharmaceutische Groothandel (TSM) decide upon for offering its ISM program to pharmacists? Provide a brief, supporting rationale. (25)

TSM's pricing strategy should be to price its ISM program significantly below what consultants would charge to discourage them from competing with TSM for this business, yet leave sufficient room for discounting the ISM programs to *TSM Partner Program* pharmacies and still make a reasonable profit. Given the estimated value of the ISM program, this pricing also should provide a significant **incentive to purchase** (and **incentive to change**) for the pharmacist. Thus, a price of €3500 would be significantly below the €4000 – 7500 that consulting firms would charge for similar services, yet leave sufficient room for discounting.

Award up to 15 points for the brief, supporting rationale, and award up to ten points for the price chosen, which should be less than €4000.

3. What pricing tactics should TSM employ in its market introduction of the ISM program? Briefly describe each tactic and provide a supporting rationale. (25)

TSM should employ two pricing tactics in its market introduction of the ISM program. It should offer a *pilot program customer discount* to the twelve pharmacies that participated in the pilot program. The pharmacists that participated in the pilot program have cooperated in the beta-testing, refinement, and implementation of the ISM program, and have generously provided data to TSM enabling TSM to estimate the value of the ISM program relative to the incumbent card system. This cooperation is valuable and as an equitable Give & Get, the pilot program pharmacists should expect a deeply-discounted price in return. They might even reasonably expect to receive the ISM program "at cost". Thus, a €1000 pilot program participant discount, implemented as an invoice reduction off the "list" price of €3500 for ISM, would provide a net price of €2500 to these pharmacists, giving them the program at TSM's cost.

TSM should also offer a *TSM Partners Program* discount, both to reinforce to pharmacists participating in this program the value of continuing participation and to provide further enticement to other pharmacists to make the commitment to join the TSM Partners Program. The size of this price discount should be large enough to make a significant reduction from the list price for ISM, while still preserving a reasonable profit for TSM on the provision of this service. TSM will need this both to improve its profitability and to have funds to reinvest in the development of further services for pharmacists. Thus, a €500 TSM partners program discount, implemented as an invoice reduction off the "list" price of €3500 for ISM, would provide a net price of €3000 to these pharmacists, giving them a significant discount for purchasing the service, while providing a profit of €500 for TSM.

Ten points total for the pilot program customer discount. Award five points for mentioning a pilot program or beta-test customer discount and up to five additional points for rationale and actual price discount chosen, which should be greater than the price discount for the TSM Partners Program participants. Fifteen points total for the TSM Partners Program discount. Award five points for mentioning a TSM Partners Program discount and up to ten additional points for rationale and actual price discount chosen.