

Chapter 2.

Ch. 2 Market Insight

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- Some material adapted from: Sorger, Stephan. "Marketing Analytics: Strategic Models and Metrics. Admiral Press. 2013.

Outline/ Learning Objectives

Topic	Description
Terminology	Know the difference between markets and products
Data Sources	Assemble your go-to list of data sources
Sizing	Practice sizing with reports, top-down, and bottom-up
Trends	Find trends using PESTLE & Porter 5 Forces techniques

Market Description

Topic	Description
Market Description	Describe market based on need that product fulfills Avoid overly narrow (product-based) descriptions Example: Wang word processors in 1980s
Market	Groups of customers buying products from sellers
Potential Market	All people in population with interest in product/service
Available Market	People with interest, plus means (money)
Qualified Available Mkt.	Legally allowed to purchase product/service
Served Market	Segments targeted by company

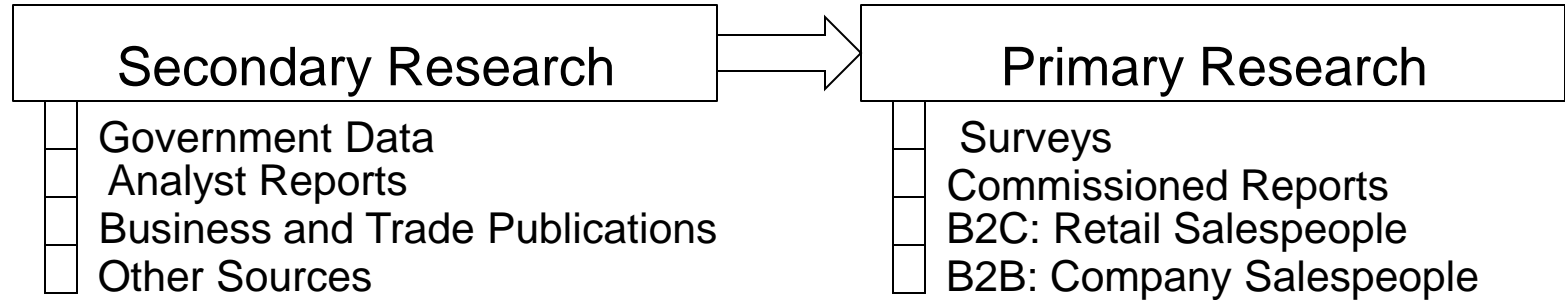


Industry Description

Topic	Description
Industry	Groups of sellers making “similar” products/ services Example: White Goods (appliances) industry Companies: GE, Westinghouse, Samsung, etc.
Category	Subset of industry Group of competing firms selling to market segment Example: High-end kitchen appliance manufacturers Companies: Wolf, Sub Zero, etc.



Market Data Sources



Government Data

Government Data

- U.S. Census Bureau: Census every 10 years, plus New American Community estimates
- U.S. Bureau of Labor and Statistics: Data on employment, productivity, inflation, etc.
- U.S. Bureau of Economic Analysis: Data on national GDP, regional GDP, personal income,...
- Local Chambers of Commerce: Data on local area

U.S. Census SIC and NAICS Codes: Purpose

Topic	Description
Purpose	Assign unique ID number to every industry Similar to the role of ZIP codes or Dewey Decimal
SIC	Standard Industrial Classification (1987)
NAICS	North American Industrial Classification System (1997) 20 Industry Groups, defined using 2 digits each More digits → More specific industry segment (6 max)

U.S. Census SIC and NAICS Codes: Purpose

51 - Information
 513 - Broadcasting & Telecommunications
 5133 - Telecommunications
 51334 - Satellite Telecommunications
 513340 - Satellite Telecommunications

ols NAICS Drill-Down Menu
 Click Code or Industry Title to reveal 6 Digit Sub Codes

Code	Industry Title	Employment
11	Agriculture, Forestry, Fishing and Hunting	439,154
21	Mining	32,209
22	Utilities	279,639
23	Construction	1,440,911
31-33	Manufacturing	105,824
42	Wholesale Trade	743,751
44-45	Retail Trade	1,287,896
48-49	Transportation and Warehousing	336,121
51	Information	321,336
52	Finance and Insurance	676,215
53	Real Estate and Rental and Leasing	689,994
54	Professional, Scientific, and Technical Services	1,803,748
55	Management of Companies and Enterprises	21,358
56	Administrative and Support and Waste Management and Remediation Services	1,130,823
61	Educational Services	297,068
62	Health Care and Social Assistance	1,162,133
71	Arts, Entertainment, and Recreation	282,986
72	Accommodation and Food Services	747,482
81	Other Services (except Public Administration)	1,767,215
92	Public Administration	227,581

http://www.census.gov/prod/ce97/97st1-v2.pdf

Table 1. Receipts Size of Establishments of Firms Subject to Federal Income Tax: 1997 - Con. (Includes only establishments with payroll. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. For method of assignment to categories shown, see Appendix C)

NAICS code	Kind of business or operation and receipts size of establishment	Establishments (number)	Receipts (\$1,000)	Annual payroll (\$1,000)	First-quarter payroll (\$1,000)	Paid employees for pay period including March 12 (number)
51	INFORMATION—Con.					
513	Broadcasting & telecommunications—Con.					
513340	Satellite telecommunications					
	All establishments	521	5 096 182	599 282	132 401	11 931
	Establishments operated for the entire year	440	4 979 961	580 989	130 538	11 678
	Establishments with receipts less than \$10,000	3	54	27	9	4
	Establishments with receipts of \$10,000 to \$24,999	5	210	74	21	12
	Establishments with receipts of \$25,000 to \$49,999	12	862	184	40	19
	Establishments with receipts of \$50,000 to \$99,999	43	17 324	3 826	886	186
	Establishments with receipts of \$100,000 to \$249,999	66	46 403	11 409	2 584	364
	Establishments with receipts of \$250,000 to \$499,999	43	160 193	40 897	8 833	1 085
	Establishments with receipts of \$500,000 to \$999,999	51	181 153	42 883	10 264	2 119
	Establishments with receipts of \$1,000,000 to \$4,999,999	21	188 880	35 635	8 259	626
	Establishments with receipts of \$5,000,000 to \$9,999,999	69	4 384 135	441 854	98 689	7 998

www.census.gov/naics

U.S. Census NAICS Codes: Industry Groups

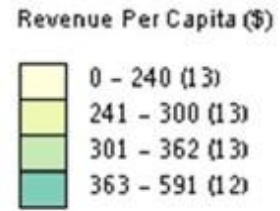
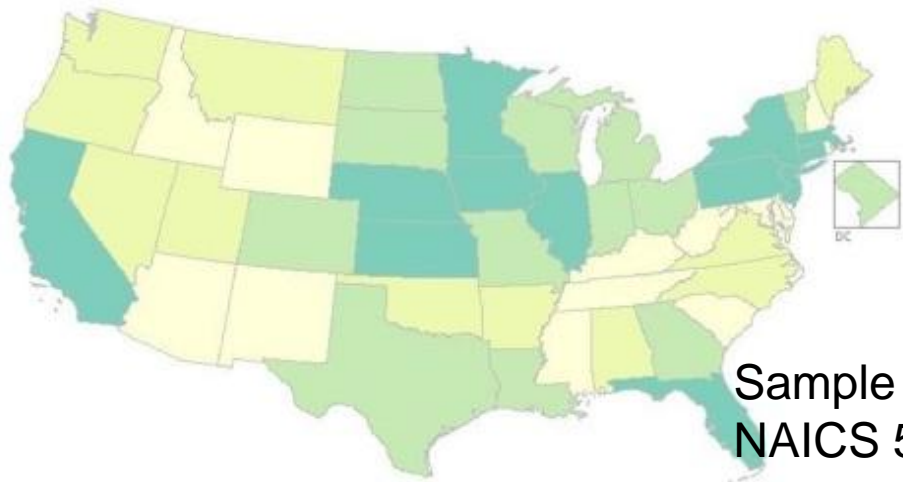
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21	Mining
22	Utilities
23	Construction
31 - 33	Manufacturing
42	Wholesale Trade
44 - 45	Retail Trade
48 - 49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)
92	Public Administration

U.S. Census NAICS Codes: Industry Example

Code	Industry Title
52	Finance and Insurance
524	Insurance carriers and related activities
5242	Agencies, brokerages, and other insurance related activities
52421	Insurance agencies and brokerages

Metrics	2002 Data	2007 Data	% Change
Total Revenue	\$80.9 billion	\$106.1 billion	31.2%
Number of Establishments	125,868	136,995	8.8%
Total Employment	627,346	695,275	10.8%

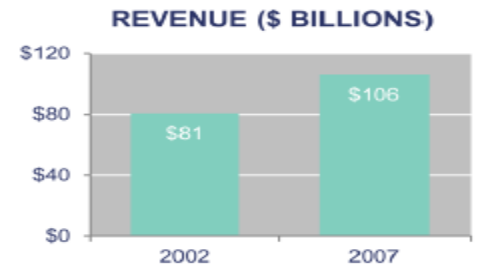
U.S. Census SIC and NAICS Codes



Sample Industry Snapshot NAICS 52421, Insurance Agencies and Brokerages

KEY INDUSTRY STATISTICS

	2002	2007	% Change
Number of establishments	125,868	136,995	8.8%
Revenue (\$ Millions)	80,901	106,125	31.2%
Annual payroll (\$ Millions)	28,218	37,432	32.7%
Total employment	627,346	695,275	10.8%



Market Sizing: Data Sources: Reports

Data Source	Description
Analyst Reports	Available published market reports by industry analysts Analysts cover popular markets and publish reports Expensive: \$1,000+ per report; \$10,000+ subscription B2C: Arbitron, Dun & Bradstreet, Nielsen B2B: Forrester, Gartner, IDC
Commissioned	Specialty firms can conduct custom market research Get exactly the data you need, but \$15,000 and weeks

Just some of many
B2C analyst firms

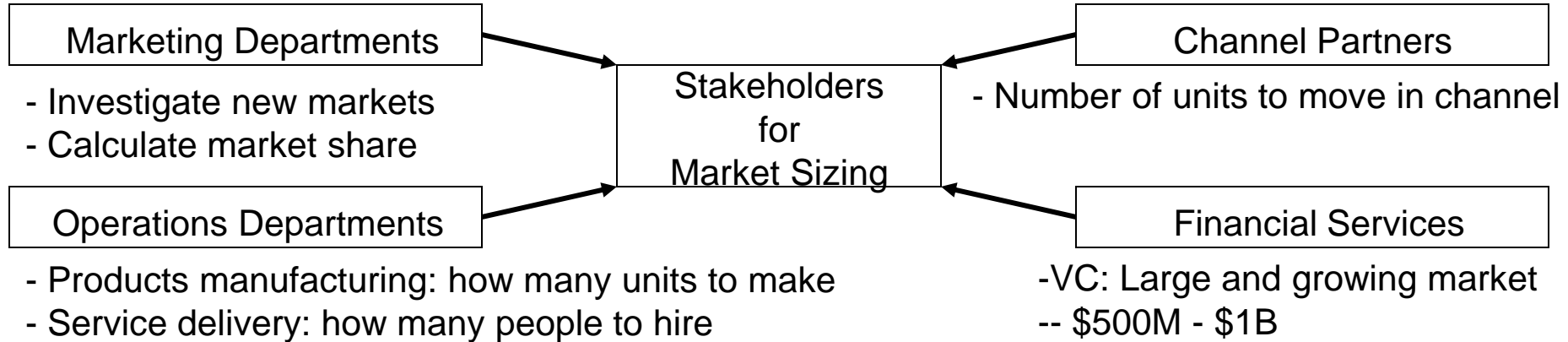


Market Sizing: Data Sources: Articles

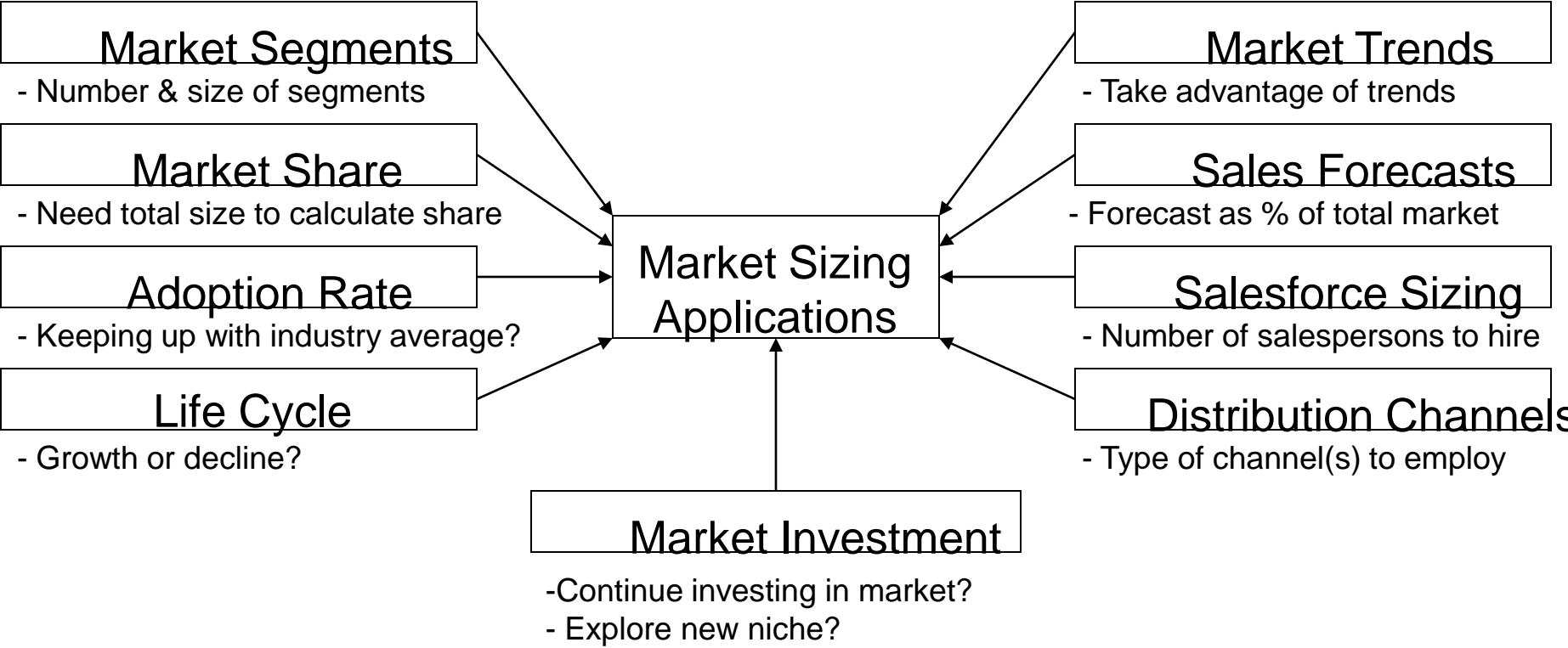
Data Source	Description
Internet Searches	Search available literature on internet Press releases from analyst firms with “teaser data”
Business Press	Larger markets will have coverage in major media Examples: Fortune, Wired, New York Times
Trade Associations	Almost every industry has a trade association Low-cost membership; High-quality articles
Blogs, Social Media	Information available from social media stream Consider reputation of blogger



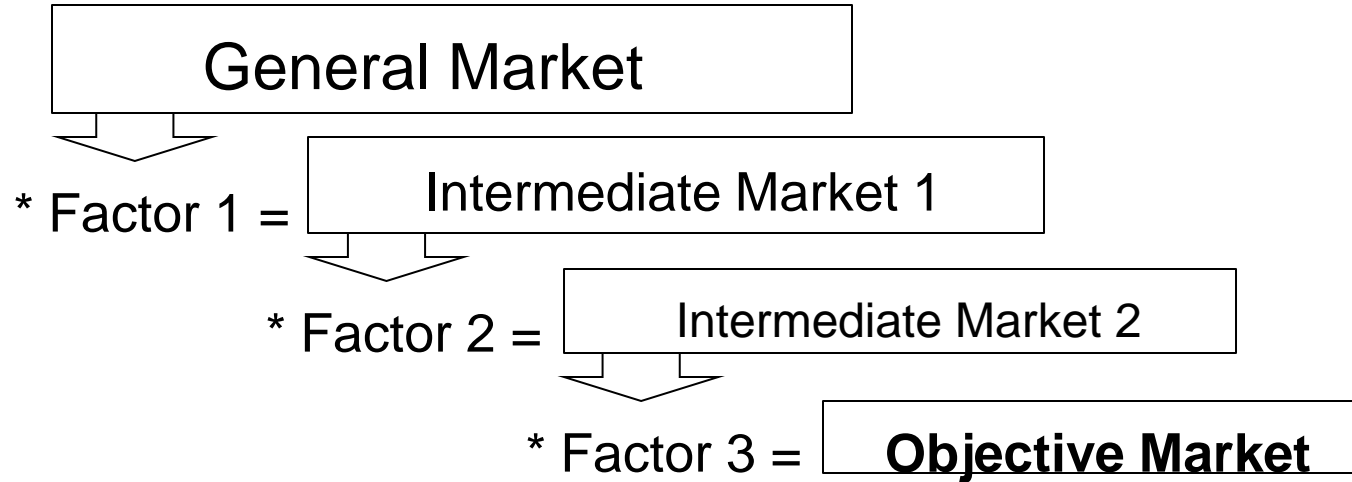
Market Sizing: Stakeholders



Market Sizing: Applications



Market Sizing Approach: Top Down



Market Sizing Approach: Top Down

General Market/ Population	Data and Source
Total population of the United States	308 million people in 2010 - U.S. Census Bureau
Total U.S. healthcare expenditures	\$2.5 trillion in 2009 - Center for Medicare and Medicaid Services
Total number of motorcycles in U.S.	7.9 million motorcycles in 2009 - U.S. Bureau of Transportation Statistics

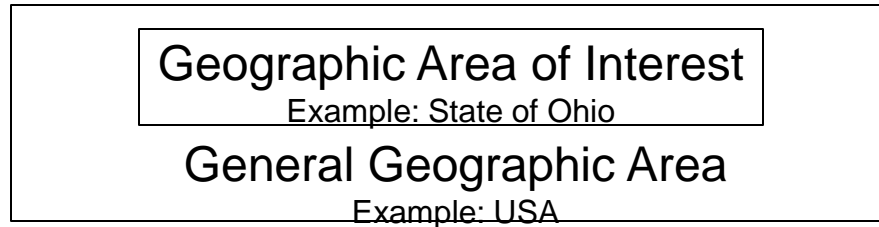
Example General Market/ Population Values

Market Sizing Approach: Top Down

Step	Data
1. Determine relevant population value	Population of United States = 308 million people in 2010
2. Determine factor #1	% of Americans who floss daily = 12%
3. Determine factor #2	Number of uses per year (assume daily flossing) = 365
4. Determine factor #3	Amount of product (floss) consumed per use = 1 foot
5. Determine factor #4	Price for one usage of floss (1 foot) = \$0.03
6. Determine factor #5	% of customers choosing eco-friendly products = 2%
7. Calculate demand by multiplying factors	= 308 million * 12% * 365 uses/year * 1 foot/use * (\$0.03/use) * 2% = \$8.1 million per year

Example: Market Size for Eco-Friendly Dental Floss

Top Down: Area Market Demand



Top Down: Area Market Demand

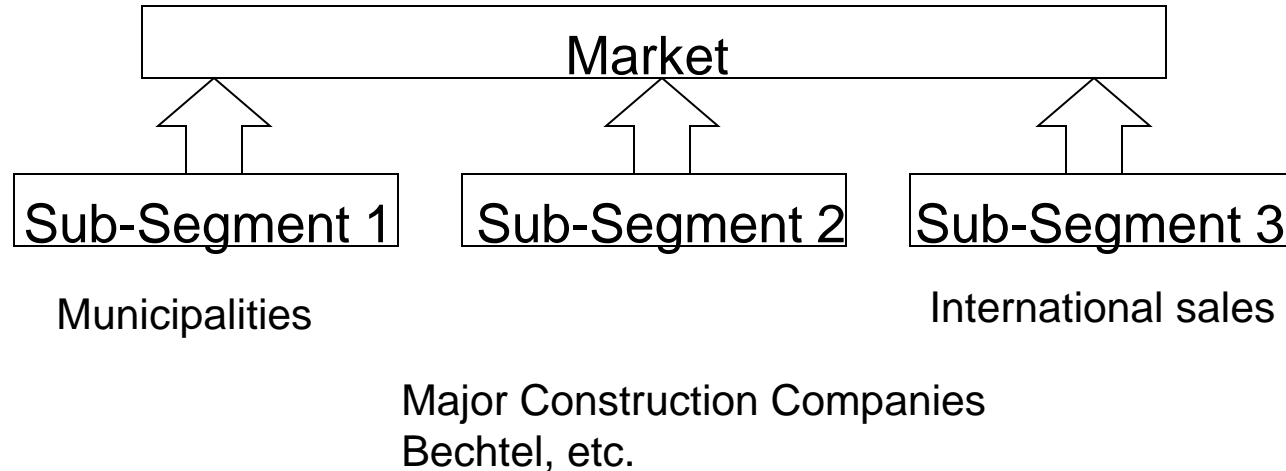
Step	Data: Values	Data: Weights
1. Determine factor #1	Retail Sales Value USA: \$3.92 billion Ohio: \$138.8 million Percentage = $0.1388 / 3.92$ billion = 3.54%	Retail Sales Weight Assign high weight due to perceived higher effect from retail sales Weight = 60%
2. Determine factor #2	Population Value USA: 308 million Ohio: 11.5 million Percentage = $11.5 / 308$ million = 3.7%	Population Weight Assign lower weight due to perceived lower effect from population Weight = 40%
3. Calculate area market demand by multiplying factors by weights	% of Floss Market in Ohio = $60\% * 3.54\% + 40\% * 3.7\%$ = 3.6%	Note that sum of all weights must equal 1.0. In our case: $0.60 + 0.40 = 1.00 \rightarrow \text{OK}$

Multiple-Factor Index Example: Eco-friendly floss for Ohio

Bottom Up

Add up sales from each potential market segment

Example: Total demand for TBM (tunnel boring machines)



Bottom Up: Niche Market Process

Step	Description
1. Identify Relevant Organizations	Determine which organizations would be interested in the product or service
2. Determine Quantity of Relevant Organizations	Determine the quantity of those organizations
3. Multiply Quantity by Price to Get Market Size	Multiply the quantity by the price of the product or service to get the market size

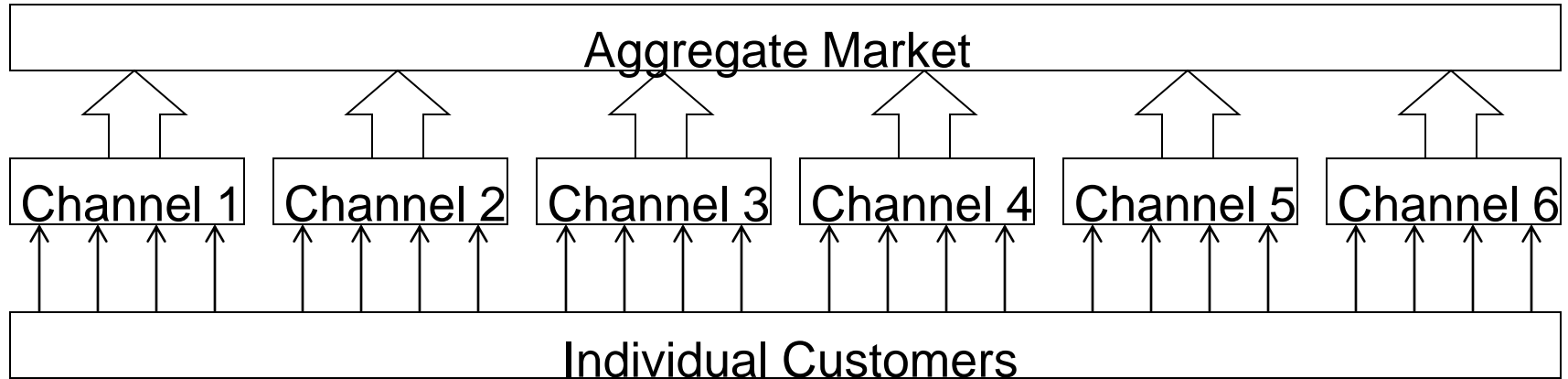
Market Sizing: Bottom Up: Niche Markets

Topic	Description
Market for PET/CT Scanning Machines	Niche Market
Limited demand; Expensive	\$3M each
Identify Relevant Organizations	Large hospitals: over 500 beds
Determine Quantity of Organizations	5% of hospitals over 500 beds 5,795 hospitals in USA = 290 hospitals
Multiply Quantity by Price	Price = \$3 million each 290 hospitals * 3 million = \$870M
Identify Other Markets	Looks for other markets: Urgent Care Repeat process for those markets

Market Sizing: Bottom Up: Market Buildup Example

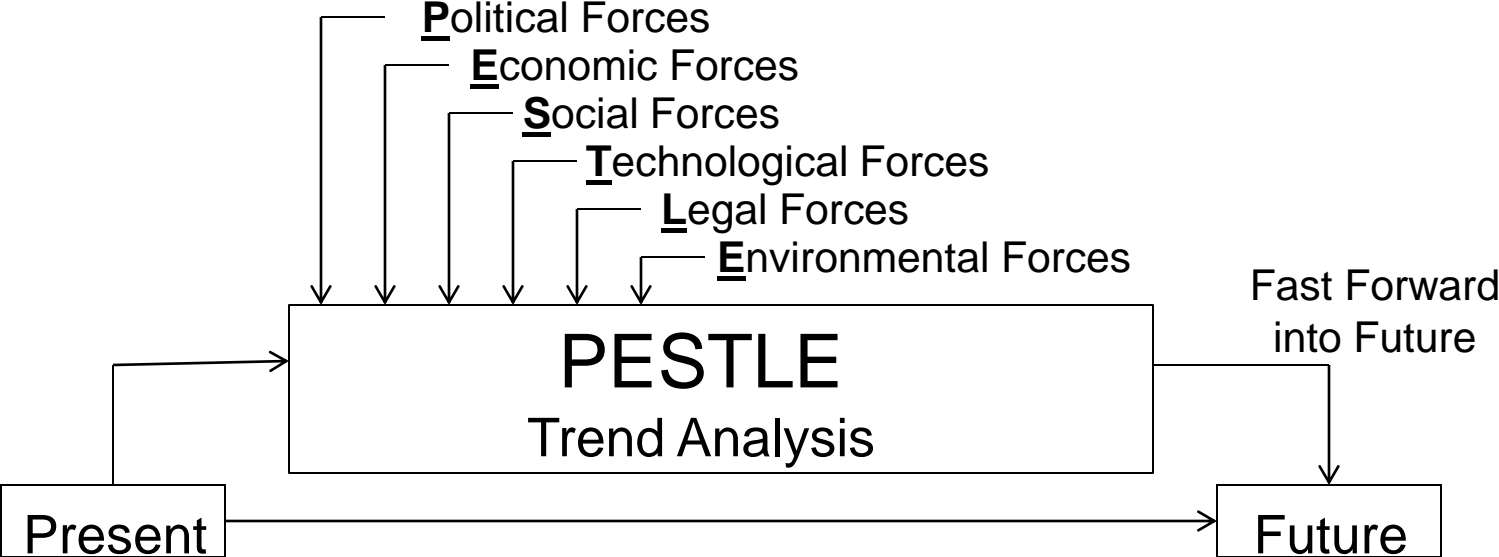
Topic	Description																
Buildup Example	You are the marketing manager for a small ad agency Specialty: Professional services in state of Arizona You want to estimate your potential market size																
1. Identify Buyers	You often do business with the following industries: Accounting, Engineering, and Legal services																
2. Identify Buy Rate	Research industry average for ads as % of revenue:																
	<table border="1"> <thead> <tr> <th>Industry</th> <th>NAICS</th> <th>Revenue</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Accounting</td> <td>541211</td> <td>\$400M</td> <td>2%</td> </tr> <tr> <td>Engineering</td> <td>541330</td> <td>\$1,100M</td> <td>1%</td> </tr> <tr> <td>Legal</td> <td>541110</td> <td>\$1,400M</td> <td>3%</td> </tr> </tbody> </table>	Industry	NAICS	Revenue	%	Accounting	541211	\$400M	2%	Engineering	541330	\$1,100M	1%	Legal	541110	\$1,400M	3%
Industry	NAICS	Revenue	%														
Accounting	541211	\$400M	2%														
Engineering	541330	\$1,100M	1%														
Legal	541110	\$1,400M	3%														
3. Sum	$(\$400M)(2\%)+(\$1100M)(1\%)+(\$1400M)(3\%) = \$61M$																

Market Sizing: Bottom Up: Limited Distribution



Example: Only 39 Ferrari dealerships in entire United States of America

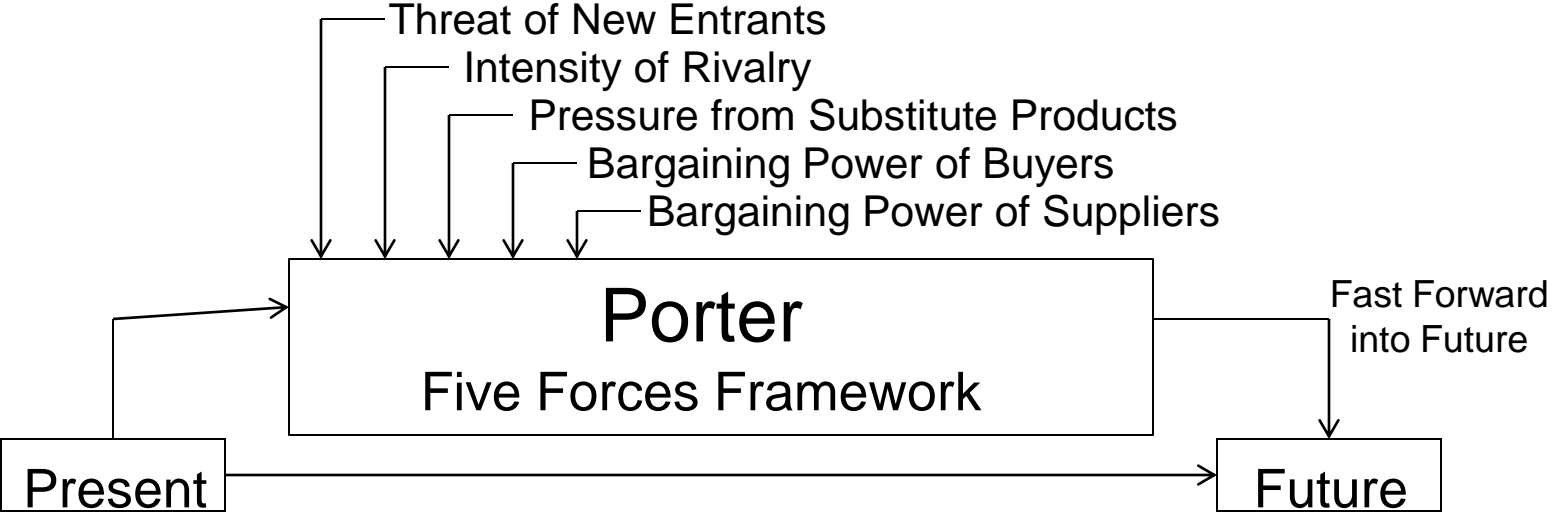
PESTLE Trend Analysis



PESTLE Trend Analysis

Force	Description and Laptop PC Example
Political	Forces due to politics, such as federal regulations Example: Indian customs duties cut: 16% to 8%
Economic	Forces due to macroeconomic conditions, e.g., inflation Example: Low IT purchases in 2009 due to recession
Social	Forces due to social customs, such as fads Example: Trend to chic ultra-portables
Technological	Forces due to technology changes, e.g. tablet PCs Example: Trend to smartphones and iPads
Legal	Forces due to new legislation, e.g., new statutes Example: Patent battles
Environmental	Forces due to environmental concerns Example: RoHS Directive for easier recycling

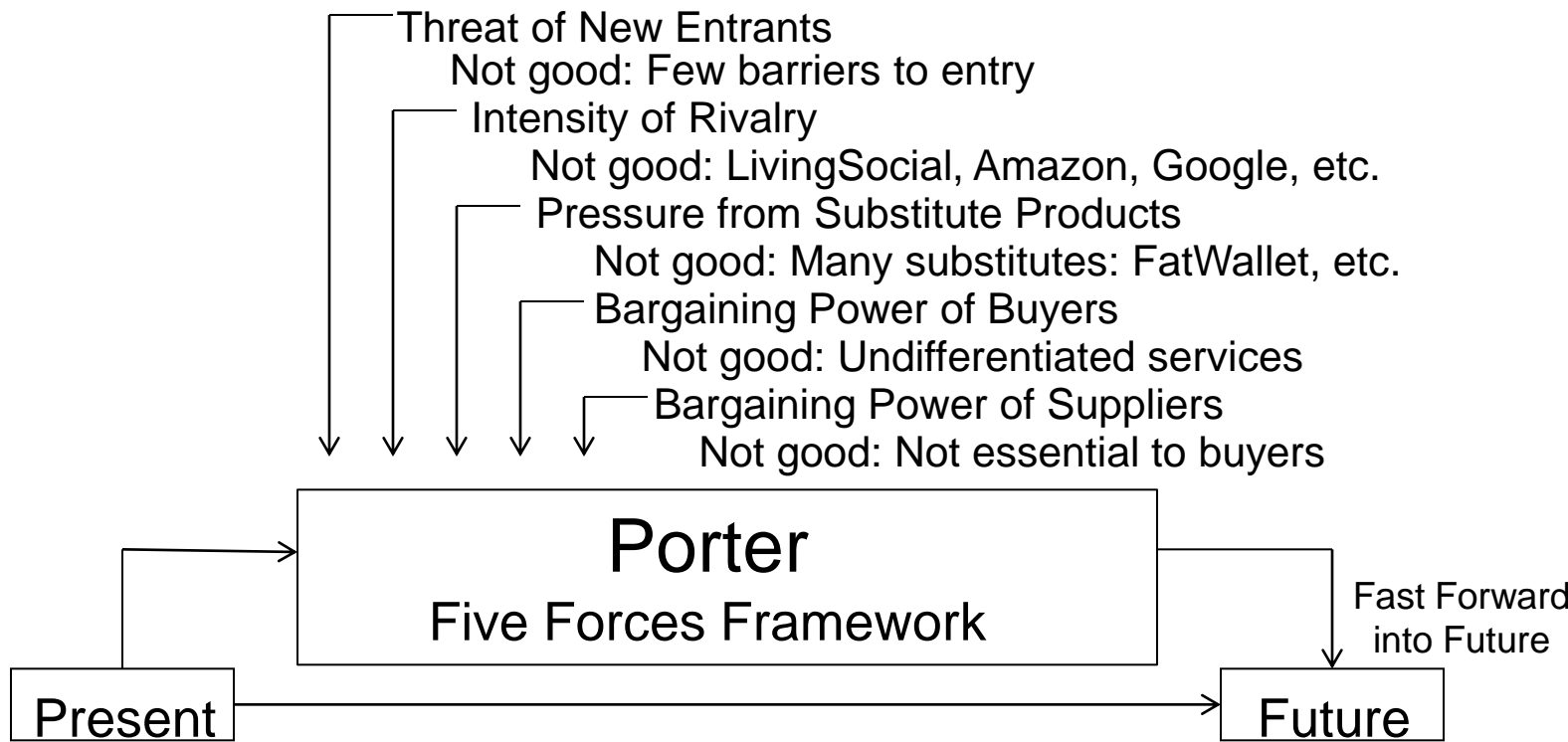
Porter Five Force Framework



Porter Five Forces Framework

Force	Description and Examples
Threat of New Entrants	New organizations/ competitors joining industry Competitors attracted to profitable markets
Intensity of Rivalry	Factors that intensify competition Nearly equal competitors; High exit costs
Pressure from Substitutes	Products/ Services that can replace offering Similar (and dissimilar) products; Services
Bargaining Power of Buyers	Conditions where buyers “call the shots” Buyers have full information, thanks to Internet
Bargaining Power of Suppliers	Conditions where sellers hold the power High switching costs, such as software

Porter Five Force Framework: Groupon in 2012



Check for Understanding

Topic	Description
Terminology	Know the difference between markets and products
Data Sources	Assemble your go-to list of data sources
Sizing	Practice sizing with reports, top-down, and bottom-up
Trends	Find trends using PESTLE & Porter 5 Forces techniques