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Answers to End-of-Chapter Questions

Chapter 2: Corporate Strategy, Performance, and Sustainability

Review Questions

1. Define mission statement and corporate strategy.

   Answer:

   Mission statement-- A statement that provides direction for the firm's strategic plan. It might include descriptions of their goods and services, the processes they employ, the markets where they compete, their potential customers, and their distinctive competencies.

   Corporate strategy-- a description of how the firm intends to compete, or provide value to its customers, both now and into the future.

2. What are the three competitive dimensions firms use to compete?

   Answer:

   Cost, quality, and customer service.

3. What are economies of scale?

   Answer:

   These are created when purchasing and manufacturing in bulk to reduce per-unit costs.

4. Define the seven aspects of customer service.

   Answer:

   Speed refers to the ability to complete the service quickly. *Flexibility* refers to the firm's ability to respond to a wide variety of customer expectations; it can also mean the firm can accommodate varying demand levels. In customer service terms, *reliability* refers to delivering a good or

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service as promised. When products are sold such as a computer, customers want to know something about the after-sales *product support*—can the firm provide useful operating information, software support, and periodic upgrades? When talking to sales associates or service representatives, customers want to feel assured that the sales person is *knowledgeable* about the firm's products and truly understands or feels *empathy* for the customer. And finally, when things go wrong—the product fails to operate correctly or the restaurant's food is cold—customers expect an equitable compensation or arrangement. This capability is also known as *service recovery.*

5. What are operations strategies and how are they different from corporate strategies?

Answer:

Operations strategies are the set of decisions made within the operations function to support the overall mission and strategy of the firm. These decisions define how the operations function will contribute to the firm's ability to compete, and collectively, these are considered core competencies of the firm. So, these support the corporate strategies.

6. What do operations strategies have to do with core competencies?

Answer:

Operations strategies ARE the core competencies of the firm.

7. How can operations align its strategies with that of the corporation?

Answer:

Using product design, process design, production control systems, facility location, facility layout, purchasing, logistics, quality, inventory, and customer service. See Table 2.1.

8. What does performance measurement have to do with corporate strategy?

Answer:

To get a clear picture of overall performance, firms should develop an organization-wide system of performance measures linked to the firm's strategies. Managers need to know how the company is doing, and what needs to be fixed to enable the firm to accomplish its objectives.

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9. What is a balanced scorecard?

Answer:

The balanced scorecard for performance measures, suggests that the use of 20 to 30 performance measures, balanced across four categories, is sufficient to assess organizational performance.

10. How is a dashboard different from a scorecard?

Answer:

Web-based scorecards are referred to as dashboards.

11. What is big data? Big data analytics?

Answer:

Big data is generally defined as large volumes of data collected (often in real-time or near real-time), using information technologies, from a number of sources including social networks, website clicks, emails, sales information, insurance information, billing information, and warranty information.

When organizations analyze this huge (or "big") array of data using predictive modeling techniques to help uncover problems or opportunities to create value, then this is referred to as big data analytics.

12. What is business ethics? How does that differ from corporate social responsibility?

Answer:

Business ethics can be described as the application of ethical principles to business situations.

The practice of business ethics is also referred to as corporate social responsibility (CSR). Much of the discussion regarding corporate social responsibility argues that corporations should act ethically just as individuals should.

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13. What is a fair trade product?

Answer:

A fair trade product refers to one which is manufactured or grown by a disadvantaged producer in a developing country who received a fair price for the goods.

14. What is sustainability? Is this a new concept?

Answer:

Sustainability means doing the right social and environmental things in ways that make economic sense. The objectives then are not only to sustain the world we live in, but to sustain the organization as well. The idea of sustainability is certainly not new as evidenced by the way early Native Americans thought and lived and as Gifford Pinchot, the first Chief Forester of the U.S. Forest Service wrote in an article in 1908.

15. To what does the triple bottom line refer?

Answer:

The triple bottom line has been coined to describe a firm's efforts to provide social, environmental, and economic benefits to stakeholders. This has also been referred to as the "three P's" which stands for people, planet, and profits.

Discussion Questions

1. What would be a good mission statement for your university?

Answer:

Will vary, but something along the lines of providing education and education services to students, families, and the community.

2. How would you rank in order of importance, the three competitive dimensions for your university? For your favorite restaurant?

Answer:

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Will vary. Recall they are cost, quality, and customer service.

3. Explain economies of scale using a manufacturing firm; your university.

Answer:

Example--Manufacturing firms buy in bulk, to achieve scale economies in purchase price. Universities use large classrooms to achieve scale economies on teacher costs.

4. Using a bank and then a fast-food outlet, describe all of the seven customer service aspects.

Answer:

Recall these are Speed, Flexibility, Reliability, Product support, Server knowledge, Empathy, and Service recovery.

5. What is the core competency of McDonald's? Southwest Airlines? Can they do it better than any of their competitors?

Answer:

McDonald's—fast, cheap food, and kids' entertainment. Mostly true.

SW Air—on-time, low-cost air travel. Mostly true.

6. Strategy tradeoffs must be considered in operations. Describe what these might be for a high quality bicycle manufacturer and then a low cost bicycle manufacturer.

Answer:

High quality bike mfg.—buy high quality materials, use precision assembly, expert people.

Low cost bike mfg.—buy in bulk, mass produce bikes, low cost labor.

7. Why are performance measures so important to the organization?

Answer:

Performance information tells operations managers about the processes in need of attention,

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and also provides feedback regarding how well a process had been corrected. Simply put, companies operate better when managers and other employees monitor process performance.

8. How can financial and productivity measures be both good and bad for tracking a firm's performance?

Answer:

Financial performance measures don't tell the whole story. Windfall profits occurring when industry prices rise, as seen over the years in the oil industry, say nothing about how effectively an oil company's processes are being managed.

Productivity measures allow firms to view the impact of one or more of the firm's inputs (such as the cost of labor) on the firm's outputs (such as units produced or customers served), but do not allow the firm to determine the actual performance of any of the processes behind these elements.

9. Using the formula for labor productivity, describe all the ways a firm could increase labor productivity.

Answer:
Increase numerator, while holding denominator constant; decrease denominator, while holding numerator constant; increase numerator while decreasing denominator; increase numerator faster than the denominator is increasing; decrease numerator slower than denominator is decreasing.

10. Using Table 2.2, list a number of performance measures you might use for a sandwich shop.

Answer:
Will vary.

11. How could a balanced scorecard help to improve a firm's performance measurements? Design one for your performance as a student.

Answer:
It makes the firm spread out their measures across the four balanced scorecard categories--financial, internal business, customer, and learning and growth.

12. Why is big data analytics becoming so important now?

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Answer:

Because computer memory and speed is high enough to analyze mountains of customer data.

13. Could a small business use big data analytics? Explain.

Answer:

Through use of cloud services.

14. Are there any fair trade producers in the U.S. today?

Answer:

Yes—go to GreenAmerica.org.

15. How could your university use the triple bottom line? Are they already using it?

Answer:

Will vary.

Point-and-Click Video Questions

1. How has the Internet impacted strategic planning?

Answer:

It has created more tools (email, website, social sites), so strategic planning has become more important.

2. What is the minimum requirement for satisfying customers?

Answer:

Meeting their needs and expectations.

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3. How could an individual determine their own core competency?

   Answer:

   By answering the question—"What are you better at than almost everyone you know?"

4. Why do you think Jack Dziak feels so strongly about the importance of performance measures? What was one of the things he said companies did wrong with regards to performance measurement?

   Answer:

   How else can a company allocate scarce resources? Managers need to base strategies and objectives on how the company is doing in various areas.

   Companies often measure too many things.

5. What does Dr. Kaplan say about the objective of performance measures?

   Answer:

   Measure things so you can manage them.

6. Describe the "three V's" of big data?

   Answer:

   Volume of data, variety of sources, and the velocity you need to deliver the data.

7. Why would a farmer in Argentina want to sell cotton to a fair trade buyer?

   Answer:

   Usually, they get paid more than the market price.

8. What are some things that Walmart is doing to measure sustainability?

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Answer:

They use a sustainability index; they use the sustainability consortium to help measure it.

Problems

Use the following information for Problems 1 and 2:

During the past month, the Blakester Lounge served 1,500 customers with very few complaints. Their labor cost was $3,000, material cost was $800, energy cost was $200, and building lease cost was $1,500. For the month prior to that, their customers served was 1,320, with labor cost of $2,900, material cost $860, energy cost $185, and building lease cost $1,500.

1. Calculate the single-factor productivities and the overall multiple-factor productivities for each of the two months.

Answer:

1st month—labor prod=1320/2900=0.46 cust/labor$; mat'l. prod=1320/860=1.53 cust/mat'l$; energy prod=1320/185=7.14 cust/energy$; lease prod=1320/1500=0.88 cust/lease$

2nd month—labor prod =1500/3000=0.5 cust/labor$; mat'l. prod=1500/800=1.88 cust/mat'l$; energy prod=1500/200=7.5 cust/energy$; lease prod=1500/1500=1.0 cust/lease$

2. Calculate the productivity growth for each productivity measure in Problem 1, from the first to the second month.

Answer:

Labor prod growth=(0.5-0.46)/0.46 = 8.7%; mat'l prod growth=(1.88-1.53)/1.53 = 22.9%; energy prod growth = (7.5-7.14)/7.14 = 5%; lease prod growth = (1-.88)/.88 = 13.6%.

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3. During the past four months, the units produced and the labor hours are as shown below. Compute the monthly labor productivities and productivity growth for periods.

	March	April	May	June
Units produced	1260	1340	1293	1324
Labor hours	328	332	321	318

Answer:

	March	April	May	June
Labor prod	3.84	4.04	4.03	4.16
Growth		5.2%	-0.25%	3.2%

4. Nadia is concerned about the company's required annual productivity growth rate. For the upcoming three years and the expected labor hours, determine the production output required to maintain a four percent productivity growth rate.

	2016	2017	2018	2019
Units produced	42,240			
Labor hours	20,000	21,500	21,700	22,000

Answer:

	2016	2017	2018	2019
Growth		4.0%	4.0%	4.0%
Units	42,240	43,930	45,687	47,514

Use the formula: (new-old)/old = .04

So, for 2017, new = .04(42240) + 42240 = 43,930.

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5. Given the information below, calculate the single-factor and total factor productivities.

Output	Inputs
325,000 units	6400 labor hours @ $15.00 per hour
Sales price = $1249.00	Material cost = $40,625,000
	Utilities cost = $4400

Answer:

Labor prod = (325000x1249)/(6400x15) = 4228.4

Mat'l. prod = (325000x1249)/40625000 = 9992

Utility prod = (325000x1249)/4400 = 92,255.7

Total prod = (325000x1249)/(6400x15+40625000+4400) = 9.97

6. For the previous month, the C.J. Lounge served 1,500 customers with very few complaints. Their labor cost was $3,000; material cost was $800; energy cost was $200; and building lease cost was $1,500. Calculate the single-factor productivities and the overall multiple-factor productivity. How could they improve the productivity?

Answer:

Single factor productivities: labor—0.5 customers/labor$; material—1.875 customers/material$; energy—7.5 customers/energy$; building—1 customer/lease$. Multifactor productivity—0.272 customers/total$. They could improve productivity by possibly increasing the number of hours they are open or adding seats; they could add technology to improve labor productivity, or try to find a cheaper supplier.

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7. The Ultra Ski Shop rents snow skis during the ski season and employs five people. The owner wants to track productivity performance measures using the data shown below. Determine the single-factor productivities and multiple-factor productivities for the two years. Discuss potential problems that you find.

Inputs and Outputs	**2014**
Skis rental revenue	$66,000
Labor cost	$10,800
Lease payments	$24,000
Inputs and Outputs	**2015**
Skis rental revenue	$69,500
Labor cost	$11,600
Lease payments	$24,500

Answer:

Single-factor productivities

2014: Labor productivity = $66,000 sales/$10,800 = 6.11 sales $ per labor $; lease productivity =

$66,000/$24,000 = 2.75 sales $ per lease $.

2015: Labor productivity = $69,500 sales/$11,600 = 5.99 sales $ per labor $; lease productivity =

$69,500/$24,500 = 2.84 sales $ per lease $.

Multiple-factor productivities

2014: $66,000 sales/[$10,800 + $24,000] = 1.90 sales $ per input $.

2015: $69,500 sales/[$11,600 + $24,500] = 1.93 sales $ per input $.

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Labor productivity grew from 2014 to 2015 by (5.99 − 6.11)/6.11 = −0.02 or −2%. The lease productivity grew by (2.84 − 2.75)/2.75 = 0.033 or 3.3%. The multiple-factor productivity grew by (1.93 − 1.90)/1.90 = 0.016 or 1.6%. Ultra management should look into why labor cost grew faster than ski revenue from 2014 to 2015.

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8. Use the following information to analyze the financial and inputs/outputs of the organization from 2015 to 2016:

Financial Information	**2015 Results**	**2016 Results**
Net sales	$1,372,000	$1,416,400
Cost of goods sold (purchased items)	$622,000	$681,000
Net income after taxes	$29,400	$34,800
Current assets	$822,000	$841,000
Current liabilities	$628,000	$679,000
Avg. inventory value	$288,500	$312,000
Inputs and Outputs		
Units produced	22,000	24,870
Labor costs	$228,200	$242,000
Lease payments	$24,000	$26,500
Energy costs	$18,300	$18,900

Answer:

Financial Performance:

Net profit margin = $29400/$1372000 = 0.021(2015); 34800/1416400 = 0.025(2016)

Current ratio = $822,000/$628,000 = 1.31(2015); 841000/679000 = 1.24(2016)

Inventory turnover = $622,000/$288,500 = 2.16(2015); 681000/312000 = 2.18(2016)

Single-Factor Productivities:

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Labor--22,000/228,200=0.096 units/labor$ (2015); 24870/242000=0.103units/labor$(2016)

Material--22,000/622,000=0.035units/mat'l$(2015); 24870/681000=0.037units/mat'l$(2016)

Lease--22,000/24,000=0.917units/lease$(2015); 24870/26500=0.938units/lease$(2016)

Energy—22,000/18,300=1.202units/energy$(2015); 24870/18900=1.316units/energy$(2016)

Multiple-Factor Productivity:

22,000/[228,200+622,000+24,000+18300]=0.025units/$(2015); and
24870/968400=0.026units/$(2016).

Productivity Growth:

Labor—(0.103-0.096)/0.096 = 7.3%

Material—(0.037-0.035)/0.035 = 5.7%

Lease—(0.938-0.917)/0.917 = 2.3%

Energy—(1.316-1.202)/1.202 = 9.5%

Multiple factor—(0.026-0.025)/0.025 = 4%

Use the following information for Problems 9 and 10:

The Hayley-Girl Soup Co. operations manager wants to calculate a number of performance statistics for an upcoming meeting using the information shown below:

Net sales = $1,450,627 Cost of goods sold (purchases) = $675,860

Current assets = $327,176 Current liabilities = $86,904

Rent = $144,000 Avg. inventory value = $163,465

Labor cost = $226,693 Annual production = 2,608,184 cans

Net income after taxes = $94,153

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9. Calculate the profit margin, current ratio, inventory turnover, and purchasing efficiency (given an annual purchasing cost goal of $600,000).

Answer:

Net profit margin = 94153/1450627 = 6.49%

Current ratio = 327176/86904 = 3.76

Inventory turnover = 675860/163465 = 4.13

Purchasing efficiency = 675860/600000 = 113%

10. Calculate the single-factor and multiple-factor productivities.

Answer:

Labor = 1450627/226693 = 6.40

Material = 1450627/675860 = 2.15

Lease = 1450627/144000 = 10.07

Total = 1450627/(226693+675860+144000) = 1.39

11. Given the information below, calculate the financial performance.

Net sales = $10,187,125 Cost of goods sold (purchases) = $4,325,219

Current assets = $12,427,000 Current liabilities = $2,432,804

Avg. inventory value = $209,398 Net income after taxes = $1,745,286

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Answer:

Net profit margin = 1745286/10187125 = 17.13%

Current ratio =12427000/2432804 = 5.11

Inventory turnover = 4325219/209398 = 20.66

12. Mary Jane's Beauty Shop has recently invested money to add more equipment to enable more services to be offered at the shop. Given the following information evaluate their investment.

2014	2015
net income = $752,000	equipment investment = $28,000
labor cost = $152,000	net income = $763,000
energy cost = $18,000	labor cost = $154,000
material cost = $32,000	energy cost = $18,800
	material cost = $33,500

Answer:

2014	2015	
Labor = 752000/152000 = 4.947	763000/154000 = 4.955	growth = 0.16%
Mat'l. = 752000/32000 = 23.5	763000/33500 = 22.78	growth = -3.06%
Energy = 752000/18000 = 41.78	763000/18800 = 40.59	growth = -2.84%
Total = 752000/202000 = 3.723	763000/206300 = 3.698	growth = -0.67%

The investment resulted in a lower total productivity, so it appears to be a bad investment.

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Chapter 02: Corporate Strategy, Performance, and Sustainability
Practice Problems

MULTIPLE CHOICE

1. The chapter begins with a quote: "Most really great companies try to set up strategies and come out stronger than when they went in." Who made that statement?
   a. Jack Welch
   b. Jeff Immelt
   c. Sergey Brin
   d. Frederick Smith
   e. Anil Ambani

   ANS: D PTS: 1 DIF: Easy
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

2. The Dow Chemical Company developed its Code of Business Conduct during Phase _____ of its ethics and sustainability initiative.
   a. 1
   b. 2
   c. 3
   d. 4
   e. 5

   ANS: A PTS: 1 DIF: Easy
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

3. The Dow Chemical Company began thinking in terms of the triple bottom line during Phase 2 of its ethics and sustainability initiative. The triple bottom line includes the impact of which of these factors on Dow's operations?
   a. Economic
   b. Social
   c. Environmental
   d. All of these factors

   ANS: D PTS: 1 DIF: Easy
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

4. Which of the following trends have become drivers of corporate strategy initiatives?
   a. Increasing number of global competitors
   b. Demands by customers for companies to become more ethically and environmentally focused
   c. The rising costs of fuels and materials
   d. Desire to deliver more innovative products more frequently and cheaply than competitors
   e. All of these

   ANS: E PTS: 1 DIF: Medium

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OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

5. An organization's _____ is a description of how it intends to compete, or provide value to its customers, both now and into the future.
   a. operations strategy
   b. strategy
   c. core competence
   d. economies of scale
   e. service recovery

   ANS: B PTS: 1 DIF: Easy
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

6. The process of determining a firm's long-term goals, plans, and policies is called _____.
   a. operations strategy
   b. business process reengineering
   c. strategic planning
   d. economies of scale
   e. service recovery

   ANS: C PTS: 1 DIF: Medium
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

7. The firm's _____ provides direction for its strategic plan and should address questions such as, "Who are we now?" and "What do we want to be?"
   a. operations strategy
   b. strategy
   c. business plan
   d. mission statement
   e. core capabilities

   ANS: D PTS: 1 DIF: Medium
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

8. "We will be the easiest pharmacy retailer for customers to use," is the mission statement of _____.
   a. CVS Pharmacy
   b. Rite Aid Pharmacy
   c. Walgreens
   d. ADV Care Pharmacy
   e. Walmart

   ANS: A PTS: 1 DIF: Easy
   OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

9. Firms compete using some combinations of the three competitive dimensions. The three competitive dimensions are
   a. Cost, customer service, and delivery
   b. Customer service, quality, and timeliness

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c. Cost, quality, and innovation
d. Cost, quality, and customer service
e. Customer service, quality, and innovation

ANS: D PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

10. Competing on _____ requires attention on reducing the costs of purchases, labor, equipment, manufacturing, overhead, and other cost items included in the products and services sold to customers.
a. quality
b. delivery
c. customer service
d. cost
e. innovation

ANS: D PTS: 1 DIF: Easy
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

11. Retailers like Walmart, for example, can sell items for low prices in part because
a. They purchase in very large quantities, which reduces purchase costs per unit
b. They have their own distribution centers and trucks
c. They help their supply chain members to reduce their costs
d. They offer little in the way of assistance to customers in the retail stores
e. All of these

ANS: E PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

12. Purchasing and manufacturing in bulk to reduce per-unit costs is also referred to as creating _____.
a. a business plan
b. virtual integration
c. economies of scale
d. core competence
e. service recovery

ANS: C PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

13. According to the textbook, which country in Western Europe has emerged as one of the lowest cost manufacturing locations?
a. Romania
b. United Kingdom
c. Sweden
d. Turkey
e. Denmark

ANS: B PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

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14. Competing on _____ typically means providing a great or unique product or service.
    a. quality
    b. delivery
    c. customer service
    d. cost
    e. innovation

    ANS: A PTS: 1 DIF: Easy
    OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

15. Why do higher quality goods and services generally command higher prices?
    a. To cover the costs of higher quality parts
    b. To cover the costs for closer attention to meeting design specifications
    c. To cover the costs for better trained personnel
    d. To cover the costs for the use of better equipment and technology
    e. All of these

    ANS: E PTS: 1 DIF: Easy
    OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

16. According to the textbook, which global consulting firm based in New York City uncovers the world's most reputable companies annually?
    a. Booz Allen Hamilton
    b. IBM Global Business Services
    c. McKinsey & Company
    d. Reputation Institute
    e. Target

    ANS: D PTS: 1 DIF: Medium
    OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

17. Which one of these aspects is usually NOT included within the customer service dimension?
    a. Server knowledge and empathy
    b. Service recovery
    c. Cost
    d. Reliability
    e. Flexibility

    ANS: C PTS: 1 DIF: Easy
    OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

18. _____ refers to the firm's ability to respond to a wide variety of customer expectations. It can also mean the firm can accommodate varying demand levels.
    a. Flexibility
    b. Reliability
    c. Server knowledge and empathy
    d. Speed
    e. Service recovery

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ANS: A PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

19. _____ refers to the ability to complete the service quickly.
    a. Flexibility
    b. Reliability
    c. Server knowledge and empathy
    d. Speed
    e. Service recovery

ANS: D PTS: 1 DIF: Easy
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

20. In customer service terms, _____ refers to delivering a good or service as promised.
    a. flexibility
    b. reliability
    c. server knowledge and empathy
    d. speed
    e. service recovery

ANS: B PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

21. When a customer service experience goes wrong—the product fails to operate correctly or the restaurant's food is cold—customers expect an equitable compensation or arrangement. This capability is also known as _____.
    a. flexibility
    b. reliability
    c. server knowledge and empathy
    d. speed
    e. service recovery

ANS: E PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

22. To create customer value and compete, firms can utilize which one of the strategic combinations?
    a. High cost, high quality, and poor customer service
    b. Low cost, low quality, and poor customer service
    c. Low cost, high quality, and great customer service
    d. High cost, low quality, and great customer service
    e. High cost, low quality, and poor customer service

ANS: C PTS: 1 DIF: Medium
OBJ: LO 2-1: List the properties of a mission statement and how corporate strategies are developed

23. _____ are the set of decisions made within the operations function to support the overall mission and strategy of the firm.
    a. Operations strategies

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b. Competitive advantages
c. Core competencies
d. Business decisions
e. Lean initiatives

ANS: A PTS: 1 DIF: Easy
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

24. _____ is/are the collective capabilities or skill sets possessed by the firm that distinguish it from its competitors.
a. Operations capabilities
b. Competitive advantages
c. Core competencies
d. Business acumen
e. Artificial intelligence

ANS: C PTS: 1 DIF: Medium
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

25. Core competencies
a. Create competitive advantage
b. Are dynamic
c. Are difficult to imitate
d. All of these

ANS: D PTS: 1 DIF: Easy
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

26. Which of the following operations strategies is NOT aligned with the firm's strategic plan of a low-cost strategy?
a. High inventories to avoid stockouts
b. Copying successful products instead of designing unproven products
c. Using low-cost, relatively unskilled labor
d. Offering minimally acceptable quality and customer service levels
e. Finding good deals on location sites

ANS: A PTS: 1 DIF: Hard
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

27. According to the textbook, operations strategies such as the use of flexible processes and the use of the state-of-the-art equipment are aligned with which part of the firm's strategic plan?
a. High-customer-service strategy
b. High-quality strategy
c. Low-cost strategy
d. None of these

ANS: B PTS: 1 DIF: Medium
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

28. When firms compete using product quality as their priority, operations managers must

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a. Seek out high-quality suppliers
b. Make use of statistical process control techniques and continuous-improvement tools
c. Use highly qualified personnel and state-of-the-art equipment
d. Sometimes incorporate ethical and sustainable operating practices
e. All of these

ANS: E PTS: 1 DIF: Easy
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

29. According to the textbook, with which part of the firm's strategic plan is customer satisfaction of the utmost importance?
a. High-customer-service strategy
b. High-quality strategy
c. Low-cost strategy
d. None of these

ANS: A PTS: 1 DIF: Medium
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

30. According to the textbook, the use of decentralized distribution centers is aligned with which part of the firm's strategic plan?
a. High-customer-service strategy
b. High-quality strategy
c. Low-cost strategy
d. None of these

ANS: A PTS: 1 DIF: Medium
OBJ: LO 2-2: Describe how companies create operations strategies for competitive advantage

31. _____ occur(s) in operations and other functional areas when doing more of one activity requires doing less of something else.
a. Operations capabilities
b. Strategic planning
c. Strategy trade-offs
d. Service recovery
e. Business planning

ANS: C PTS: 1 DIF: Easy
OBJ: LO 2-3: Explain the trade-offs in operations strategies

32. Which of the following is an example of an operations strategy trade-off followed by Southwest Airlines?
a. Fly one model
b. Fly point to point to many smaller, regional airports
c. Exclusively use their website for reservations
d. Offer no assigned or first-class seating
e. All of these

ANS: E PTS: 1 DIF: Easy

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OBJ: LO 2-3: Explain the trade-offs in operations strategies

33. Which of the following is a common operations performance measure for the *financial* performance category?
    a. Order delivery time accuracy
    b. Number of processes using statistical process control
    c. Number of sustainability awards received
    d. Inventory turnover
    e. Multiple-factor productivity

    ANS: D PTS: 1 DIF: Hard
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

34. According to the textbook, which of the following is a common operations performance measure for the *quality* performance category?
    a. Number of service awards received
    b. Average time between product failures
    c. Percent of suppliers that are ISO 14000 certified
    d. Total cost compared to standard or desired cost
    e. Completeness of website

    ANS: B PTS: 1 DIF: Hard
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

35. According to the textbook, which of the following is a NOT a common operations performance measure for the *customer service* performance category?
    a. Cost of poor quality
    b. Order delivery time accuracy
    c. Customer satisfaction score
    d. Number of service awards received
    e. Completeness of website

    ANS: A PTS: 1 DIF: Hard
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

36. According to the textbook, which of the following is a NOT a common operations performance measure for the *ethics/sustainability* performance category?
    a. Percent reduction in greenhouse gas emissions (carbon footprint)
    b. Percent of purchases from small, minority-owned, or women-owned suppliers
    c. Customer satisfaction score
    d. Percent of waste recycled
    e. Number of fair trade products purchased

    ANS: C PTS: 1 DIF: Hard
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

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	2014	2015
Output (items sold)	18,300	21,050
Inputs:		
Labor cost	46,300	49,000
Materials cost	6,100	7,175
Lease cost	6,700	7,100
Energy cost	3,300	2,975

37. Find out the single-factor labor productivity for the year 2014 from the information provided above.
    a. 0.395
    b. 0.367
    c. 0.455
    d. 0.430
    e. Do not have enough information to compute

    ANS: A PTS: 1 DIF: Medium
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

38. Find out the single-factor labor productivity for the year 2015 from the information provided above.
    a. 0.395
    b. 0.367
    c. 0.455
    d. 0.430
    e. Do not have enough information to compute

    ANS: D PTS: 1 DIF: Medium
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

39. Find out the single-factor materials productivity for the year 2014 from the information provided above.
    a. 3.451
    b. 2.934
    c. 3.000
    d. 2.551
    e. Do not have enough information to compute

    ANS: C PTS: 1 DIF: Medium
    OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

40. Find out the single-factor materials productivity for the year 2015 from the information provided above.
    a. 3.451

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b. 2.934
c. 3.000
d. 2.551
e. Do not have enough information to compute

ANS: B PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

41. Find out the single-factor lease productivity for the year 2014 from the information provided above.
a. 2.577
b. 3.142
c. 2.965
d. 2.731
e. Do not have enough information to compute

ANS: D PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

42. Find out the single-factor lease productivity for the year 2015 from the information provided above.
a. 2.577
b. 3.142
c. 2.965
d. 2.731
e. Do not have enough information to compute

ANS: C PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

43. Find out the single-factor energy productivity for the year 2014 from the information provided above.
a. 5.545
b. 6.379
c. 6.151
d. 7.076
e. Do not have enough information to compute

ANS: A PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

44. Find out the single-factor energy productivity for the year 2015 from the information provided above.
a. 5.545
b. 6.379
c. 6.151

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d. 7.076
e. Do not have enough information to compute

ANS: D PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

45. Find out the total productivity for the year 2014 from the information provided above.
a. 0.318
b. 0.337
c. 0.293
d. 0.276
e. Do not have enough information to compute

ANS: C PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

46. Find out the total productivity for the year 2015 from the information provided above.
a. 0.318
b. 0.337
c. 0.293
d. 0.276
e. Do not have enough information to compute

ANS: A PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

47. Find out the growth of labor productivity from 2014 to 2015 from the information provided above.
a. 8.14% decrease
b. 8.86% decrease
c. 8.86% increase
d. 8.14% increase
e. Do not have enough information to compute

ANS: C PTS: 1 DIF: Hard
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

48. Find out the materials productivity growth rate from 2014 to 2015 from the information provided above.
a. 2.21% decrease
b. 2.26% decrease
c. 2.31% increase
d. 2.27% increase
e. Do not have enough information to compute

ANS: A PTS: 1 DIF: Hard

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OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

49. Find out the lease productivity growth rate from 2014 to 2015 from the information provided above.
    a. 7.87% decrease
    b. 8.55% increase
    c. 8.55% decrease
    d. 7.87% increase
    e. Do not have enough information to compute

ANS: B PTS: 1 DIF: Hard
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

50. Find out the energy productivity growth rate from 2014 to 2015 from the information provided above.
    a. 27.61% decrease
    b. 21.64% increase
    c. 21.64% decrease
    d. 27.61% increase
    e. Do not have enough information to compute

ANS: D PTS: 1 DIF: Hard
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

Net sales	$410,660
Cost of goods sold (purchased items)	$102,500
Net income after taxes	$ 45,415
Current assets	$299,665
Current liabilities	$276,230
Avg. inventory value	$ 91,620

51. Find out the net profit margin from the information provided above.
    a. 44.3%
    b. 16.4%
    c. 15.2%
    d. 11.1%
    e. Do not have enough information to compute

ANS: D PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

52. Find out the current ratio from the information provided above.
    a. 0.67
    b. 0.73
    c. 1.08

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d. 0.92
e. Do not have enough information to compute

ANS: C PTS: 1 DIF: Hard
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

53. Find out the inventory turnover from the information provided above.
a. 1.1
b. 0.3
c. 1.6
d. 0.9
e. Do not have enough information to compute

ANS: A PTS: 1 DIF: Medium
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

54. Which of the following is a category of the balanced scorecard instrument?
a. Financial
b. Key business processes
c. Customer
d. Learning and growth
e. All of these

ANS: E PTS: 1 DIF: Easy
OBJ: LO 2-4: Discuss a number of operations performance measures and potential measurement problems

55. Triple bottom line has also been referred as the *three P's*. What are they?
a. People, processes, and profits
b. People, planet, and processes
c. Processes, planet, and profits
d. People, planet, and profits
e. Processes, plants, and people

ANS: D PTS: 1 DIF: Medium
OBJ: LO 2-5: Demonstrate how corporate ethics and sustainability impact corporate and operations strategies

56. A _____ is a product that is manufactured or grown by a disadvantaged producer in a developing country who received a fair price for the goods.
a. specialty product
b. fair trade product
c. consumer product
d. gross domestic product
e. None of these

ANS: B PTS: 1 DIF: Medium
OBJ: LO 2-5: Demonstrate how corporate ethics and sustainability impact corporate and operations

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strategies

57. An ethical act that creates the greatest good for the greatest number of people is called _____.
    a. utilitarianism
    b. fair trade product
    c. sustainability
    d. scorecarding
    e. chivalry

    ANS: A PTS: 1 DIF: Easy
    OBJ: LO 2-5: Demonstrate how corporate ethics and sustainability impact corporate and operations strategies

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Class Activities

Chapter 2. Corporate Strategy, Performance, and Sustainability

Insulate Your Bottles
LO 2-1: List the properties of a mission statement and how corporate strategies are developed
LO 2-2: Describe how companies create operations strategies for competitive advantage
LO 2-3: Explain the tradeoffs in operations strategies
Online or Offline; Individual or Group

You and a friend have decided to create a company that designs and manufactures insulating "socks" for water bottles. What would be your company's mission statement? How would your company integrate operations management concerns into its mission and strategy? For example of such a company, see the link below to Freaker USA, a Wilmington, North Carolina-based maker of beverage insulators. An article for Entrepreneur is also linked below that provides a unique perspective into how Freaker USA has shaped its missions statement.

Freaker USA: http://www.freakerusa.com/
Entrepreneur Article including reference to Freaker USA mission:
https://www.entrepreneur.com/article/243385

The Sustainable Lorax
LO 2-5: Demonstrate how corporate ethics and sustainability impact corporate and operations strategies
Online or Offline; Individual or Group

Read Dr. Seuss' famous book "The Lorax" (widely available from nearly any brick-and-mortar or online bookstore). Alternatively, "The Lorax" animated TV special (1972) may be viewed. This TV special is readily available online and follows the book's storyline faithfully. How did the Once-ler's process change over time? What operational and sustainability issues did the Once-ler face? How might he have overcome these issues?

Feger, A. L. R., & Thomas, G. A. (2011). Bailing Out the Once-Ler: Using Dr. Seuss to Teach Operations Management. *Decision Sciences Journal of Innovative Education*, *9*(1), 69-73.
http://onlinelibrary.wiley.com/doi/10.1111/j.1540-4609.2010.00291.x/abstract

Sandwich Productivity
LO 2-4: Discuss a number of operations performance measures and potential measurement problems
Offline; Individual or Group

Purchase a loaf of sandwich bread, a jar of peanut butter (other butters can be substituted in case of allergy concerns), and a jar of jelly or jam. The instructor will then ask students to create as many "acceptable" peanut butter and jelly sandwiches as possible using the bread, peanut butter, and jelly. The instructor is the final judge of what an "acceptable" sandwich is and may provide (or not provide) additional guidelines for sandwiches before sandwich construction begins. After building sandwiches, determine your sandwich production process productivity. How could you improve your productivity?

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Case Notes

Chapter 2: Corporate Strategy, Performance, and Sustainability

Blue Nile—A Passion for Perfection

Case Summary

Blue Nile is a small internet diamond retailer. Blue Nile has developed a corporate strategy that enables it to compete against much larger brick and mortar jewelry retailers such as Signet Jewelers, Tiffany and CO., and Helzberg Diamonds. Their strategy consists primarily of a strong customer service element. Blue Nile offers online education and tutorials about what to look for when selecting jewelry. Furthermore, they provide price match guarantees, lifetime upgrades, and free shipping. In addition, Blue Nile has demonstrated that it is a good corporate citizen by only purchasing diamonds from suppliers who adhere to the Kimberley Process.

Case Analysis

This case illustrates the effective use of the three competitive dimensions—cost, quality, and customer service. Blue Nile focused on keeping the costs down by being an internet diamond retailer and forsaking brick and mortar stores. This provides significant savings and allows Blue Nile to be competitive with the more traditional diamond retailers. Blue Nile utilized its approach to customer service as an indicator of the quality of its goods. Through the use of online education and tutorials about how to assess gems, Blue Nile makes the customer feel at ease, while enabling the customer to be a well-informed judge of the quality of Blue Nile's diamonds and other jewelry items. Blue Nile further demonstrates its confidence in its quality by offering diamond price match guarantees and a lifetime diamond upgrade. Finally, Blue Nile's actions illustrate its commitment to behaving ethically. Blue Nile follows guidelines such as the Kimberley Process to ensure the diamonds it buys are not financing rebel movements.

Sample Answers to Case Questions

1. How does Blue Nile compete with traditional brick-and-mortar jewelers? What is its competitive advantage? Should they build brick and mortar stores?

   Compared to traditional brick-and-mortar jewelers, Blue Nile's exclusive internet model offers significant cost advantages:
   - Low operating costs. Blue Nile does not have any physical retail stores, so they have savings on any store-related costs, such as rent ($5,000 per month), utilities, and insurance. They also save on salesperson wages ($20/hour) plus sales bonuses.
   - Low inventory costs. Blue Nile displays diamonds from suppliers on their website, but does not purchase any items until a customer makes the order. They are not tied up with

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inventory like their retail competitors, who usually carry up to 70,000 items in the store and yet, still may not have the right items to satisfy the needs of all customers.
- Low profit margins. Blue Nile maintains only a third of Tiffany's profit margin. This low profit margin approach attracts customers to purchase higher grade diamonds, and thus average purchases at Blue Nile are much higher than that of retail stores.
- Blue Nile's internet exclusive model offers significant cost competitive advantage. They should not build brick and mortar stores, since this is getting away from what makes them competitive.

2. What are the challenges ahead for Blue Nile?

- According to the Baymard Institute, a web research company in the UK, 67.45% of online shopping carts are ultimately abandoned. For diamond rings, this percentage is probably even higher. Reducing abandoned carts and increasing online purchases remains a challenge.
- Increased competition from Costco, Walmart, Home Shopping Network, and other online and big box retailers.
- Expansion into overseas markets without brick-n-mortar stores.

3. What could it do to expand its overseas markets?

- Understand the overseas markets by looking into the local customs and cultures, including customers' online shopping behaviors and their preference for the design of the engagement rings and other jewelry.
- Establish partnerships with global logistics partners to ensure safe and fast delivery.
- Ensure online payment security and careful execution of their product refund policy.

4. In addition to ethical sourcing, what other areas of corporate sustainability could Blue Nile consider?

- Blue Nile should consider adopting ethical sourcing standards for other raw materials such as gem stones, silver, platinum, and packaging materials.
- They should also consider expanding from sourcing compliance to sustainability throughout the supply chain. This would include improvement in the areas of energy and water consumption, GHG emissions, carbon footprint, employee well-being, and community involvement.

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Case Notes

Chapter 2: Corporate Strategy, Performance, and Sustainability

The Woods Coffee

Case Summary

The Woods Coffee is a family-owned business that is very successful. They are currently opening their 17th store in Western Washington. This puts them in direct competition with Starbucks and Tully's. They are focused on more than providing a great cup of coffee. They also focus on Corporate Social Responsibility. The Woods Coffee engages in activities such as fundraising to help orphans and underprivileged children, as well as partnering with Western Washington University and donating $1 of their Viking Blend coffee sales to the University's scholarship program.

Case Analysis

In this case, the chapter concepts of ethics and sustainability are highlighted by the actions of The Woods Coffee. As part of their selection of coffees, The Woods Coffee offers a limited selection of fair trade organic coffees. This action demonstrates its commitment to Corporate Social Responsibility (ethics). In addition, The Woods Coffee in engaged in several social and environmental initiatives. For example, The Woods Coffee organizes fundraisers to provide support for various causes such as helping orphans. The Woods Coffee donates a portion of its sales of the Viking Blend coffee to Western Washington University's scholarship fund. Evidence of its efforts in sustainability are the design of The Woods Coffee locations and their pledge to adhere to the Leadership in Energy and Environmental Design (LEED) green standards.

Sample Answers to Case Questions

1. How does The Woods Coffee compete with Starbucks or other major coffee chains?

- The Woods has found its unique niche in the coffee business. Their Northwest store design, in-house coffee roasting and bakery products, sustainability practices, and community outreach helped them to become the best in the Western Washington community.

2. Suggest some other things The Woods Coffee could do to compete.

- Answers will vary. They could serve lunch for example, or sell packaged, branded coffee.

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3. Should the company expand its locations outside of the Western Washington area? Why?

- The Woods Coffee should focus on expanding the business in Western Washington. They can open new stores in nearby cities while maintaining the centralized roasting and bakery operations. As the number of stores increases, they can consider establishing more roasting and bakery facilities to continue the centralized operations model. Eventually, they can consider expansion outside of Western Washington through franchises which allow investors to establish new stores in other regions.

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Case Notes

Chapter 2: Corporate Strategy, Performance, and Sustainability

Viking Sensors—The Triple Bottom Line

Case Summary

Viking Sensors is committed to ensuring it focuses on the triple bottom line—people, planet, and profit. Proof of its commitment is how Viking Sensors treats its employees, addressing training needs, the work environment, etc. Viking Sensors works to preserve the planet by engaging in various energy conservation initiatives; of course, profit is not forgotten too. Utilizing multiple Lean principles, they use continuous improvement techniques to reduce costs.

Case Analysis

As indicated in the title, Viking Sensors believes it has a responsibility to support the triple bottom line—people, planet, and profit. The safety and comfort of their employees are priority one. Viking Sensors ensures that it maximizes the natural light when designing its facilities. They make every effort to make the entire facility ergonomically friendly by adding indoor plants, etc. They cross-train employees to prevent boredom. They adhere to the Leadership in Energy and Environmental Design (LEED) standards and have a LEED Gold-Certified building. They utilize solar power to meet their energy needs. Viking Sensors is addressing the profit element of the triple bottom line by engaging in Lean activities such as Poka-Yoke to reduce process-related defects. In addition, Viking Sensors uses JIT to keep their inventory low, thus saving money.

Sample Answers to Case Questions

1. What is triple bottom line? How should it integrate with corporate and operations strategies?

- The triple bottom line is an accounting framework with three parts: social, environmental (or ecological) and financial. These three divisions are also called the three Ps: people, planet and profit, or the "three pillars of sustainability".
- The triple bottom line helps a company to pay attention to sustainability issues when formulating business strategies and making operational decisions which will benefit the firm, its employees, and its customers.

2. How does Viking Sensors incorporate the triple bottom line into its business practices?

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- Viking Sensors implemented the triple bottom line as a new culture in all areas of their business practices including facility design, energy consumption, employee well-being, quality improvement, supplier selection and relationship, and inventory management.

3. Among the future initiatives Bill Spencer is considering, which do you think the company should pursue? Why?

- They should consider obtaining all of them. A B-Corp takes into account how decisions will impact the environment as well as the society. This allows the company to make decisions that are not the most profitable. Shareholders will evaluate if the business decisions have a sustainable impact on the environment. Pursuing the B-Corp designation should be a good next step for the company, and it should entail obtaining a platinum certified building and ISO 14000 certification.

4. Discuss some other sustainability practices and certifications Viking could consider. Answers will vary based on location of the students.

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Lecture Notes

Chapter 2: Corporate Strategy, Performance, and Sustainability

Overview

LO 2-1: List the properties of a mission statement and how corporate strategies are developed.
Mission statements include descriptions of a company's goods and services, the processes employed, markets where it competes, potential customers, and the company's distinctive competencies. **Corporate strategies** are developed using some combination of the competitive dimensions of cost, quality, and customer service. Cost benefits can be derived from economies of scale; quality takes on many forms such as reliability, performance, and warranties; customer service focuses on delivery speed, flexibility, product support, etc.

LO 2-2: Describe how companies create operations strategies for competitive advantage.
Companies create operations strategies for competitive advantage by first understanding what their core competencies are. Core competencies are the collective capabilities or skill sets a firm possesses that differentiate it from its competition. Using their core competencies as the foundation to build upon, companies assess their overall strategy (cost strategy, quality strategy, or customer service strategy), and align the 10 operations strategies to support the firm's overall strategy. The 10 operations strategies a company tailors to it firm's strategy are product design, process design, production control system, facility location, facility layout, purchasing, logistics, quality, inventory, and customer service.

LO 2-3: Explain the tradeoffs in operations strategies.
The 10 operations strategies a company tailors to it firm's strategy are product design, process design, production control system, facility location, facility layout, purchasing, logistics, quality, inventory, and customer service. However, when a company tailors these 10 operations strategies to support a specific overall strategy (cost, quality, or customer service), the effectiveness of the operations strategy is constrained. For example, if a company aligns its logistics strategy to support an overall cost strategy, it will generally utilize centralized distribution centers and low-cost transportation modes. This impacts customer service in that an overall customer service strategy is more effective when decentralized distribution centers are used and delivering on time is a higher priority than cost saving.

LO 2-4: Discuss a number of operations performance measures and potential measurement problems.
Performance measures fall into five major categories: financial, productivity, quality, customer service, and ethics and sustainability. Financial measures can be influenced by macro-environmental conditions that a firm's managers cannot control. Consequently, changes in cost or profit figures may not correctly indicate the company's capabilities. Another example is

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customer service measures such as customer satisfaction scores and complaint resolution time. Working to drive complaint resolution time down can potentially cause customer satisfaction scores to decrease because customers may feel insufficient time was spent understanding their issues and/or explaining solutions or corrective actions.

LO 2-5: Demonstrate how corporate ethics and sustainability impact corporate and operations strategies

When firms work to demonstrate an ethical approach to purchasing by buying fair trade products, this often translates into it supporting their customer service strategy. Customers often view this activity as aligning with their values; thus, enhancing their positive opinion of the firm. When firms go green through their sustainability strategy, this action has the effect of enabling them to reduce costs through recycling, etc.; thereby, reducing operational costs and supporting their low-cost strategy.

Outline

Slide 1:

Title Slide

Slide 2: Learning Objectives

You should be able to:

- Describe the properties of a mission statement and how corporate strategies are developed
- Describe how companies create operations strategies for competitive advantage
- Explain the tradeoffs in operations strategies
- Describe a number of operations performance measures and potential measurement problems
- Demonstrate how corporate ethics and sustainability impact corporate and operations strategies

NOTES: None

Slide 3: Chapter Outline

- Introduction
- Corporate Strategy Development
- Aligning Operations Strategies for Competitive Advantage
- Operations Strategy Tradeoffs
- Measuring Operations Performance
- Trends in Operations Strategies – The Growing Importance of Ethics and Sustainability

NOTES: None

Introduction

Slide 4: Introduction

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- Mission statements impact organizations' competitive strategies
- Strategies result in short-term tactics for process improvements
- Measuring operations performance
- Socially responsible and environmentally friendly strategies

NOTES: Once mission statements have been set, they become the impetus behind the formation of various functional strategies.

Today, many firms are using scorecards to help them track the right performance measures.

Socially responsible and environmentally friendly strategies can create a competitive advantage and even reduce costs for the organization.

Corporate Strategy Development

Slide 5: Corporate Strategy Development

- Organization's **strategy** – how it intends to compete, or provide value to its customers
- **Strategic planning** – process of determining firm's long-term goals, plans, and policies
- **Mission statement** – provides direction for its strategic plan and should address:
  - Who are we now?
  - What do we want to be?

NOTES: An organization's **strategy** is a description of how it intends to compete, or provide value to its customers, both now and into the future. The process of determining a firm's long-term goals, plans, and policies is called **strategic planning**.

Executives in the firm must address two questions when developing the firm's overall strategy, namely, "Who are we now?" and "What do we want to be?"

Slide 6: Corporate Strategy Development

A mission statement might include:

- Descriptions of company's goods and services
- Processes employed
- Potential customers
- Markets where company competes
- Distinctive competencies

NOTES: The strategic plan addresses how the firm intends to achieve its mission.

The mission statement might include descriptions of the company's goods and services, the processes employed, the markets where the company competes, its potential customers, and its distinctive competencies.

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Strategic plans are periodically revisited and potentially revised, typically annually, mission statements are changed far less often.

Slide 7: Strategy Choices

Three competitive dimensions' firms use to compete:

- Cost
- Quality
- Customer Service

NOTES: When consumers buy products, some choose the low-cost alternative; others may prefer instead to buy the higher priced, higher quality product, while still others may base their purchases on various service attributes of the product or retailer, Companies utilize strategic combinations of low cost, high quality, and great customer service as a way to create customer value and compete.

Slide 8: Strategy Choices

Cost

- Reduce costs of purchases, labor, equipment, manufacturing, and overhead
- Use **economies of scale** – purchase and manufacture in bulk to reduce per-unit costs
- Seek locations in countries with low labor costs, low taxes, and plentiful suppliers

NOTES: Most any product line includes a low-cost alternative. Manufacturers too, can compete using a low cost strategy by producing very large quantities of no-frills products with automated equipment, which reduces the per-unit cost. Purchasing and manufacturing in bulk to reduce per-unit costs is also referred to as creating **economies of scale**. Additionally, manufacturers seek locations in countries with low labor costs, low taxes, and plentiful suppliers

Slide 9: Strategy Choices

Quality

- Related to product's design or features, reliability, performance, safety, and warranty package

Customer Service

- Delivery speed, flexibility, reliability, product support, server knowledge, empathy, and service recovery

NOTES: Quality has many elements including the product's design or features, reliability, performance, safety, and warranty package. Consumers might have varying perceptions of quality. Higher quality goods and services generally command higher prices to cover the costs of higher quality parts, closer attention to meeting design specifications.

Customer service includes a number of aspects such as delivery speed, flexibility, reliability, product support, server knowledge and empathy, and service recovery.

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Aligning Operations Strategies for Competitive Advantage

Slide 10: Aligning Operations Strategies for Competitive Advantage

Operations strategies

- Decisions made within the operations function to support the overall mission and strategy of the firm

NOTES: Competitive advantage can be achieved when the operations function creates strategies which are aligned with the overall mission and strategy of the firm. These decisions define how the operations function will contribute to the firm's ability to compete, and collectively, these are considered core competencies of the firm.

Slide 11: Core Competencies

- Skill sets possessed by the firm that distinguish it from its competitors
- Are dynamic – as customer tastes, competition, and technologies change, core competencies change
- Should be difficult to imitate

NOTES: Core competencies are the collective capabilities or skill sets possessed by the firm that distinguish it from its competitors. Core competencies create competitive advantage.

Core competencies are also dynamic—as customer tastes, competition, and technologies change, a firm's core competencies must also change to continue to provide an advantage for the firm. core competencies should be difficult to imitate. This is what makes a competitive advantage sustainable. Patent portfolios are used to protect core technologies and can be used to block competitors from entering a market

Slide 12: Operations Strategy Choices

Aligning Operations with a Low-Cost Strategy

- Focus their efforts on creating competencies that achieve low cost
  - Find good deals on location sites
  - Low-cost transportation alternatives
  - Offer minimally acceptable quality and customer service levels

NOTES: *Aligning Operations with a Low Cost Strategy.* Firms competing using a low-cost strategy for example, will require operations to focus their efforts on creating competencies that achieve low costs, such as copying successful products instead of designing unproven products, purchasing and manufacturing in large quantities to reduce per-unit costs, and using low cost, relatively unskilled labor.

Slide 13: Operations Strategy Choices

Aligning Operations with a High-Quality Strategy

- Seek out high-quality suppliers using quality certifications
- Statistical process control techniques

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- Continuous improvement tools like Six Sigma

NOTES: *Aligning Operations with a High Quality Strategy.* When firms compete using product quality as their priority, operations managers must seek out high quality suppliers, through use of quality certifications such as the ISO 9000 family of standards. Additionally, the company makes use of statistical process control techniques and continuous improvement tools such as Six Sigma.

These firms also use highly-qualified personnel, state-of-the-art equipment, and may incorporate ethical and sustainable operating practices

Slide 14: Operations Strategy Choices

Aligning Operations with a High Customer Service Strategy

- Customer satisfaction utmost importance
- On-time deliveries
- Layouts should use fair queuing systems
- WOW customers by exceeding expectations

NOTES: *Aligning Operations with a High Customer Service Strategy.* With this type of strategy, customer satisfaction is of the utmost importance. Deliveries must be on-time, which may require use of air transportation and decentralized distribution centers which are close to each market served. Layouts should keep customers occupied and use fair queuing systems. Most importantly, companies should attempt to WOW customers by exceeding expectations, using strong warranties, and having 24-hour call centers.

Operations Strategy Tradeoffs

Slide 15: Operations Strategy Tradeoffs

Strategy tradeoffs

- Doing more of one activity and less of something else
- Ex. Southwest Airlines
  - No meals or assigned seating, website only for reservations
  - Forego pampering, meals, close-in airports, business or first-class and reserved seating

NOTES: **Strategy tradeoffs** occur in operations and other functional areas when doing more of one activity requires doing less of something else.

Example - Southwest Airlines offer no meals, exclusively use their website for reservations, and offer no assigned or first-class seating, which reduces costs and speeds passenger loading. While these characteristics act together to reduce total costs and keep planes in the air hauling more passengers than their competitors, Southwest must forego other things which can cause them to

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lose favor with those customers who like pampering, meals, close-in airports, and business or first-class and reserved seating.

Measuring Operations Performance

Slide 16: Performance Measures

- Give clear picture of overall performance
- Vary from one company to the next
- Provide information for decision-making purposes

NOTES: To get a clear picture of overall performance, firms should develop an organization-wide system of **performance measures** linked to the firm's strategies. Performance measures vary substantially from one company to the next. Designing a suite of performance measures and then monitoring the many key operations processes that impact costs and profits can provide much better information for decision-making purposes.

Slide 17: Performance Measures

Financial

- Net profit margin = net income after taxes⁄net sales
- Current ratio = current assets⁄current liabilities
- Inventory turnover = cost of goods sold⁄average inventory value

NOTES: Financial performance measures don't tell the whole story, but are an integral part of any performance measurement portfolio. Changes in cost and profit statistics may not accurately reflect the true, underlying capabilities of the firms.

Net profit margin (net income after taxes/net sales), Current ratio (current assets/current liabilities), Inventory turnover (cost of goods sold/average inventory value), are a few financial performance measures that are commonly used today.

Slide 18: Performance Measures

Productivity – impact of one or more of the firm's inputs on the firm's outputs
Productivity = outputs⁄inputs
Overall productivity = outputs⁄cost of (labor+capital+materials+energy)

NOTES: As this index grows, it means the firm is using fewer inputs per unit of output, which is generally considered good. **Multiple-factor productivity** measures such as overall productivity, are useful but can have problems similar to the use of financial performance measures. These measures allow firms to view the impact of one or more of the firm's inputs (such as the cost of labor) on the firm's outputs (such as units produced or customers served), but do not allow the firm to determine the actual performance of any of the processes behind these elements.

Slide 19: Performance Measures

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Productivity growth rate – used to gauge an investment's success

- Growth rate % = $[(P2 - P1)/P1]$ (100)

where:

- P_1 = Productivity in period 1, and
- P_2 = Productivity in period 2

NOTES: The **productivity growth rate** from one period to the next is also occasionally determined to gauge an investment's success. This can be calculated as (P2 – P1)/ P1 where: P_1 = Productivity in period 1, and P_2 = Productivity in period 2.

Slide 20: Example 2.1: Financial and Productivity Measures at Ultra Ski Co

See Example 2.1 on page 35.

NOTES: The **productivity growth rate** from one period to the next is also occasionally determined to gauge an investment's success. This can be calculated as (P2 – P1)/ P1 where: P_1 = Productivity in period 1, and P_2 = Productivity in period 2.

Slide 21: Example 2.1 Continued

See Example 2.1 on page 35.

NOTES: The **productivity growth rate** from one period to the next is also occasionally determined to gauge an investment's success. This can be calculated as (P2 – P1)/ P1 where: P_1 = Productivity in period 1, and P_2 = Productivity in period 2.

Slide 22: Example 2.1 Continued

See Example 2.1 on page 35.

NOTES: The **productivity growth rate** from one period to the next is also occasionally determined to gauge an investment's success. This can be calculated as (P2 – P1)/ P1 where: P_1 = Productivity in period 1, and P_2 = Productivity in period 2.

Slide 23: Example 2.1 Continued

See Example 2.1 on page 35.

NOTES: The **productivity growth rate** from one period to the next is also occasionally determined to gauge an investment's success. This can be calculated as (P2 – P1)/ P1 where: P_1 = Productivity in period 1, and P_2 = Productivity in period 2

Slide 24: Example 2.1 Continued

See Example 2.1 on page 35.

NOTES: If for example, the 2012 multiple-factor productivity was 0.0040 skis per dollar, then productivity in 2013 grew by: 5%.
This could have been due to greater ski output through better use of technology or training, fewer labor hours, reduced purchasing cost, lower lease cost, or some combination of all of these

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Slide 25: Performance Measures

Quality

- Number of defects per unit
- Cost of poor quality
- Avg. time between product failures
- Product returns per units sold
- Number of employees with quality training
- Number of quality awards received
- Percent of suppliers with quality certifications

NOTES: For goods producing firms, quality measures like the average number of defects per unit, the average time between product failures, the total cost of poor quality, and the number of warranty claims per units sold would likely be used. Services might be more interested in quality measures like the average number of complaints per customer. All firms would potentially be interested in tracking the number of employees receiving quality training, the number of quality awards received, and the number of suppliers used with quality certifications.

Slide 26: Performance Measures

Customer Service

- Order delivery time and quantity accuracy
- Customer satisfaction score
- Complaint resolution time
- Number of stockouts per period
- Completeness of website
- Number of "friends" on social websites

NOTES: Customer service covers a wide range of activities, from website design to call center capabilities to on-time delivery. A few examples of customer service performance measures are: Order delivery time and quantity accuracy, Customer satisfaction score

Complaint resolution time, Number of stockouts per period, Completeness of website, Number of "friends" on social websites

Slide 27: Performance Measures

Ethics and Sustainability

- Number of business ethics and sustainability initiatives adopted
- Percent of purchases from small, minority, or women-owned suppliers
- Percent reduction in greenhouse gas emissions
- Percent of waste recycled
- Percent of suppliers that are ISO 14000 certified
- Number of ethics/sustainability awards received

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NOTES: The design of effective ethical and sustainable performance measures should be discussed by all key process personnel. Some ethical and sustainable performance measures are: Number of business ethics and sustainability initiatives adopted, Percent of purchases from small, minority, or women-owned suppliers, Percent reduction in greenhouse gas emissions Percent of waste recycled, Percent of suppliers that are ISO 14000 certified, Number of ethics/sustainability awards received.

Slide 28: Figure 2.1: The Balanced Scorecard Model

See Figure 2.1 on page 38.

NOTES: Balanced Scorecard is a performance scorecard using 20 to 30 performance measures, balanced across four categories. The four balanced scorecard categories are financial, internal business, customer, and learning and growth and have been shown used in managerial decision making. Web-based scorecards are also used and are referred to as **dashboards**.

Slide 29: Emerging Issue in Performance – Big Data Analytics

Big data

- Large volumes of data collected, using information technologies, from a number of sources

Big data analytics

- Analyzing data using predictive modeling techniques to uncover problems or opportunities to create value

NOTES: **Big data** is generally defined as large volumes of data collected (often in real-time or near real-time), using information technologies, from a number of sources including social networks, website clicks, emails, sales information, insurance information, billing information, and warranty information just to name a few.

When organizations analyze this huge (or "big") array of data using predictive modeling techniques to help uncover problems or opportunities to create value, then this is referred to as **big data analytics**.

Trends in Operations Strategies -The Growing Importance of Ethics and Sustainability

Slide 30: Emerging Business Ethics

- **Business ethics** – application of ethical principles to business situations
  - **Utilitarianism** – ethical act that creates the greatest good for greatest number of people
  - **Rights and duties** - some actions are simply right, without any regard to the consequences
  - **CSR** – corporations should act ethically just as individuals should
  - **Fair trade product** – manufactured or grown by disadvantaged producer in a developing country

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NOTES: **Business ethics** can be described as the application of ethical principles to business situations, and has been very widely studied. Generally speaking, there are two approaches to deciding whether or not an action is ethical. The first approach is known as **utilitarianism**. It maintains that an ethical act creates the greatest good for the greatest number of people. The second approach is known as **rights and duties** and states that some actions are simply right, without any regard to the consequences. Much of the discussion regarding corporate social responsibility argues that corporations should act ethically just as individuals should.
A fair trade product refers to one which is manufactured or grown by a disadvantaged producer in a developing country who received a fair price for the goods.

Slide 31: Sustainability

- **Sustainability** – doing the right social and environmental things in ways that make economic sense
- **Triple bottom line** – firm's efforts to provide social, environmental, and economic benefits to stakeholders

NOTES: Sustainability means doing the right social and environmental things in ways that make economic sense. The term **triple bottom line** has been coined to describe a firm's efforts to provide social, environmental, and economic benefits to stakeholders. This has also been referred to as the "three P's" which stands for *people, planet,* and *profits*.

Slide 32: Ethical and Sustainable Operations Strategies

- Have become useful tools for operations' managers to support the firm's overall strategic goals
- When customers require evidence of sustainability then high performance becomes part of providing good customer service

NOTES: Ethical and sustainable strategies have become relevant and useful tools for operations managers, as they make plans to support the firm's overall strategic goals. When customers require firms to provide evidence of sustainability (or CSR for that matter), then high performance in these areas becomes part of providing good customer service.

Slide 33: Review Questions

1. What are the three competitive dimensions firms use to compete?
2. What do operations strategies have to do with core competencies?
3. What is sustainability? Is this a new concept?

NOTES: None

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Chapter 2:
Corporate Strategy, Performance, and Sustainability



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Learning Objectives

You should be able to:

- Describe the properties of a mission statement and how corporate strategies are developed
- Describe how companies create operations strategies for competitive advantage
- Explain the tradeoffs in operations strategies
- Describe a number of operations performance measures and potential measurement problems
- Demonstrate how corporate ethics and sustainability impact corporate and operations strategies

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Chapter Outline

- Introduction
- Corporate Strategy Development
- Aligning Operations Strategies for Competitive Advantage
- Operations Strategy Tradeoffs
- Measuring Operations Performance
- Trends in Operations Strategies – The Growing Importance of Ethics and Sustainability

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Introduction

- Mission statements impact organizations' competitive strategies
- Strategies result in short-term tactics for process improvements
- Measuring operations performance
- Socially responsible and environmentally friendly strategies

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Corporate Strategy Development

- Organization's **strategy** – how it intends to compete, or provide value to its customers
- **Strategic planning** – process of determining firm's long-term goals, plans, and policies
- **Mission statement** – provides direction for its strategic plan and should address:
  - Who are we now?
  - What do we want to be?

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Corporate Strategy Development

A mission statement might include:

- Descriptions of company's goods and services
- Processes employed
- Potential customers
- Markets where company competes
- Distinctive competencies

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Strategy Choices

Three competitive dimensions' firms use to compete:

- Cost
- Quality
- Customer Service

Strategy Choices

Cost

- Reduce costs of purchases, labor, equipment, manufacturing, and overhead
- Use **economies of scale** – purchase and manufacture in bulk to reduce per-unit costs
- Seek locations in countries with low labor costs, low taxes, and plentiful suppliers

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Strategy Choices

Quality

- Related to product's design or features, reliability, performance, safety, and warranty package

Customer Service

- Delivery speed, flexibility, reliability, product support, server knowledge, empathy, and service recovery

Aligning Operations Strategies for Competitive Advantage

Operations strategies

- Decisions made within the operations function to support the overall mission and strategy of the firm

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Core Competencies

- Skill sets possessed by the firm that distinguish it from its competitors
- Are dynamic – as customer tastes, competition, and technologies change, core competencies change
- Should be difficult to imitate

Operations Strategy Choices

Aligning Operations with a Low-Cost Strategy

- Focus their efforts on creating competencies that achieve low cost
  - Find good deals on location sites
  - Low-cost transportation alternatives
  - Offer minimally acceptable quality and customer service levels

Operations Strategy Choices

Aligning Operations with a High-Quality Strategy

- Seek out high-quality suppliers using quality certifications
- Statistical process control techniques
- Continuous improvement tools like Six Sigma

Operations Strategy Choices

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- Customer satisfaction utmost importance
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- Layouts should use fair queuing systems
- WOW customers by exceeding expectations

Operations Strategy Tradeoffs

Strategy tradeoffs

- Doing more of one activity and less of something else
- Ex. Southwest Airlines
  - No meals or assigned seating, website only for reservations
  - Forego pampering, meals, close-in airports, business or first-class and reserved seating

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Performance Measures

- Give clear picture of overall performance
- Vary from one company to the next
- Provide information for decision-making purposes

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Performance Measures

Financial

- Net profit margin $= \dfrac{\text{net income after taxes}}{\text{net sales}}$
- Current ratio $= \dfrac{\text{current assets}}{\text{current liabilities}}$
- Inventory turnover $= \dfrac{\text{cost of goods sold}}{\text{average inventory value}}$

Performance Measures

Productivity – impact of one or more of the firm's inputs on the firm's outputs

$$\text{Productivity} = \frac{\text{outputs}}{\text{inputs}}$$

$$\text{Overall productivity} = \frac{\text{outputs}}{\text{cost of (labor+capital+materials+energy)}}$$

Performance Measures

Productivity growth rate – used to gauge an investment's success

- Growth rate % = $\frac{(P_2 - P_1)}{P_1}(100)$

where:

- P_1 = Productivity in period 1, and
- P_2 = Productivity in period 2

Example 2.1 Financial and Productivity Measures at Ultra Ski Co

Financial Information	2013 Results
Net sales	$205,000
Cost of goods sold (purchased items)	$32,000
Net income after taxes	$28,200
Current assets	$68,000
Current liabilities	$22,000
Avg. inventory value	$4,500
Inputs and Outputs	
Skis produced	1,000
Labor hours	10,800
Lease payments	$24,000

Example 2.1 continued

Financial Performance

Net profit margin = $28,200/$205,000 = 0.138

Current ratio = $68,000/$22,000 = 3.09

Inventory turnover = $32,000/$4,500 = 7.11

Purchasing efficiency = $32,000/$35,000 = 91.4%

(for a 2013 purchasing goal of $35,000)

Example 2.1 continued

Single-Factor Productivities

Labor productivity:

1,000 skis/10,800 hours = 0.093 skis/labor hr

Material productivity:

1,000 skis/$32,000 = 0.031 skis/material $

Lease productivity:

1,000 skis/$24,000 = 0.042 skis/lease $

Example 2.1 continued

Multiple-Factor Productivity

(given an average wage of $17 per hr)

1,000 skis / [10,800($17) + $32,000 + $24,000] =
0.0042 skis/$

Example 2.1 continued

Productivity Growth

If, for example, the 2012 multiple-factor productivity was 0.0040 skis/$, then productivity in 2013 grew by:

$$\frac{(0.0042 - 0.0040)}{0.0040}(100) = 5\%$$

Performance Measures

Quality

- Number of defects per unit
- Cost of poor quality
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- Number of employees with quality training
- Number of quality awards received
- Percent of suppliers with quality certifications

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Performance Measures

Customer Service

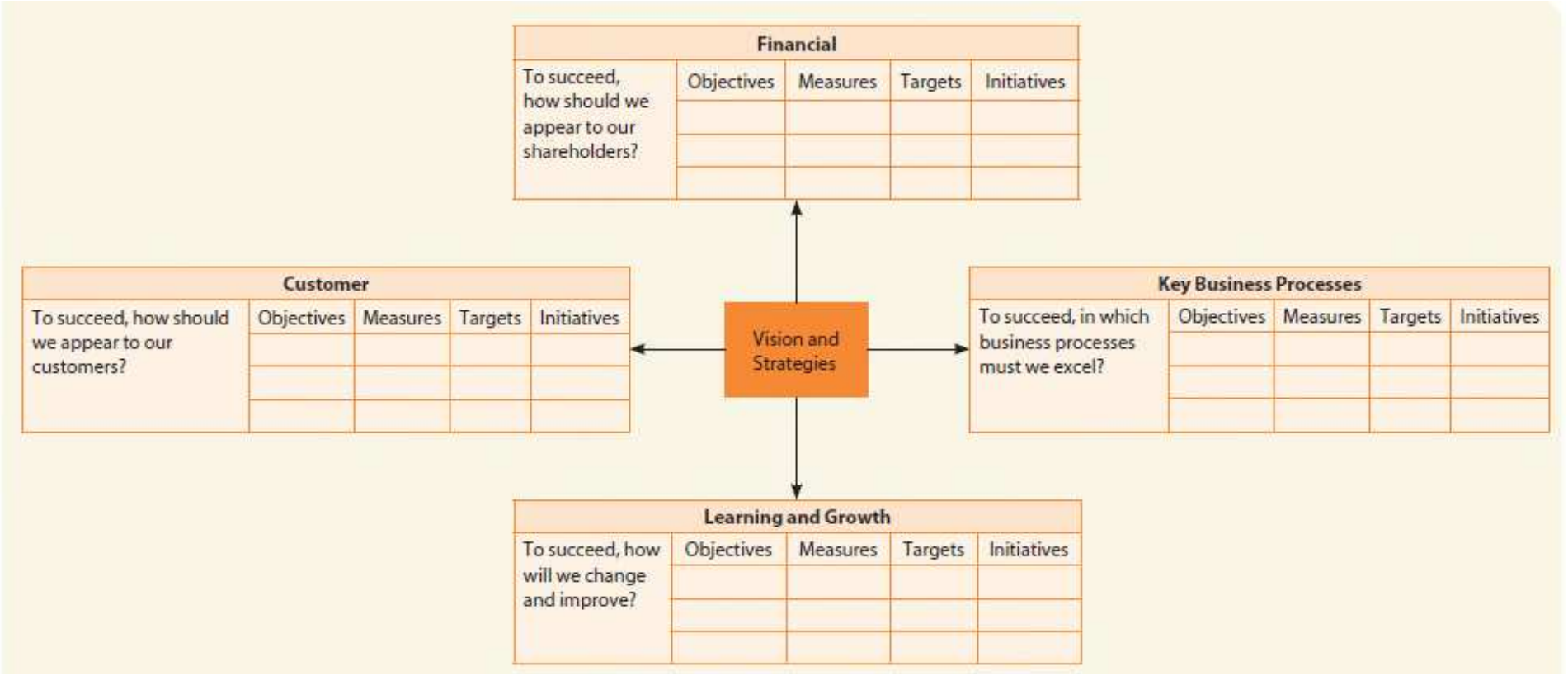
- Order delivery time and quantity accuracy
- Customer satisfaction score
- Complaint resolution time
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- Completeness of website
- Number of “friends” on social websites

Performance Measures

Ethics and Sustainability

- Number of business ethics and sustainability initiatives adopted
- Percent of purchases from small, minority, or women-owned suppliers
- Percent reduction in greenhouse gas emissions
- Percent of waste recycled
- Percent of suppliers that are ISO 14000 certified
- Number of ethics/sustainability awards received

Figure 2.1: The Balanced Scorecard Model



Emerging Issue in Performance – Big Data Analytics

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- Analyzing data using predictive modeling techniques to uncover problems or opportunities to create value

Emerging Business Ethics

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- When customers require evidence of sustainability then high performance becomes part of providing good customer service

Review Questions

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