



COMPANY

Business Report

2014 , 2015 , 2016 , 2017

American Shipping Company

Business Intelligence Report for American Shipping Company | Logistics & Sales Analytics

PREPARED BY

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Title

Business Intelligence Report for American Shipping Company | Logistics & Sales Analytics

Context

American Shipping Company, a major logistics provider operating across the United States, needed to consolidate disparate operational data into a unified business intelligence system. With multiple shipping modes, customer segments, and product categories, the company required an integrated dashboard to optimize logistics operations and enhance sales strategy across all 50 states.

Problem / Question

How can American Shipping Company gain real-time visibility into operational performance across different shipping modes, customer segments, and geographic regions to optimize logistics efficiency, reduce costs, and maximize revenue growth?

Tools Used

- Microsoft Excel: Advanced dashboard development with interactive slicers and Pivot Charts
- Data Modeling: Multi-dimensional analysis across time, geography, product categories, and customer segments
- KPI Framework: Balanced scorecard approach tracking financial, operational, and customer metrics

Process Walk-through

1. Data Integration: Consolidated data from shipping logs, sales transactions, customer database, and returns management system.

2. Data Validation: Cleaned and standardized state names, product categories, and shipping mode classifications.

3. Dashboard Architecture:

- Designed a comprehensive KPI header with financial and operational metrics
- Created complementary visualizations for geographic, temporal, and categorical analysis
- Implemented four interactive slicers for dynamic filtering

4. Performance Benchmarking: Established revenue targets and achievement tracking mechanisms.

Key Findings

- Revenue Overachievement: Company exceeded \$250K target by 14.6% (\$286.4K actual), indicating strong market position.
- Geographic Concentration: West region dominated with 32% of total sales, while South region underperformed at 17%.
- Product Category Performance: Technology products showed highest growth potential, while Furniture maintained steady revenue.
- Shipping Mode Efficiency: First Class and Same Day shipping correlated with higher-value orders but required cost optimization.
- Temporal Trends: Consistent year-over-year growth from 2014-2017, with identifiable seasonal patterns for

inventory planning.

Visuals with a Purpose

- Geographic Bar Charts (States/Cities): For targeted resource allocation and regional strategy development.
- Product Category Column Chart: To guide inventory planning and product portfolio optimization.
- Temporal Line Chart: For trend analysis, seasonal planning, and growth trajectory monitoring.
- Regional Pie Charts: To quickly understand market distribution and identify growth opportunities.
- Interactive Slicers: For self-service analysis by different departments (sales, logistics, marketing).

Main Takeaway

The dashboard revealed that while American Shipping Company successfully exceeded revenue targets, significant opportunities exist in optimizing geographic coverage (particularly in the South region) and balancing shipping mode efficiency with customer satisfaction. The immediate priority should be replicating West region success strategies in underperforming markets.

What I Learned from this Case Study

- How to design multi-dimensional logistics dashboards that serve both operational and commercial teams.
- The importance of integrating financial and operational metrics in transportation business intelligence.
- How to use interactive filtering to create

personalized views for different stakeholders (state managers, product managers, logistics coordinators).

Reflection and Next Steps

- Reflection: The Excel dashboard successfully provided comprehensive visibility. A limitation was the inability to track real-time shipping status and customer satisfaction metrics.
- Next Steps:
 1. Real-time Tracking Integration: Connect to GPS and logistics APIs for live shipment monitoring.
 2. Customer Satisfaction Metrics: Incorporate Net Promoter Score (NPS) and on-time delivery rates.
 3. Cost Optimization Analysis: Develop detailed cost-per-shipment models by mode and distance.
 4. Predictive Analytics: Implement machine learning for delivery time predictions and demand forecasting.

Invite Feedback

- Which insight (geographic, product, or operational) do you find most valuable for strategic decisions?
- How could the dashboard be enhanced to better serve logistics operations teams?
- What additional metrics would be crucial for a comprehensive shipping company analysis?





Sales Dashboard

Total Sales

\$2,297,201

Returns

\$180,504

Net Sales

\$2,116,697

Discounts

\$(297,687)

COGS

\$(1,555,845)

T. Customers

793

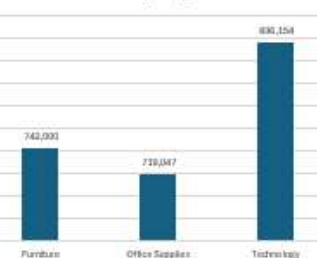
Total Orders

5009

Revenue

\$286,397

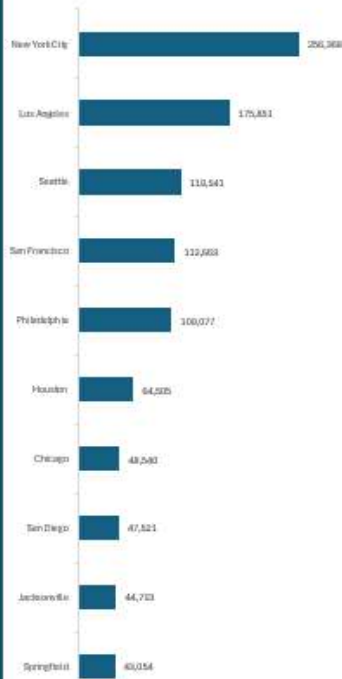
Sales By Categories



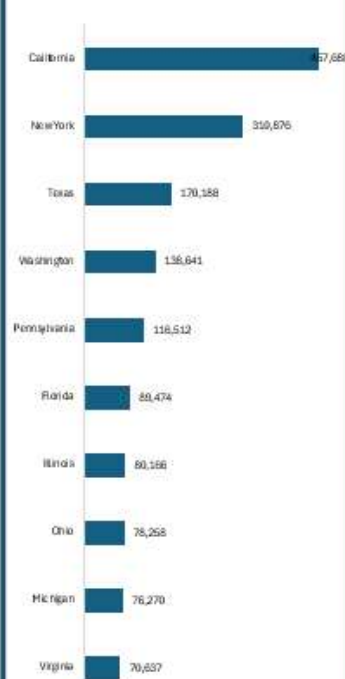
SALES BY SALES REGION



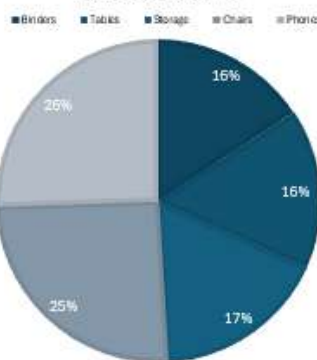
Top 10 Cities In Sales



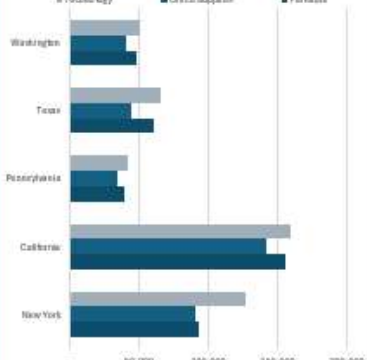
Top 10 States In Sales



SALES BY SUB CATEGORIES



SALES BY SUB CATEGORIES



Order Date

All Periods

2014

2015

2016

2017

2018

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Sales By State & Category		Column Labels		
Row Labels	Furniture	Office Supplies	Technology	Grand Total
New York	93,373	90,020	127,484	310,876
California	156,065	142,352	159,271	457,688
Pennsylvania	39,355	34,942	42,215	116,512
Texas	60,593	44,491	65,104	170,188
Washington	48,020	40,084	50,537	138,641
Grand Total	397,406	351,889	444,611	1,193,905

Total Profit	Total Profit Go	Total Profit Status
\$286,397	250000	

Total Sales & Quantity Per Years	Sum of Sales	Sum of Quantity
2015		
Qtr1	68,852	990
Qtr2	89,124	1,604
Qtr3	130,260	2,241
Qtr4	182,297	3,144
2014		
Qtr1	74,448	1,028
Qtr2	86,539	1,523
Qtr3	143,633	2,159
Qtr4	179,628	2,871
2016		
Qtr1	93,237	1,243
Qtr2	136,082	2,240
Qtr3	143,787	2,767
Qtr4	236,099	3,587
2017	733,215	12,476
Grand Total	2,297,201	37,873



Top 10 Cities	↑↓ Sum of Sales
Springfield	43,054
Jacksonville	44,713
San Diego	47,521
Chicago	48,540
Houston	64,505
Philadelphia	109,077
San Francisco	112,669
Seattle	119,541
Los Angeles	175,851
New York City	256,368
Grand Total	1,021,839

Sales By Sub Category	↑↓ Sum of Sales
Binders	203,413
Tables	206,966
Storage	223,844
Chairs	328,449
Phones	330,007
Grand Total	1,292,678

Top 10 States	↑↓ Sum of Sales
Virginia	70,637
Michigan	76,270
Ohio	78,258
Illinois	80,166
Florida	89,474
Pennsylvania	116,512
Washington	138,641
Texas	170,188
New York	310,876
California	457,688
Grand Total	1,588,709

Sales By Sales Rep.	▼ Sum of Sales
◦ Central	501,240
◦ East	678,781
◦ South	391,722
◦ West	725,458
Grand Total	2,297,201



Sum of Sales

\$ 2,297,201

Sum of Discount Value

\$ (322,582)

Sum of Cogs

\$ (1,688,222)

Sum of Profit

\$ 286,397

Sum of Quantity

37873

Values

Total Orders 5009

Total Customers 793

No of consumers 5191

Profit Per Customer 361.16

Profit Per Order 57.18

Average Profit 28.66

Sales By Categories Sum of Sales

Furniture 742,000

Office Supplies 719,047

Technology 836,154

Grand Total 2,297,201

Row Labels

Yes \$ 180,504 -24896 -132376

(blank) \$ 2,116,697 \$ (297,687) \$ (1,555,845)

Grand Total 2,297,201 -322582 -1688222