

Marketing Analytics
Chapter 02
Case Study: Luggage

Individual Name: _____

Team Member Names: _____

Date: _____

Overview

1. Background
2. Market Size Calculation Questions
3. PESTLE Trend Analysis

1. Background

You have been promoted to Vice President of Marketing for ACME Products. ACME sells various products to its customers in the United States and abroad. ACME is considering entering the market to sell luggage worldwide.

Based on your knowledge of market sizing from your Marketing Analytics course, you decide to estimate the 2015 global market size for luggage using the following methods:

- Available industry analyst reports
- Top-Down estimation methods
- Bottom-Up estimation methods
- Triangulation of data

Based on your market research to date, you have collected the market data shown in the figure below. The numbers in parentheses refer to research citations.

Data	Values
Statista analyst report: Global luggage market retail sales, 2015 (1)	\$31.62 B
Total worldwide population (U.S. Census Bureau) (2)	7.2 B
Total United States population (U.S. Census Bureau) (3)	319.2 M
Number of Americans who travel more than 50 miles (AAA) (4)	91.9 M
Luggage pieces purchased per person per year (Samsonite) (5)	0.10
Average price for luggage (CBS News) (6)	\$150
Spending by usage segment: People with business luggage (7)	\$6,014 M
Spending by usage segment: People with standard luggage (7)	\$12,887 M
Spending by usage segment: People with casual, everyday	\$12,721 M

luggage (7)	
Spending by geographic segment: People in North America (8)	\$8,639 M
Spending by geographic segment: People in Europe (8)	\$7,206 M
Spending by geographic segment: People in Latin America (8)	\$2,292 M
Spending by geographic segment: People in Japan (8)	\$4,212 M
Spending by geographic segment: People in Asia ex-Japan (8)	\$9,273 M

References

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1. Estimate the size of the global luggage market in 2015 using available industry analyst reports.

Enter answer here: _____

2. Estimate the size of the global luggage market in 2015 using top-down estimation methods.

Enter answer here: _____

3. Estimate the size of the global luggage market in 2015 using bottom-up estimation methods, applying usage-based segments of people using business bags, travel bags, and casual bags.

Enter answer here: _____

4. Estimate the size of the global luggage market in 2015 using bottom-up estimation methods, applying geographic-based segments of people in North America, Europe, Latin America, Japan, and Asia ex-Japan (all people in Asia except those in Japan).

Enter answer here: _____

5. Estimate the overall size of the global luggage market in 2015 by triangulating (aggregating) the sizes found with the analyst report, top-down, and bottom-up methods. Weight each size estimate equally.

Enter answer here: _____

6. Complete the PESTLE table below, indicating trends from political, economic, social, technology, legal, and environmental forces. Cite references for each entry.

PESTLE Element	Trend
Political	
Economic	
Social	
Technological	
Legal	
Environmental	

SOLUTION:

1. Estimate the size of the global luggage market in 2015 using available industry analyst reports.

--> \$31.62 B

Answer, with Calculations: \$31.62 B, based on Statista analyst report

2. Estimate the size of the global luggage market in 2015 using top-down estimation methods.

--> \$31.32 B

Answer, with Calculations:

(Size) = (Population) * (Travel Percentage) * (Bags/Person/Year) * (Cost/Bag)

(Size) = (7.2 B) * (29.0%) * (0.10) * (\$150) = \$31.32 B

Calculation Notes:

Size = Estimated market size for global luggage market in 2015

Population = Total worldwide population = 7.2 B

Travel Percentage = Percentage of people who travel more than 50 miles

Travel Percentage = (U.S. people who travel) / (All U.S. people) = 91.9 M / 319.2 M = 29.0%

(Assumption: The travel percentage value assumes that people who travel more than 50 miles need luggage. It further assumes that the percentage of people who travel in the U.S. is representative of total global behavior.)

Bags/Person/Year = Average number of luggage bags purchased per person per year = 0.10

(Assumption: The bags/person/year value assumes that luggage bags last only as long as their warranty period, and that people replace their luggage after it wears out. Samsonite, a luggage market leader, warrants its luggage for 10 years. Therefore, people will replace luggage every 10 years, so the purchase frequency is once every 10 years, or 0.10 per year.)

Cost/Bag = Average cost per luggage bag = \$150

(Assumption: According to CBS News, good luggage costs between \$100 and \$200 per bag. We have averaged the two values to arrive at \$150 per bag.)

Commentary:

Positive: The value agrees well with the Statista analyst report.

Negative: The approach is sensitive to the accuracy of the constituent values used.

3. Estimate the size of the global luggage market in 2015 using bottom-up estimation methods, applying usage-based segments of people using business bags, travel bags, and casual bags.

-->. \$31.62 B

Answer, with Calculations:

(Size) = (Business Bag Segment Size) + (Travel Bag Segment Size) + (Casual Bag Segment Size)

(Size) = (\$6,014 M) + (\$12,887 M) + (\$12,721 M) = \$31.62 B

Calculation Notes:

An alternative to the approach shown would be to conduct a study of business travelers and leisure travelers, determining the size of each segment and the luggage purchase rate of each segment. We could then add up the demand of the two segments to obtain the total market size.

Commentary:

Positive: The value agrees well with the Statista analyst report.

Negative: Would be more interesting to conduct a study of usage rates by business and leisure segments, as mentioned in the Calculation Notes.

4. Estimate the size of the global luggage market in 2015 using bottom-up estimation methods, applying geographic-based segments of people in North America, Europe, Latin America, Japan, and Asia ex-Japan (all people in Asia except those in Japan).

--> \$31.62 B

Answer, with Calculations:

(Size) = (North America Segment Size) + (Europe Segment Size) + (Latin America Segment Size) + (Japan Segment Size) + (Asia ex-Japan Segment Size)

(Size) = (\$8,639 M) + (\$7,206 M) + (\$2,292 M) + (\$4,212 M) + (\$9,273 M) = \$31.62 B

Calculation Notes:

An alternative to the approach shown would be to conduct a study of travelers by geographic segment, determining the size of each segment and the luggage purchase rate of each segment. We could then add up the demand of the segments to obtain the total market size.

Commentary:

Positive: The value agrees well with the Statista analyst report.

Negative: Would be more interesting to conduct a study of usage rates by geographic segments, as mentioned in the Calculation Notes.

5. Estimate the overall size of the global luggage market in 2015 by triangulating (aggregating) the sizes found with the analyst report, top-down, and bottom-up methods. Weight each size estimate equally.

--> \$31.55 B

Answer, with Calculations:

(Size) = [(Size, Analyst Report) + (Size, Top-Down) + (Size, Bottom-Up, Usage Segments) + (Size, Bottom-Up, Geographic Segments)] / 4

(Size) = [(\$31.62 B) + (\$31.32 B) + (\$31.62 B) + (\$31.62 B)] / 4 = \$31.55 B

Calculation Notes:

In this case, we triangulated the data using a simple arithmetic average. Alternatively, we could apply different weights to different data if we believed some methods delivered better results than others.

Commentary:

Positive: The values agreed well with each other, making arithmetic averaging a good choice.

Negative: Cases where data values differ significantly from each other will indicate the usage of different weights for different data values.

6. Complete the PESTLE table below, indicating trends from political, economic, social, technology, legal, and environmental forces.

Political: Transportation Service Agency (TSA) requirements on luggage locks, as well as other federal regulations on screening, etc. (9)

Economic: Recession in late 2000s caused some airlines to force baggage fees on passengers. (10)

Social: Pink and grey are the new blacks for luggage, according to the Travel Goods Association. (11)

Technological: New luggage technologies allow travelers to recharge gadgetry, as well as gaining more space by compressing air out of clothes. (12)

Legal: Airline carriers have a dizzying number of laws around baggage sizes, weights, and fees, not to mention numerous federal laws. (13)

Environmental: Plastics found in baggage and other items tend to clog landfills, hence the ban on plastic bags found in many cities. (14)

Citations for PESTLE Trend Analysis Answers:

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