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Chapter 2:
Operations Strategy in a Global Environment

- Discuss the six reasons to globalize operations
- Define mission and strategy
- Identify & explain three strategic approaches to competitive advantage
- Understand the significant key success factors and core competencies
- Identify and explain four global operations strategy options
- Use factor rating to evaluate both country and outsource providers
- Understand and use the Value of a Loyal Customer (VLC) model

Globalization

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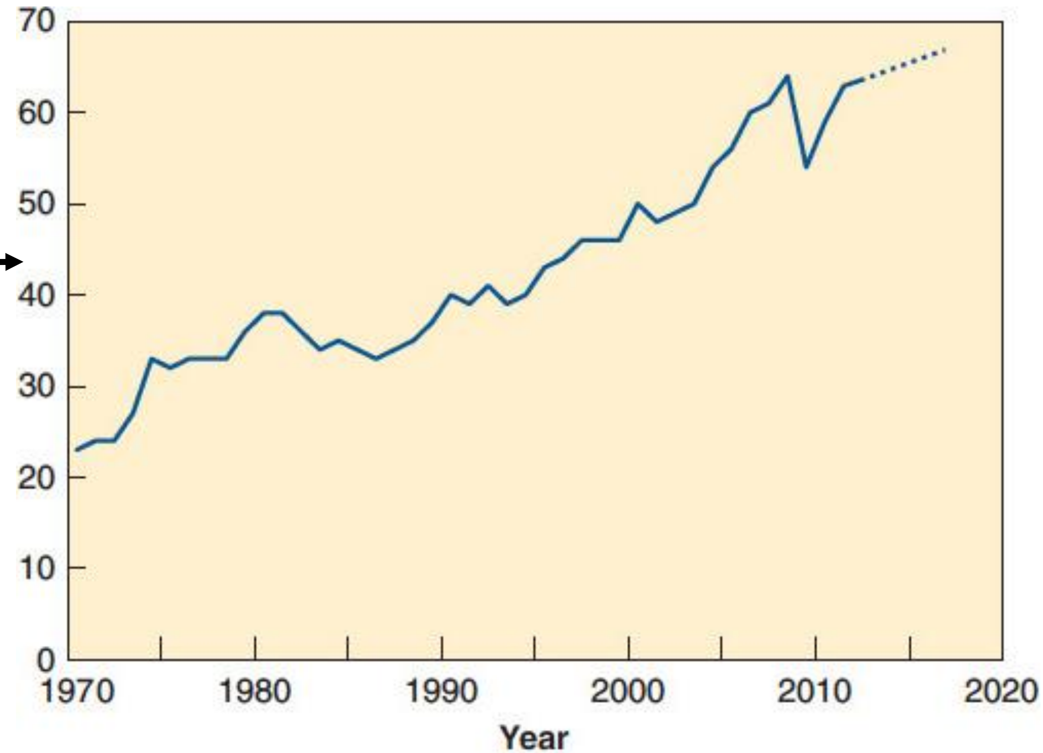
- Increasingly, firms find their customers and suppliers located around the world - the result is the growth of world trade
- In response, organizations are extending their distribution channels and supply chains globally – firms compete not just with their own expertise but with the talent in their global supply chain

Growth of World Trade as a Percent of World GDP



Reasons to Globalize

- Globalization means customers, talent, and suppliers are worldwide. Six reasons why businesses change to some form of international operation:

1. Improve the supply chain
2. Reduce costs (labor, taxes, tariffs, etc.)
3. Improve operations
4. Understand markets
5. Improve products
6. Attract and retain global talent

Tangible Reasons

↓

Intangible Reasons

Reasons to Globalize: 1) Improve the Supply Chain

- Locating facilities closer to unique resources
  - Auto design to California
  - Athletic shoe production to China
  - Perfume manufacturing in France

Reasons to Globalize: 2) Reduce Costs

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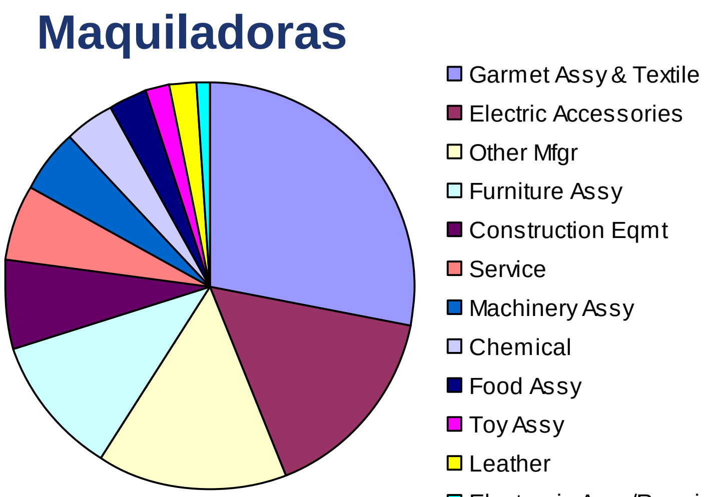
- Foreign locations with lower wage rates can lower direct and indirect costs
  - World Trade Organization (WTO)
  - APEC, SEATO, MERCOSUR, CAFTA
  - European Union (EU)
  - North American Free Trade Agreement (NAFTA, now “USMCA”, U.S.-Mexico-Canada Agreement – 11/18)
  - Maquiladoras



U.S.-Mexico-Canada Agreement

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- **NAFTA** has been a major driver of American trade for nearly two decades, but it has long been divisive, with critics blaming it for lost jobs and lower wages
- **USMCA** (U.S.-Mexico-Canada Agreement, 11/18) the USMCA will account for more than $1.2 trillion in trade in one of the world's largest free trade zones. It's essentially "NAFTA 2.0".

Reasons to Globalize: 3) Improve Operations

- Internationalization provides access to great ideas from around the world
- Remain open to the free flow of ideas
  - General Motors partnered with a Japanese auto manufacturer to learn new approaches to production and inventory control
  - Equipment and layout have been improved using Scandinavian ergonomic competence
- International operations can improve response time and customer service

Reasons to Globalize: 4) Understand Markets

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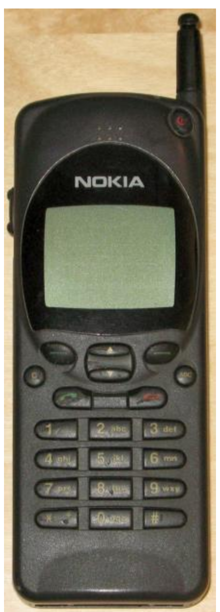
- Interacting with foreign customers and suppliers can lead to new opportunities
  - Cell phone design from Europe
  - Extend the product life cycle
  - Nixon Watches in Europe



Reasons to Globalize:
5) Improve Products

- Objective and subjective characteristics of goods and services
  - On-time deliveries
  - Cultural variables
  - Improved customer service
- Example: Toyota and BMW manage joint research and development
  - Reduced risk, state-of-the-art design, lower costs

Toyota Supra / BMW Z4

Reasons to Globalize:
6) Attract & Retain Global Talent

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- Offer better employment opportunities
  - Better growth opportunities and insulation against unemployment
  - Relocate unneeded personnel to more prosperous locations

Globalization concerns: Cultural and Ethical Issues

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- Cultures can be quite different
- Attitudes can be quite different towards
  - Punctuality
  - Child labor
  - Intellectual property
  - Thievery
  - Bribery, corruption

Ranking Corruption

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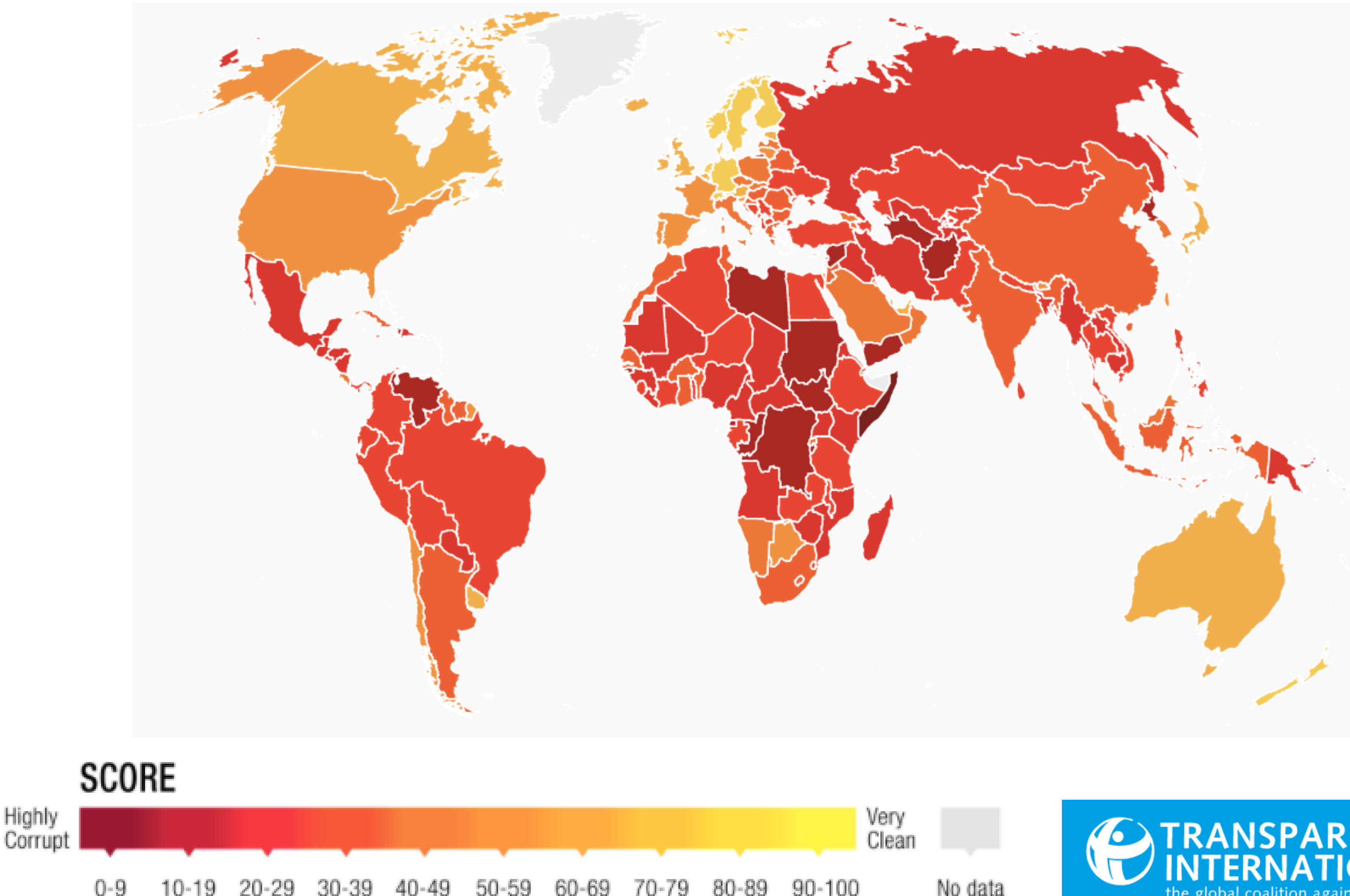

TRANSPARENCY INTERNATIONAL
the global coalition against corruption

Globalization considerations for companies

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- National literacy rate
- Rate of innovation
- Rate of technology change
- Number of skilled workers
- Political stability
- Product liability laws
- Export restrictions
- Variations in language
- Work ethic
- Tax rates
- Inflation
- Availability of raw materials
- Interest rates
- Population
- Number of miles of highway
- Phone system

Determining Missions and Strategies

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- Mission: the reason for existence for an organization (present)
  - Mission Statement: the purpose of an organization
  - Vision: where the organization is headed (future) and what it intends to be

- Strategy: a plan that integrates an organization's major goals, policies, and action sequences into a cohesive whole
- Strategic planning: the process of determining long-term goals, policies, and plans for an organization as a result of hierarchical decisions about goals, directions, and resources
  - Goals: provide detail and scope of mission
  - Strategies: plans for achieving organizational goals
  - Tactics: methods and actions taken to accomplish strategies

Strategy Development Process

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Analyze the Environment

Identify the strengths, weaknesses, opportunities, and threats. Understand the environment, customers, industry, and competitors.

SWOT analysis

Determine the Corporate Mission

State the reason for the firm's existence and identify the value it wishes to create

Form a Strategy

Build a competitive advantage, such as low price, design, or volume flexibility, quality, quick delivery, dependability, after-sale service, broad product lines.

SWOT Analysis

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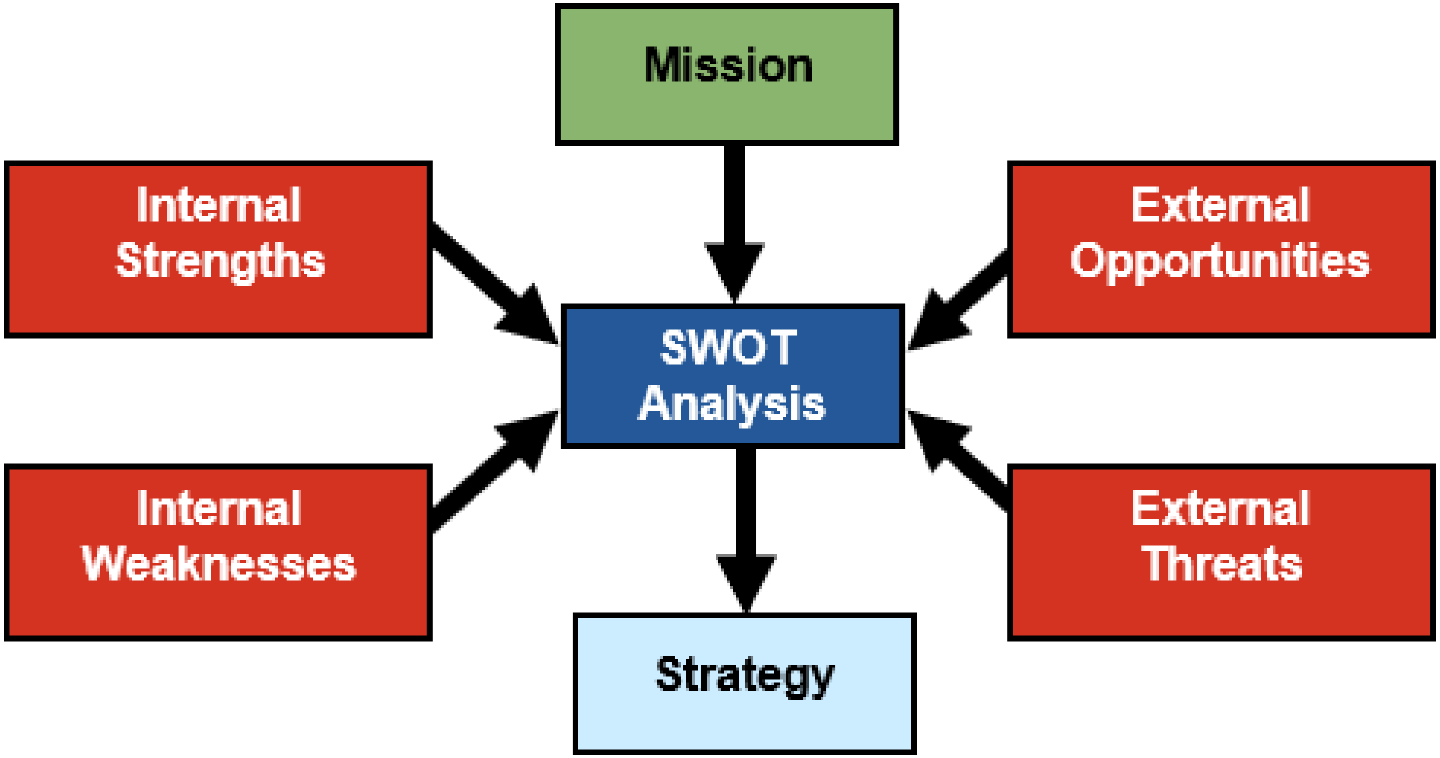


Strengths: characteristics of the business that give it an advantage over others
Weaknesses: characteristics that place the business at a disadvantage relative to others
Opportunities: elements that the business could exploit to its advantage
Threats: elements in the environment that could cause trouble for the business

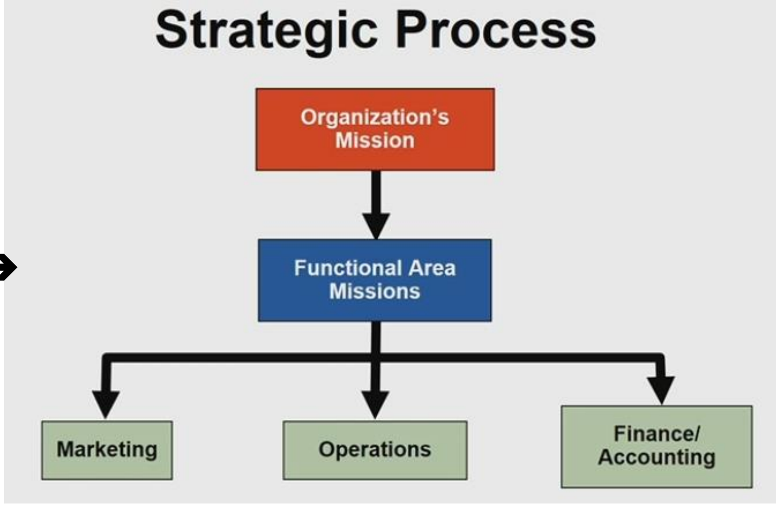
Strategic Planning

- Most large corporations have three levels of strategy

1. Corporate Strategy: defines the businesses in which the corporation will participate and develops plans for the acquisition and allocation of resources among those businesses
    - Businesses are often called Strategic Business Units (SBUs)

2. Business Strategy: Defines the focus for the SBU and involves which markets to pursue and how best to compete in those markets

3. Functional Strategy: the set of decisions that each functional area develops to support its business strategy
    - Operations, marketing, finance, R&D, engineering, etc ➔



Operations Strategy

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- <u>Operations strategy:</u> how an organization’s processes are designed and organized to produce the type of goods and services to support the business strategies

- The value chain can be leveraged to provide a distinct competitive advantage, and that operations is a core competency for the organization

- <u>Core Competencies:</u> A set of skills, talents, and capabilities in which a firm is particularly strong.

- Whoever has superior operational capability over the long term is the odds-on-favorite to win the industry shakeout

Competitive Advantage

- Every organization is concerned with building and sustaining a competitive advantage in its markets

- Competitive advantage: a firm's ability to achieve market and financial superiority over its competitors
  - Driven by customer needs and aligns the organization's resources with its business opportunities
  - A strong competitive advantage is difficult to copy, often because of a firm's culture, habits, or sunk costs

Strategies for Competitive Advantage

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- Differentiation: better (or at least different)
  - Uniqueness can go beyond both the physical characteristics and service attributes to encompass everything that impacts customer's perception of value
- Cost leadership: cheaper
  - Provide the maximum value as perceived by customer
  - Does not imply low quality
- Response: faster
  - Flexibility is matching market changes in design innovation and volumes
  - Reliability is meeting schedules
  - Timeliness is quickness in design, production, and delivery

Differentiation Examples:
YETI Coolers
Hard Rock Café
Disneyland

Cost Leadership Examples:
Southwest Airlines
Walmart
McDonalds

Response Examples:
Hewlett-Packard
Amazon
Pizza Hut

Competitive Advantage: Differentiation

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- <u>Differentiation</u>: Distinguishing the offerings of an organization in a way that the customer perceives as adding value.
  - Differentiation is concerned with providing uniqueness.
  - Businesses offering high quality goods usually have large market shares, were early entrants into their markets, and can charge premium prices

ROLEX

- <u>Experience differentiation:</u> Engaging a customer with a product through imaginative use of the fives senses, so the customer experiences the product.

Competitive Advantage: Cost Leadership

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- Almost every industry has a low-price market segment and a low-price market leader.
- Low price does not imply low quality.

- Southwest Airlines is one of the few airlines that have been consistently profitable. A low-cost strategy can reshape industry structure such as in the airline industry.

How does Southwest do it?

- Keep operations simple!
- Only one aircraft type (B737)
- No seat assignments
- Point-to-point routing
- Quick aircraft turnaround (25 min)
- Cross-trained employees
- Bags fly free

Competitive Advantage: Responsiveness

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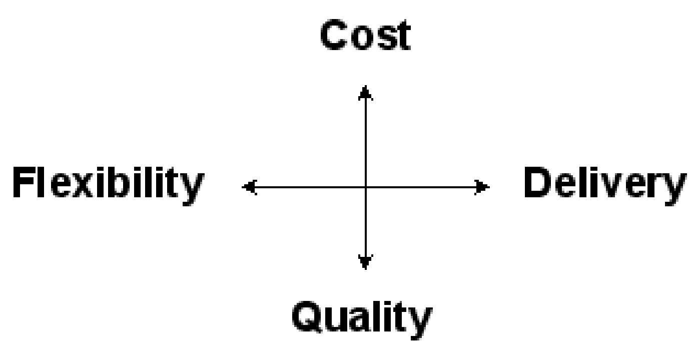
- Response: A set of values related to rapid, flexible, and reliable performance.
- Time is perhaps the most important source of competitive advantage
- Customers demand quick response, short waiting times, and consistency in performance
- There are three aspects of response (flexibility, reliability, & quickness):
  - Flexibility: ability to match market challenges through innovation
  - Reliability: performing on time per the schedule
  - Quickness: speed in product development, production, and delivery

Dealing with Trade-offs

- Operations cannot excel simultaneously on all competitive dimensions
  - Management must decide which parameters of performance are critical to the firm's success and concentrate on those

- Trade-offs occur when activities are incompatible so that more of one thing necessitates less of another



Theory of Comparative Advantage

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- The theory focuses on the economic concept of relative advantage. If an external provider, regardless of its geographic location, can perform activities more productively than the purchasing firm, the external provider should do the work.
- This allows companies to focus on what they do best… their core competencies.
- Due to this theory, outsourcing practices continue to grow.

- <u>Outsourcing:</u> Transferring a firm's activities that have traditionally been internal to external suppliers.
  - Note: *Outsourcing* does not mean *Offshoring*.

Rating Provider Selection Criteria

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Supplier Qualification & Selection: Many factors play a role.

- Choosing suppliers just based off lowest price is becoming rare
- Factor weighting techniques consider multiple criteria
  - Each factor is assigned a weight and a score
  - Choose the supplier with the **best weighted score**

		FABER PAINT		SMITH DYE	
CRITERION	WEIGHT	SCORE (1-5) (5 HIGHEST)	WEIGHT x SCORE	SCORE (1-5) (5 HIGHEST)	WEIGHT x SCORE
Engineering/innovation skills	.20	5	1.0	5	1.0
Production process capability	.15	4	0.6	5	0.75
Distribution capability	.05	4	0.2	3	0.15
Quality performance	.10	2	0.2	3	0.3
Facilities/location	.05	2	0.1	3	0.15
Financial strength	.15	4	0.6	5	0.75
Information systems	.10	2	0.2	5	0.5
Integrity	.20	5	1.0	3	0.6
Total	1.00		3.9		4.2

Table 2.3 in textbook

Rating Provider Selection Criteria

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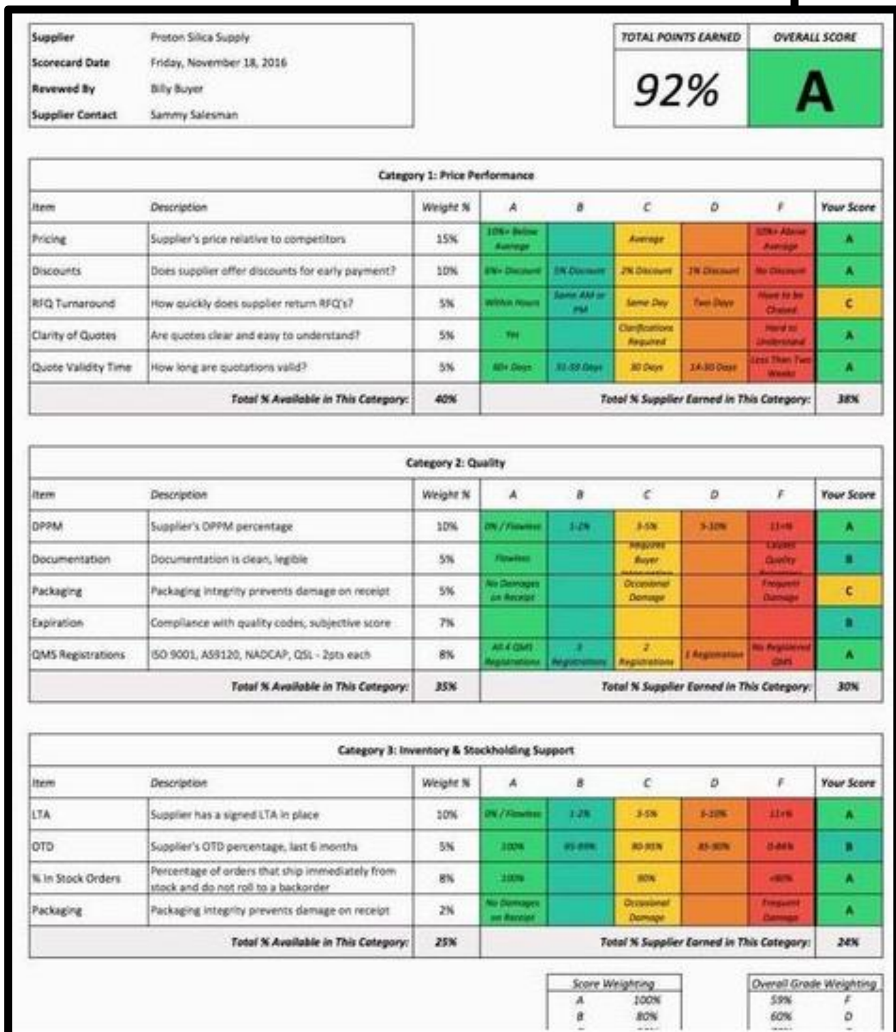
Supplier Report Card Examples



Supplier	Proton Silica Supply
Scorecard Date	Friday, November 18, 2016
Revewed By	Billy Buyer
Supplier Contact	Sammy Salesman

TOTAL POINTS EARNED	OVERALL SCORE
92%	A

Category 1: Price Performance								
Item	Description	Weight %	A	B	C	D	F	Your Score
Pricing	Supplier's price relative to competitors	15%	10%+ Below Average		Average		10%+ Above Average	A
Discounts	Does supplier offer discounts for early payment?	10%	5%+ Discount	3% Discount	2% Discount	1% Discount	No Discount	A
RFQ Turnaround	How quickly does supplier return RFQ's?	5%	Within Hours	Same AM or PM	Same Day	Two Days	Have to be Chased	C
Clarity of Quotes	Are quotes clear and easy to understand?	5%	Yes		Clarifications Required		Hard to Understand	A
Quote Validity Time	How long are quotations valid?	5%	60+ Days	31-59 Days	30 Days	14-30 Days	Less Than Two Weeks	A
	Total % Available in This Category:	40%					Total % Supplier Earned in This Category:	38%

Category 2: Quality								
Item	Description	Weight %	A	B	C	D	F	Your Score
DPPM	Supplier's DPPM percentage	10%	0% / Flawless	1-2%	3-5%	5-10%	11+%	A
Documentation	Documentation is clean, legible	5%	Flawless		Requires Buyer		Causes Quality	B
Packaging	Packaging integrity prevents damage on receipt	5%	No Damages on Receipt		Occasional Damage		Frequent Damage	C
Expiration	Compliance with quality codes, subjective score	7%						B
QMS Registrations	ISO 9001, AS9120, NADCAP, QSL - 2pts each	8%	All 4 QMS Registrations	3 Registrations	2 Registrations	1 Registration	No Registered QMS	A
	Total % Available in This Category:	35%					Total % Supplier Earned in This Category:	30%

Category 3: Inventory & Stockholding Support								
Item	Description	Weight %	A	B	C	D	F	Your Score
LTA	Supplier has a signed LTA in place	10%	0% / Flawless	1-2%	3-5%	5-10%	11+%	A
OTD	Supplier's OTD percentage, last 6 months	5%	100%	95-99%	90-95%	85-90%	0-84%	B
% In Stock Orders	Percentage of orders that ship immediately from stock and do not roll to a backorder	8%	100%		90%		<90%	A
Packaging	Packaging integrity prevents damage on receipt	2%	No Damages on Receipt		Occasional Damage		Frequent Damage	A
	Total % Available in This Category:	25%					Total % Supplier Earned in This Category:	24%

Score Weighting	
A	100%
B	80%

Overall Grade Weighting	
59%	F
60%	D

Supplier Performance Categories and Points Ratings:

PPM	Points
≤ 50	35
≤ 500	28
≤ 1000	21
≤ 2500	14
≤ 5000	7
> 5000	0

OTIF	Points
≥ 98%	35
≥ 95%	28
≥ 90%	21
≥ 85%	14
≥ 80%	7
< 80%	0

PPV	Points
≤ 95%	20
≤ 96%	16
≤ 97%	12
≤ 98%	8
≤ 100%	4
Price Increase	0

Turns	Days	Points
≥ 25	≤ 15	10
≥ 18	≤ 20	8
≥ 12	≤ 30	6
≥ 6	≤ 60	4
≥ 3	≤ 120	2
< 3	> 120	0

Supplier Performance Rating	Points
Excellent	≥ 90
Very Good	≥ 75
Meets Requirements	≥ 60
Needs Improvement	≥ 45
At Risk	< 45

- Supplier Quality (PPM) — **35** *Points*
- Supplier Delivery (% OTIF) — **35** *Points*
- Supplier Cost Control (PPV) — **20** *Points*
- Supplier Inventory Management (Turns) — **10** *Points*

Understanding Customer Preferences & Requirements

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- Three classes of customer requirements:
  - <u>Dissatisfiers</u>: requirements that are expected in a good or service. If these features are not present, the customer is dissatisfied, sometimes very dissatisfied
  - <u>Satisfiers</u>: requirements that customers say they want
  - <u>Exciters/delighters</u>: new or innovative good/service features that customers do not expect
- <u>Order qualifiers</u> - basic customer expectations (dissatisfiers and satisfiers) are generally considered the minimum performance level required to stay in business
- <u>Order winners</u> – goods/service features and performance characteristics (satisfiers and exciters) that cause customers to choose those features over of its competitors and to win the customer's business
  - Order winners can be considered competitive advantages for the firm

Material not in Textbook

Value of a Loyal Customer (VLC)

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- Value of a Loyal Customer (VLC): quantifies the total revenue or profit each target market customer generates over the Buyers Life Cycle
- By multiplying the VLC times the absolute number of customers gained or lost, the total market value can be found

$$\boxed{\textbf{VLC = P x CM x RF x BLC}}$$

Where

- P = Price, the revenue per unit
- CM = Contribution Margin, to profit
- RF = Repurchase frequency = # purchases / # years
- BLC = Buyers Life Cycle = 1/Defection Rate
    - Defection Rate = 1 – Customer Retention Rate

VLC not in Textbook

VLC Problem

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A. What is the Value of a Loyal Customer (VLC) in the small contractor target market segment who buys an electric drill on average every 4 years for $100, when the gross margin on the drill averages 50 percent, and the customer retention rate is 60 percent?

B. What if the customer retention rate increases to 80 percent?

VLC not in Textbook

VLC Solution

VLC = P x CM x RF x BLC

P = Price, the revenue per unit
CM = Contribution Margin
RF = Repurchase frequency = # purchases / # years
BLC = Buyers Life Cycle = 1/Defection Rate
Defection Rate = 1 – Customer Retention Rate

BLC = If customer retention rate is 60 percent, the average customer defection rate = (1 – customer retention rate).
Thus, the customer defection rate is 40 percent, or 0.4.

The average buyers life cycle is 1/0.4 = 2.5 years.

RF = The repurchase frequency is every four years, or 0.25 (1/4). So,

A. VLC (P)(CM)(RF)(BLC) =
($100)(0.50)(0.25)(1/0.4) = **$31.25 per cust/per year**

B. If customer retention rate is 80 percent, the average customer defection rate is 0.2, and the average buyers life cycle is 1/0.2 = 5 years.

Then, VLC = (P)(CM)(RF)(BLC)
= ($100)(0.50)(0.25)(1/.2) = **$62.50 per year**