

Frequency Table for Continent Name			Quantities returned for each continent							
ContinentName	Sum of ReturnQuantity	%GT Sum of ReturnQuantity	Year	2007		2008		2009		Total
Asia	25811	20.66%	ContinentName	Return Quantity	%GT Return Quantity	Return Quantity	%GT Return Quantity	Return Quantity	%GT Return Quantity	Return C
Europe	26923	21.55%	Asia	8418	6.74%	8383	6.71%	9010	7.21%	
North America	72201	57.79%	Europe	12975	10.39%	7680	6.15%	6268	5.02%	
Total	124935	100.00%	North America	33283	26.64%	21978	17.59%	16940	13.56%	
			Total	54676	43.76%	38041	30.45%	32218	25.79%	

Number of returned quantities by continent

ContinentName	Number of returned quantities
Asia	25.81K
Europe	26.92K
North America	72.20K

Contribution of returned quantities by continent.

Continent Name	Sum of ReturnQuantity	Contribution (%)
North America	72K	(57.79%)
Europe	27K	(21.5...)
Asia	26K	(20.66%)

Returned quantity changes over time, by continent

Year	North America	Europe	Asia
2007	33.28K	12.98K	8.42K
2008	21.98K	7.68K	8.38K
2009	16.94K	6.27K	9.01K

Pareto of returned quantities by continent

ContinentName	Sum of ReturnQuantity
North America	72,201
Europe	26,923
Asia	25,811

Returned quantity changes over time, by continent

Year	North America	Europe	Asia
2007	60.87%	23.73%	15.40%
2008	57.77%	20.19%	22.04%
2009	52.58%	19.45%	27.97%

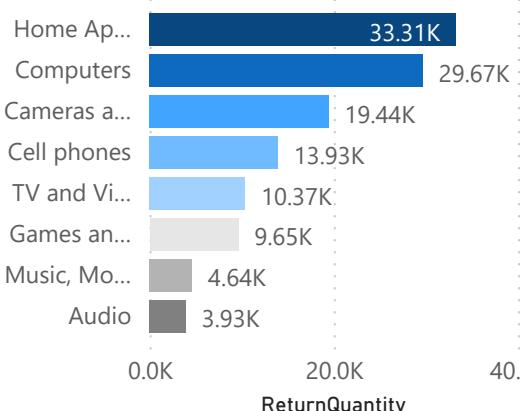
Frequency Table for Product

ProductCategoryName	ReturnQuantity	%GT ReturnQuantity
Audio	3933	3.15%
Cameras and camcorders	19437	15.56%
Cell phones	13926	11.15%
Computers	29674	23.75%
Total	124935	100.00%

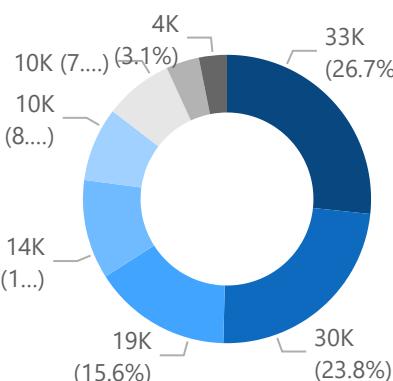
Table of returned quantities by product

Year	2007	2008	2009		
ProductCategoryName	ReturnQuantity	%CT Sum of ReturnQuantity	ReturnQuantity	%CT Sum of ReturnQuantity	ReturnQuantity
Audio	1163	2.13%	1395	3.67%	
Cameras and camcorders	8990	16.44%	5880	15.46%	
Cell phones	6592	12.06%	3809	10.01%	
Total	54676	100.00%	38041	100.00%	

Number of returned quantities by product

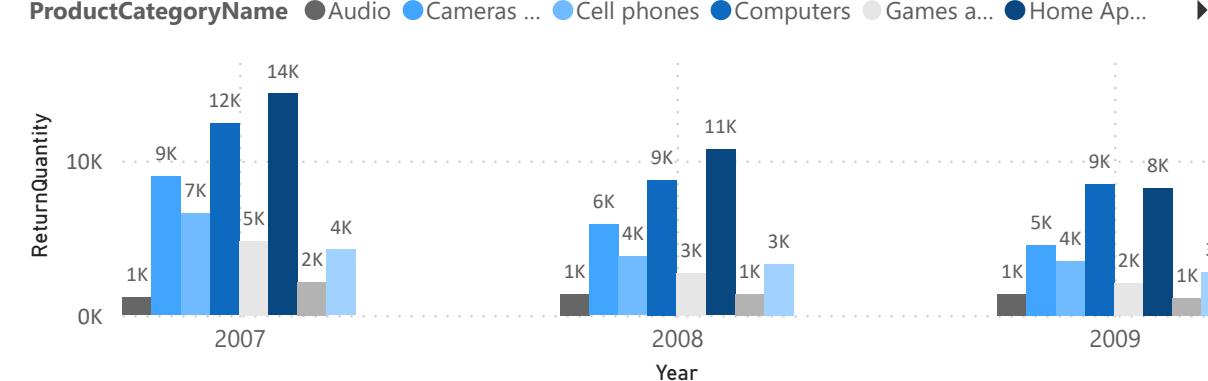


Contribution of returned quantities by product

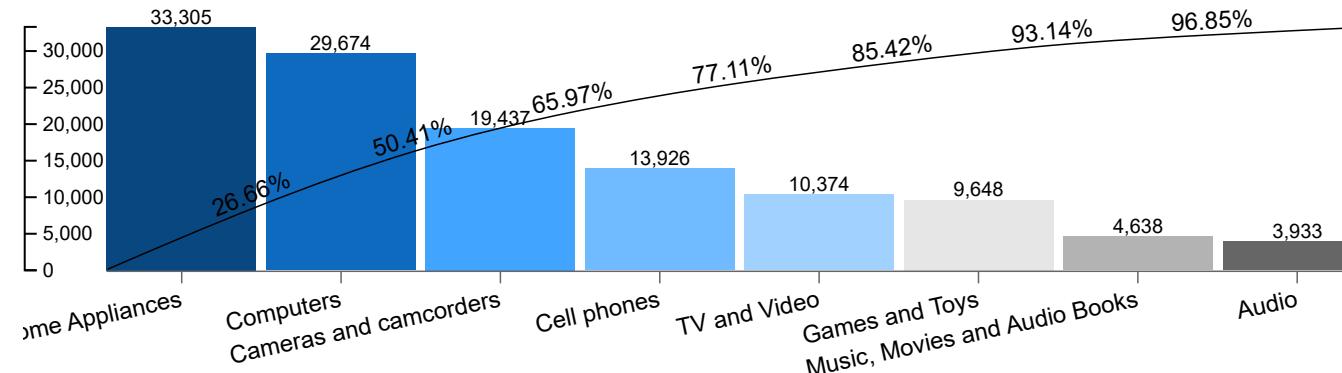


ProductCategoryName
● Home Appliances
● Computers
● Cameras and camcorders
● Cell phones
● TV and Video
● Games and Toys
● Music, Movies and Audio Books

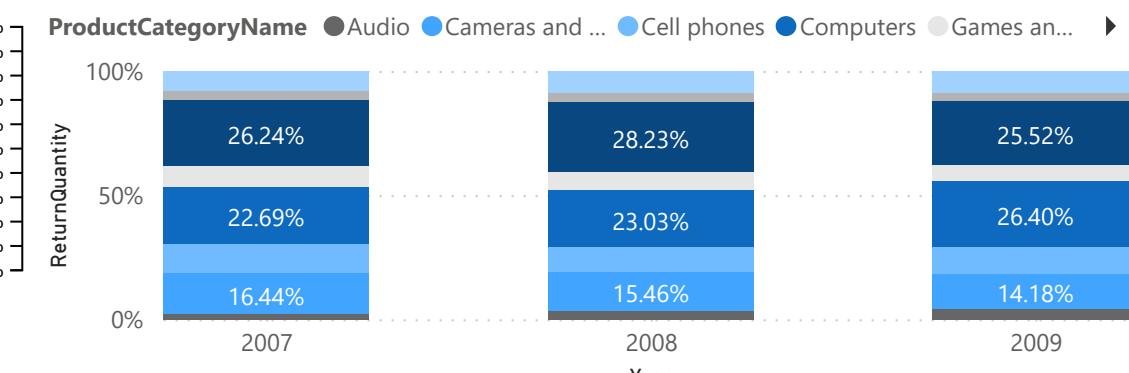
Returned quantity changes over time, by product



Pareto of returned quantities by product



Returned quantity changes over time, by product



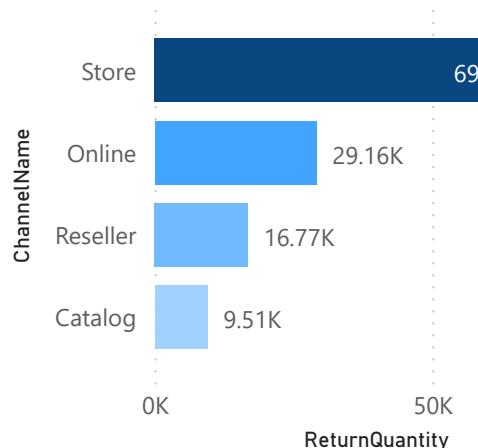
Frequency Table for Channel

ChannelName	ReturnQuantity	%GT ReturnQuantity
Catalog	9514	7.62%
Online	29155	23.34%
Reseller	16773	13.43%
Store	69493	55.62%
Total	124935	100.00%

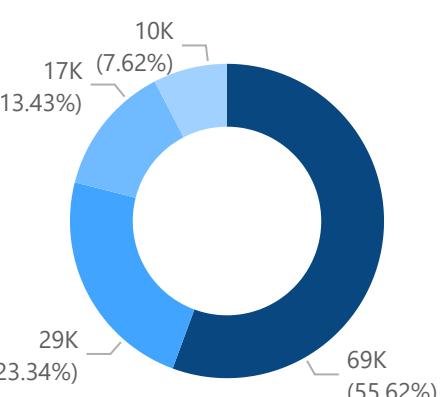
Table of returned quantities by channel

Year	2007		2008		2009	
	ChannelName	ReturnQuantity	%CT Sum of ReturnQuantity	ReturnQuantity	%CT Sum of ReturnQuantity	ReturnQuantity
Catalog	3802	6.95%	3040	7.99%	2672	
Online	11097	20.30%	9287	24.41%	8771	
Reseller	6754	12.35%	5309	13.96%	4710	
Total	54676	100.00%	38041	100.00%	32218	

Number of returned quantities by channel

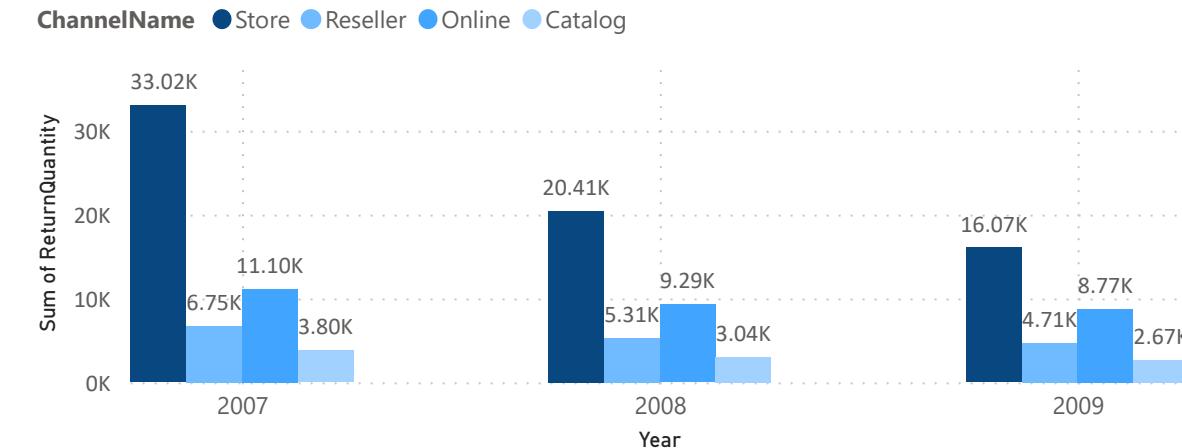


Contribution of returned quantities by continent

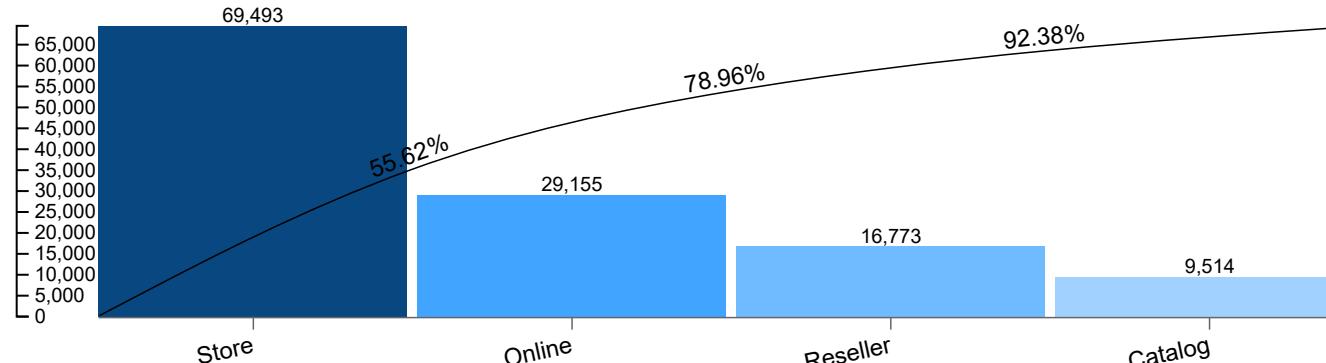


- ChannelName**
- Store
 - Online
 - Reseller
 - Catalog

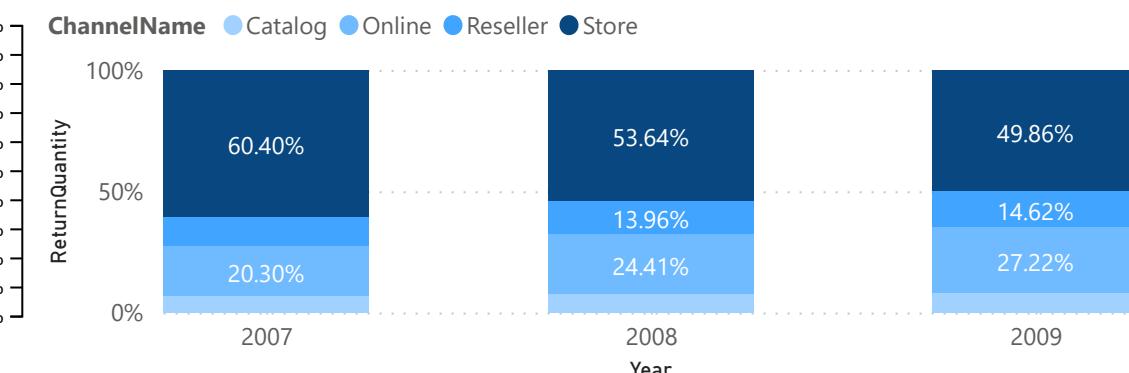
Returned quantity changes over time, by continent



Pareto chart of returned quantities by channel



Returned quantity changes over time, by channel



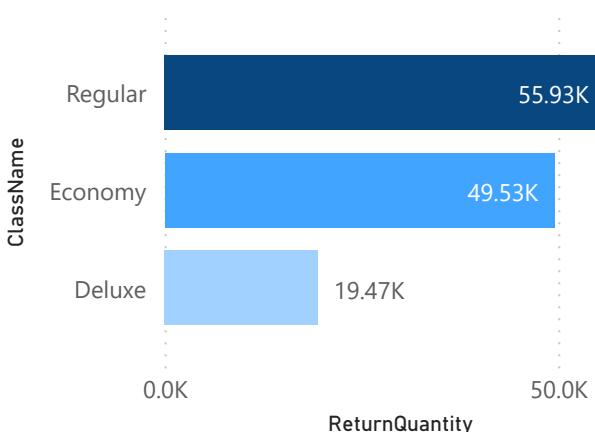
Frequency Table for Class Name

ClassName	ReturnQuantity	%GT ReturnQuantity
Deluxe	19470	15.58%
Economy	49531	39.65%
Regular	55934	44.77%
Total	124935	100.00%

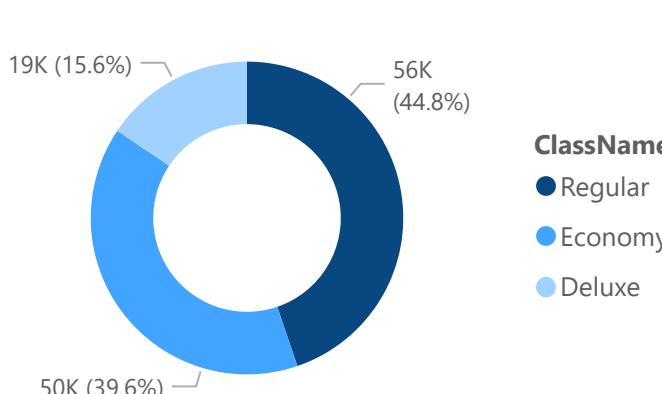
Table of returned quantities by Class Name

Year	2007	2008		2009		
ClassName	ReturnQuantity	%CT Sum of ReturnQuantity	ReturnQuantity	%CT Sum of ReturnQuantity	ReturnQuantity	%CT Sum of Retu
Deluxe	7924	14.49%	5782	15.20%	5764	
Economy	24040	43.97%	14599	38.38%	10892	
Regular	22712	41.54%	17660	46.42%	15562	
Total	54676	100.00%	38041	100.00%	32218	

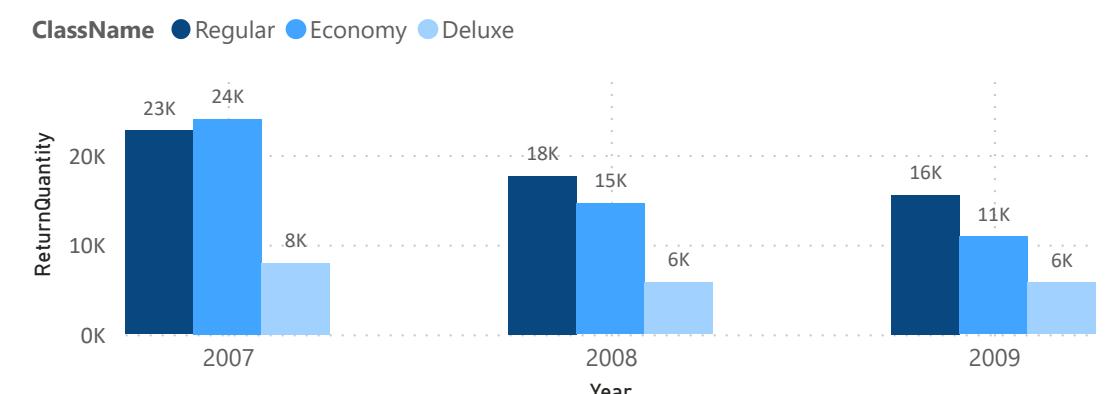
Number of returned quantities by Class Name



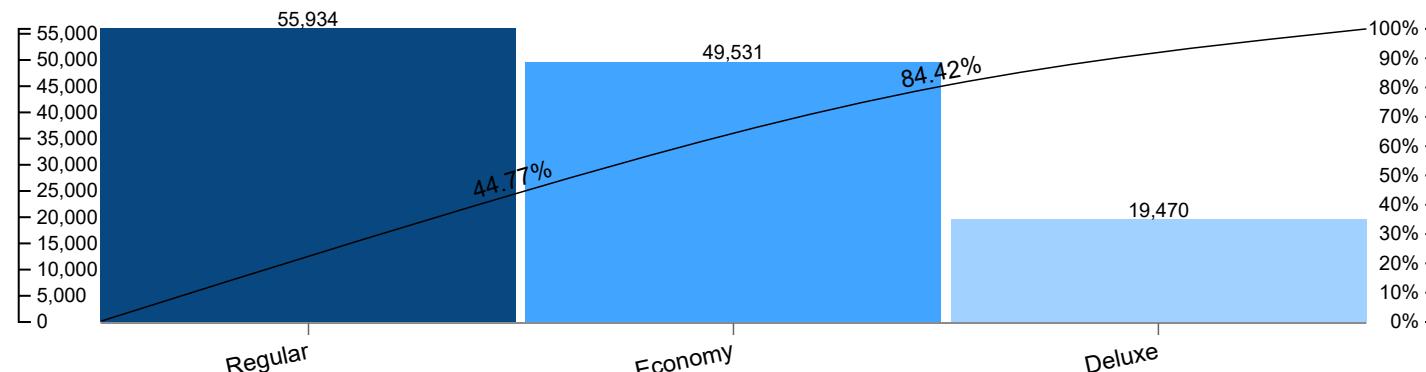
Contribution of returned quantities by Class Name



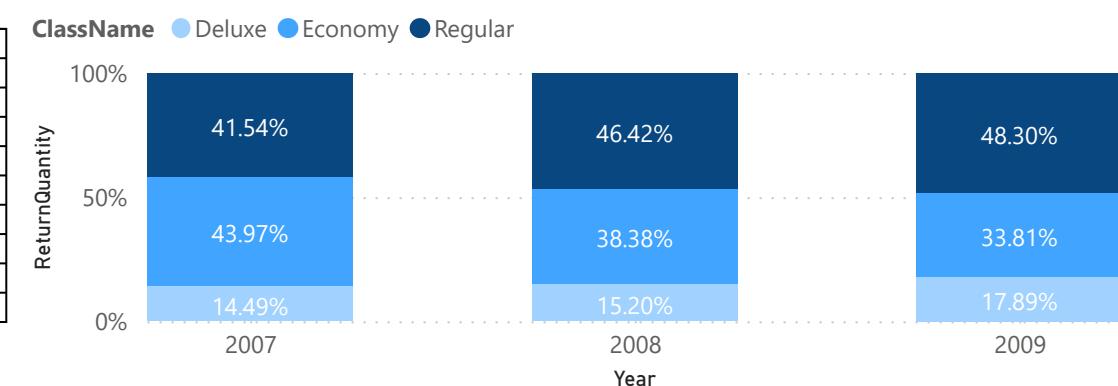
Returned quantity changes over time, by Class Name



Pareto of returned quantities by Class Name



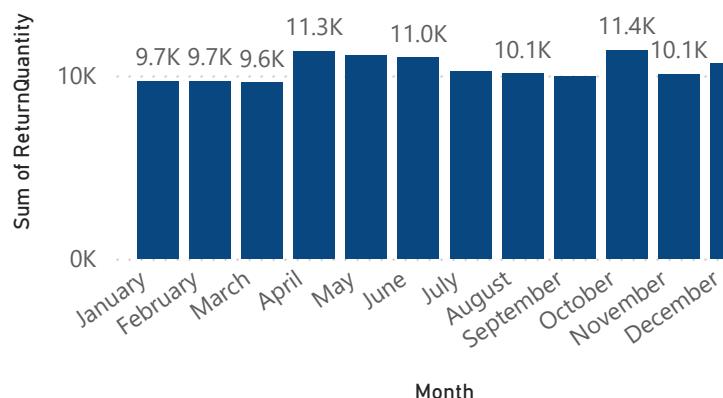
Returned quantity changes over time, by Class Name



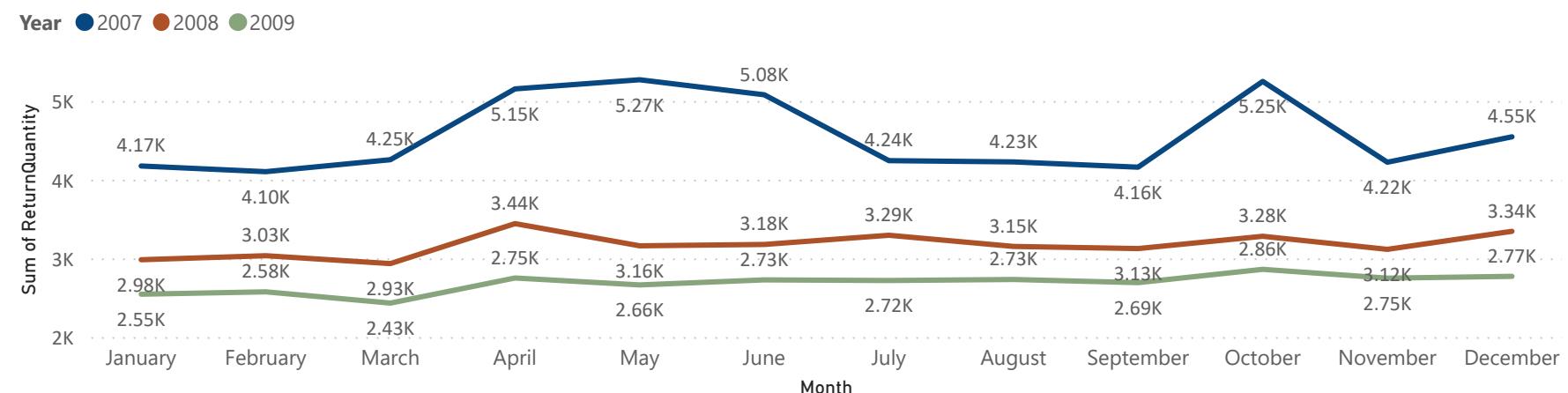
STATIC ANALYSIS-DATE

DESCRIPTIVE ANALYTICS-DAY (CONTOSO)

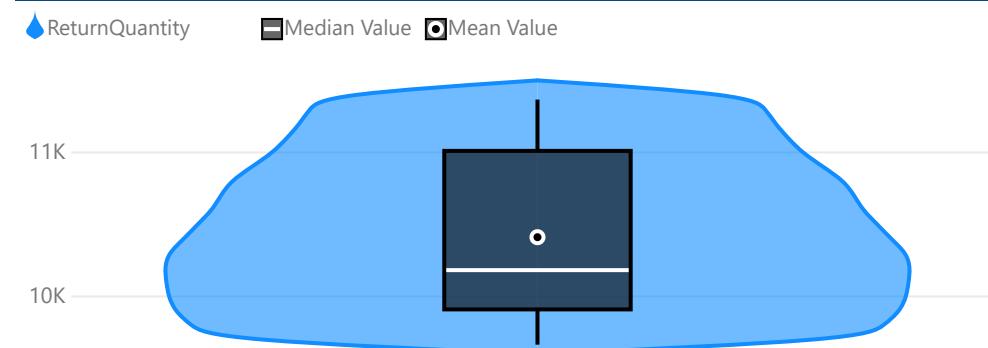
Number of Transactions



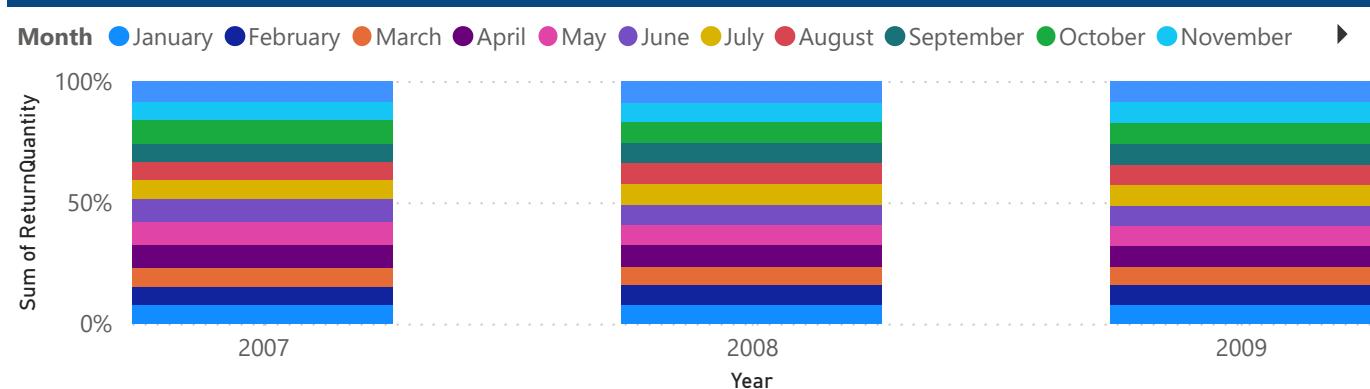
Number of transaction change over time



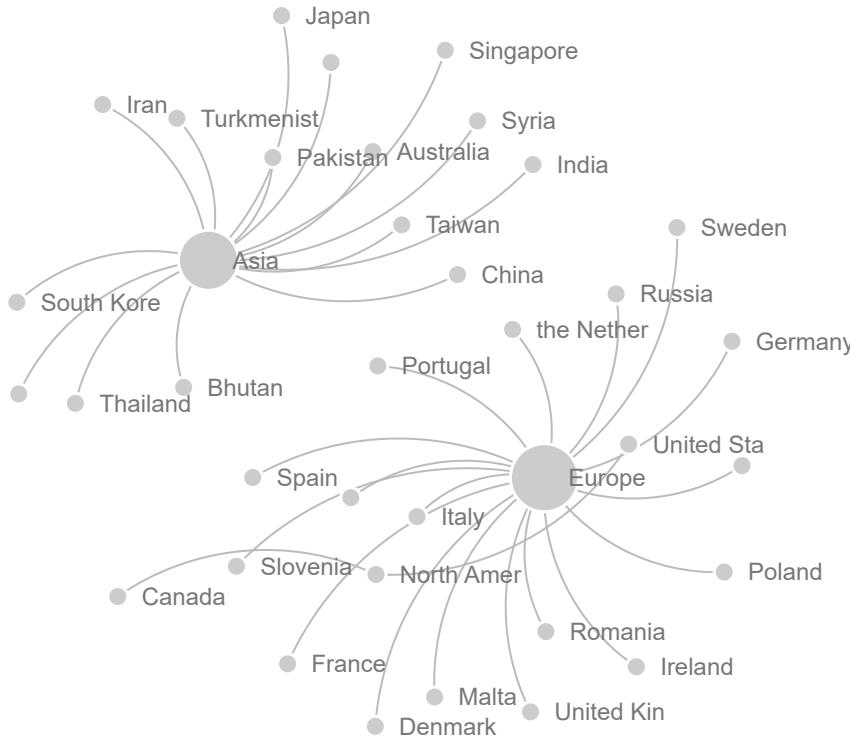
ReturnQuantity by Month



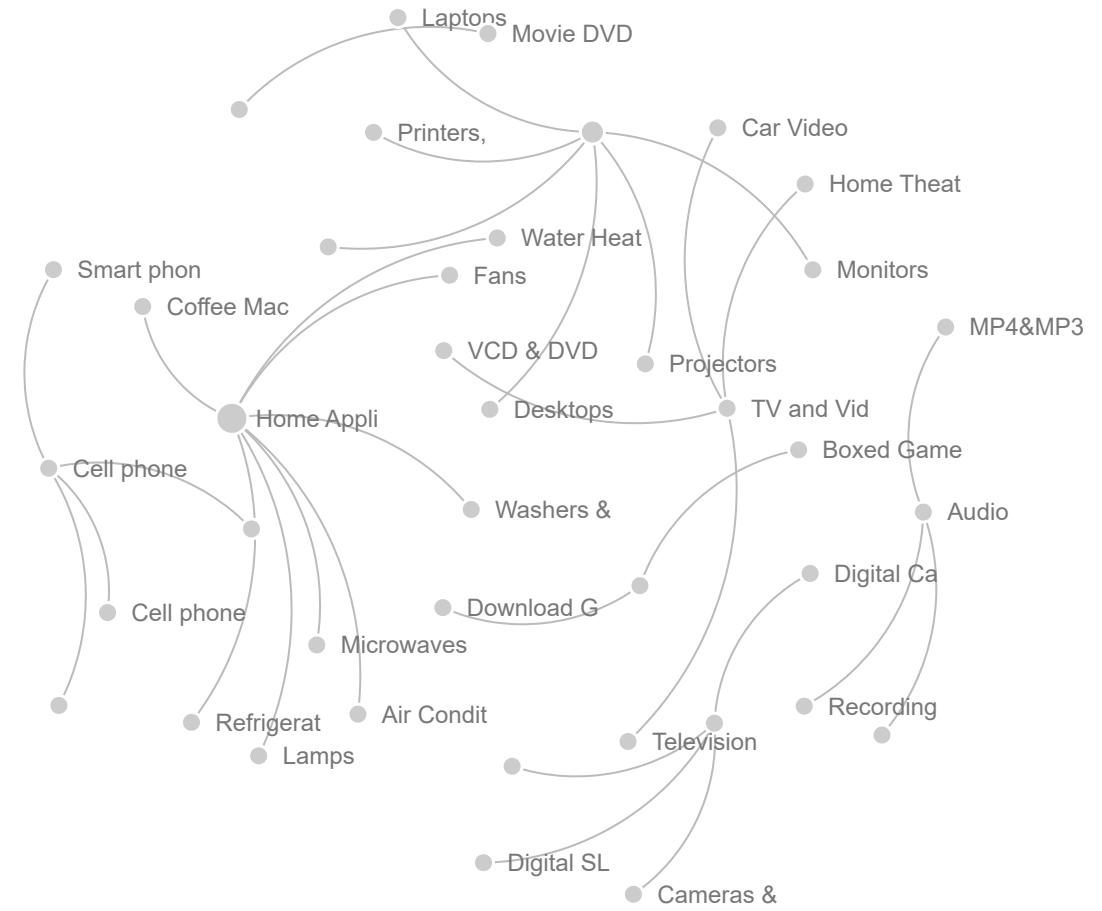
Number of Transaction for Channel change over time



RegionCountryName and ContinentName



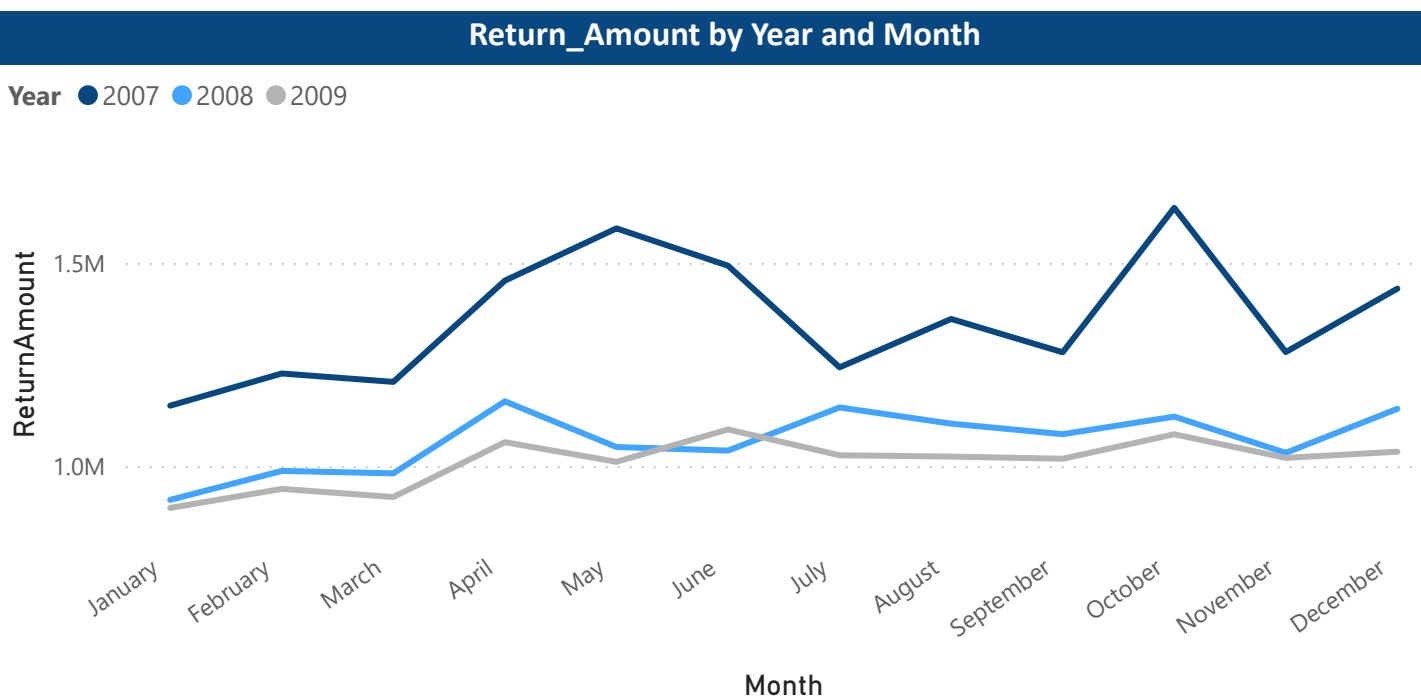
ProductCategoryName and ProductSubcategoryName



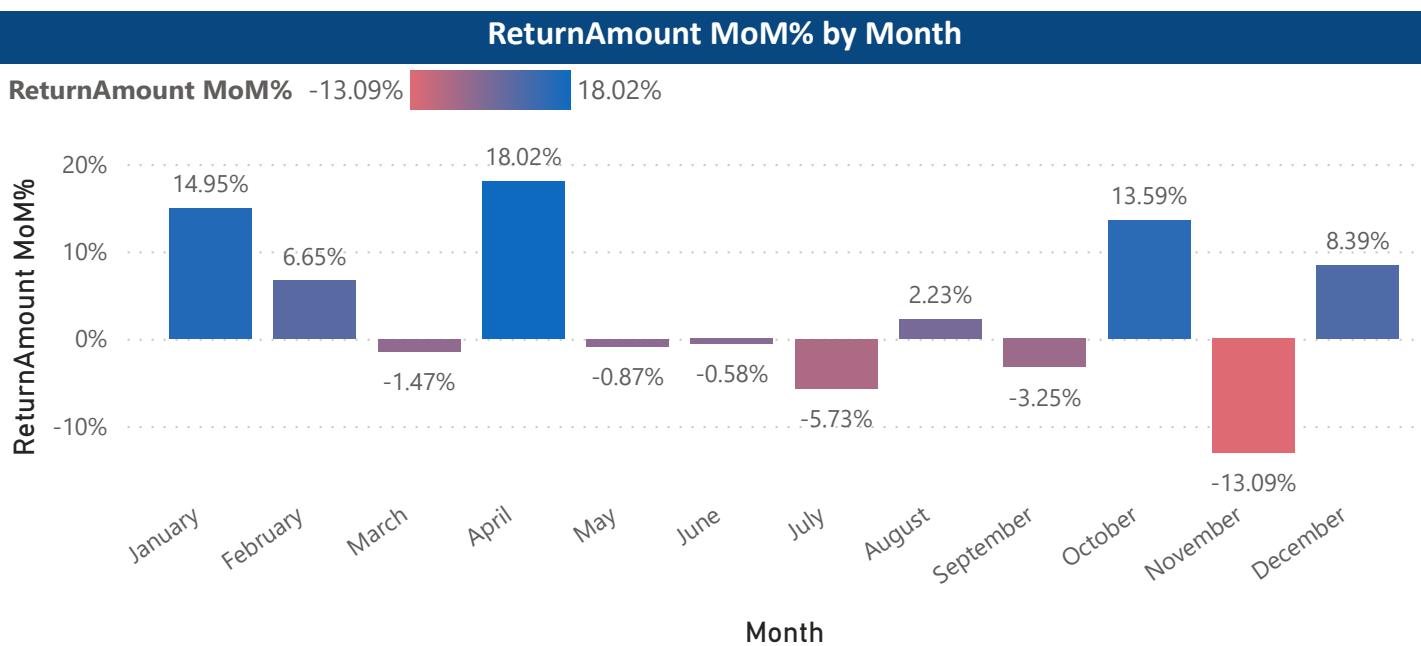
NUMERICAL_RETURNQUANTITY



NUMERICAL VARIABLE



Check Data MoM				
Month	2007	2008	2009	Total
January	-36.17%	-21.37%	14.95%	
February	6.89%	7.77%	5.22%	6.65%
March	-1.68%	-0.60%	-2.11%	-1.47%
April	20.63%	18.04%	14.59%	18.02%
May	8.82%	-9.69%	-4.55%	-0.87%
June	-5.79%	-0.85%	7.87%	-0.58%
July	-16.75%	10.23%	-5.82%	-5.73%
August	9.58%	-3.48%	-0.31%	2.23%
September	-6.02%	-2.34%	-0.53%	-3.25%
October	27.77%	4.00%	5.92%	13.59%
November	-21.70%	-7.94%	-5.39%	-13.09%
December	12.19%	10.49%	1.50%	8.39%
Total	9.63%	-2.27%	-0.86%	2.58%



Check Data MoM				
Month	2007	2008	2009	Total
January	1,148,832.27	917,040.38	897,237.30	2,963,109.95
February	1,227,966.95	988,255.54	944,042.79	3,160,265.28
March	1,207,340.71	982,319.24	924,097.99	3,113,757.94
April	1,456,451.28	1,159,507.01	1,058,916.80	3,674,875.09
May	1,584,956.47	1,047,130.88	1,010,684.39	3,642,771.74
June	1,493,137.06	1,038,256.04	1,090,270.15	3,621,663.25
July	1,243,098.79	1,144,443.88	1,026,770.64	3,414,313.31
August	1,362,147.94	1,104,563.30	1,023,590.13	3,490,301.37
September	1,280,123.42	1,078,666.76	1,018,126.02	3,376,916.20
October	1,635,594.11	1,121,808.16	1,078,428.12	3,835,830.39
November	1,280,704.78	1,032,738.57	1,020,290.88	3,333,734.23
December	1,436,780.58	1,141,065.54	1,035,578.08	3,613,424.20
Total	16,357,134.36	12,755,795.30	12,128,033.29	41,240,962.95



CAT-CAT (CHANNEL-GEOGRAPHY)

Raw Counts

ChannelName	Asia	Europe	North America	Total
Catalog			9514	9514
Online	8637	9089	11429	29155
Reseller	5298	5552	5923	16773
Total	25811	26923	72201	124935

Percentages of overall total

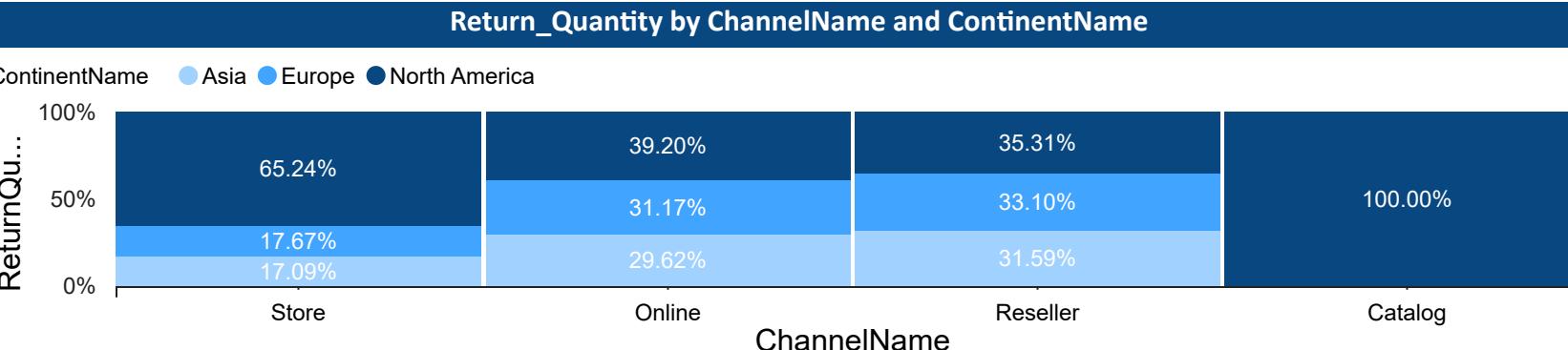
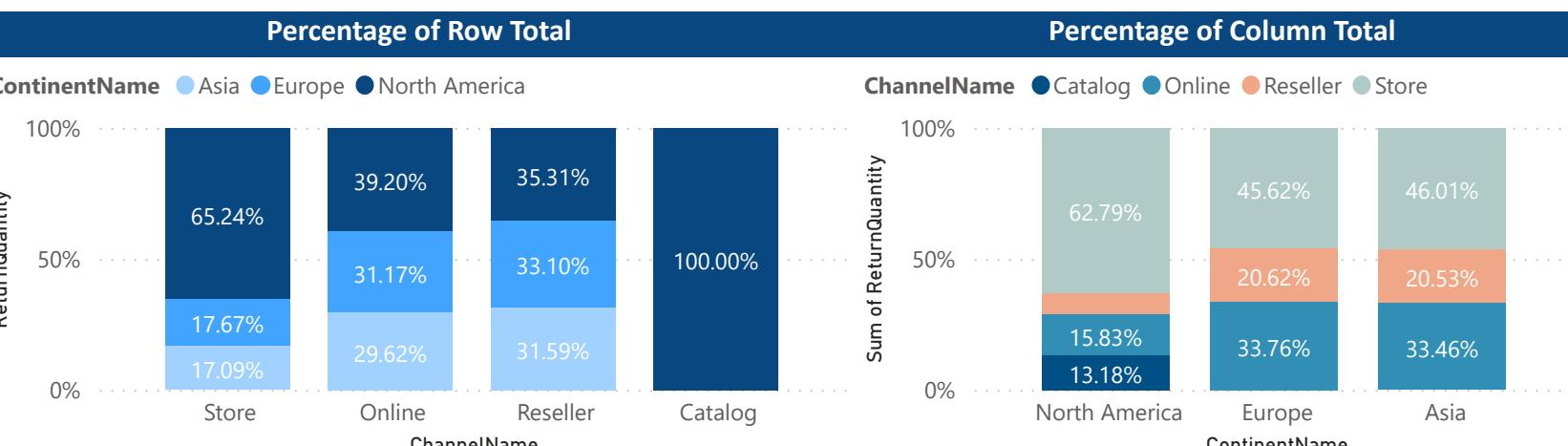
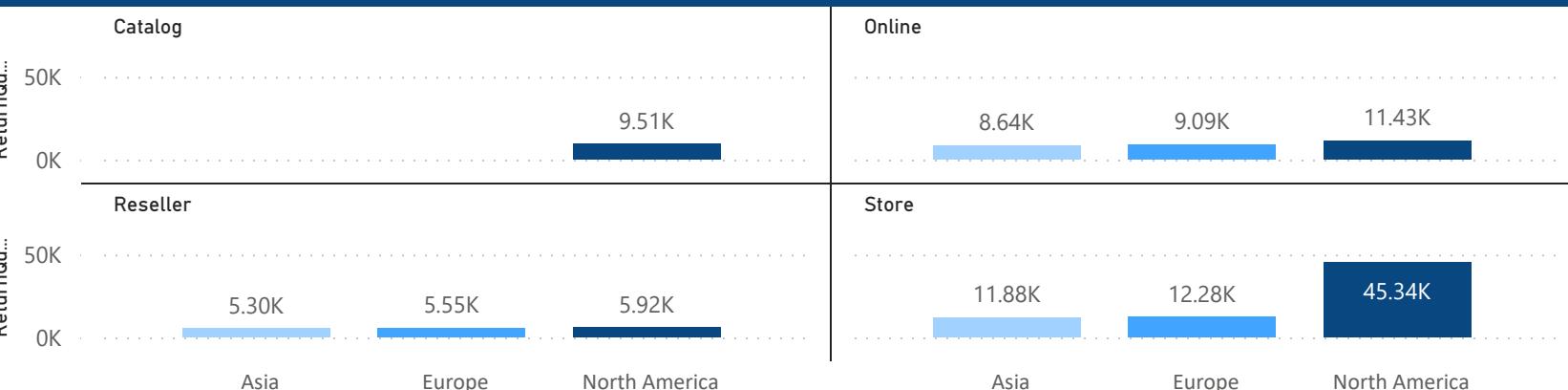
ChannelName	Asia	Europe	North America	Total
Catalog			7.62%	7.62%
Online	6.91%	7.27%	9.15%	23.34%
Reseller	4.24%	4.44%	4.74%	13.43%
Store	9.51%	9.83%	36.29%	55.62%
Total	20.66%	21.55%	57.79%	100.00%

Percentages of row totals

ChannelName	Asia	Europe	North America	Total
Catalog			100.00%	100.00%
Online	29.62%	31.17%	39.20%	100.00%
Reseller	31.59%	33.10%	35.31%	100.00%
Store	17.09%	17.67%	65.24%	100.00%
Total	20.66%	21.55%	57.79%	100.00%

Percentages of column totals

ChannelName	Asia	Europe	North America	Total
Catalog			13.18%	7.62%
Online	33.46%	33.76%	15.83%	23.34%
Reseller	20.53%	20.62%	8.20%	13.43%
Store	46.01%	45.62%	62.79%	55.62%
Total	100.00%	100.00%	100.00%	100.00%



CAT-CAT(PRODUCTGEO)

Raw Counts					Raw Counts					%GT of overall total				
ProductCategoryName	Asia	Europe	North America	Total	ProductCategoryName	Asia	Europe	North America	Total	ProductCategoryName	North America	Europe	Asia	Total
Audio	914	820	2199	3933	Cameras and camcorders	4030	4301	11106	19437	Computers	2869	2964	8093	13926
Cameras and camcorders	4030	4301	11106	19437	Cell phones	2869	2964	8093	13926	TV and Video	25811	26923	72201	12493
Cell phones	2869	2964	8093	13926	Total	25811	26923	72201	12493	ProductCategoryName	North America	Europe	Asia	Total
Total	25811	26923	72201	12493										

Percentages of overall total

ProductCategoryName	Asia	Europe	North America	Total
Audio	0.73%	0.66%	1.76%	3
Cameras and camcorders	3.23%	3.44%	8.89%	15
Cell phones	2.30%	2.37%	6.48%	11
Computers	4.82%	5.12%	13.82%	23
Total	20.66%	21.55%	57.79%	100

Percentages of row totals

ProductCategoryName	Asia	Europe	North America	Total
Audio	23.24%	20.85%	55.91%	100
Cameras and camcorders	20.73%	22.13%	57.14%	100
Cell phones	20.60%	21.28%	58.11%	100
Computers	20.27%	21.55%	58.18%	100
Total	20.66%	21.55%	57.79%	100

Percentages of column totals

ProductCategoryName	Asia	Europe	North America	Total
Audio	3.54%	3.05%	3.05%	
Cameras and camcorders	15.61%	15.98%	15.38%	
Cell phones	11.12%	11.01%	11.21%	
Computers	23.31%	23.75%	23.91%	
Games and Toys	7.37%	7.92%	7.77%	
Total	100.00%	100.00%	100.00%	1

Stacked bar chart showing the percentage of return quantity by continent for each product category. The y-axis is labeled "Sum of ReturnQuantity" and ranges from 0% to 100%. The x-axis lists ProductCategoryName: Home Appliances, Computers, Cameras and camcord..., Cell phones, TV and Video. Each bar is stacked with segments representing Asia (dark blue), Europe (medium blue), and North America (light blue).

ProductCategoryName	Continent	Percentage
Home Appliances	North America	57.65%
	Europe	21.35%
	Asia	20.99%
Computers	North America	58.18%
	Europe	21.55%
	Asia	20.27%
Cameras and camcord...	North America	57.14%
	Europe	22.13%
	Asia	20.73%
Cell phones	North America	58.11%
	Europe	21.28%
	Asia	20.60%
TV and Video	North America	58.17%
	Europe	21.13%
	Asia	20.70%

Stacked bar chart showing the percentage of return quantity by continent for each product category. The y-axis is labeled "Sum of ReturnQuantity" and ranges from 0K to 20K. The x-axis lists ProductCategoryName: Cameras and camcord..., Cell phones, Computers, Home Appliances, TV and Video. Each bar is stacked with segments representing Asia (dark blue), Europe (medium blue), and North America (light blue).

ProductCategoryName	Continent	Value
Cameras and camcord...	North America	~10K
	Europe	~10K
	Asia	~10K
Cell phones	North America	~15K
	Europe	~15K
	Asia	~15K
Computers	North America	~18K
	Europe	~18K
	Asia	~18K
Home Appliances	North America	~20K
	Europe	~20K
	Asia	~20K
TV and Video	North America	~5K
	Europe	~5K
	Asia	~5K

Stacked bar chart showing the percentage of return quantity by continent for each product category. The y-axis is labeled "Sum of ReturnQuantity" and ranges from 0K to 20K. The x-axis lists ProductCategoryName: TV and Video, Home Appliances, Computers, Cell phones, Cameras and camcord... The bars are color-coded by continent: TV and Video (light blue), Home Appliances (dark blue), and Computers (medium blue).

ProductCategoryName	Continent	Value
TV and Video	North America	~5K
	Europe	~5K
	Asia	~5K
Home Appliances	North America	~18K
	Europe	~18K
	Asia	~18K
Computers	North America	~18K
	Europe	~18K
	Asia	~18K
Cell phones	North America	~15K
	Europe	~15K
	Asia	~15K
Cameras and camcord...	North America	~10K
	Europe	~10K
	Asia	~10K

Stacked bar chart showing the percentage of column totals by continent for each product category. The y-axis is labeled "%GT Sum of ReturnQuantity" and ranges from 0% to 100%. The x-axis lists ProductCategoryName: TV and Video, Home Appliances, Computers, Cell phones, Cameras and camcord... The bars are color-coded by continent: TV and Video (light blue), Home Appliances (dark blue), and Computers (medium blue).

ProductCategoryName	Continent	Value
TV and Video	North America	15.38%
	Europe	11.21%
	Asia	23.91%
Home Appliances	North America	11.01%
	Europe	7.77%
	Asia	26.59%
Computers	North America	15.98%
	Europe	11.01%
	Asia	23.75%
Cell phones	North America	15.61%
	Europe	11.12%
	Asia	23.31%
Cameras and camcord...	North America	11.12%
	Europe	7.37%
	Asia	27.09%
TV and Video	North America	8.36%
	Europe	8.14%
	Asia	8.32%

Stacked bar chart showing the percentage of column totals by continent for each product category. The y-axis is labeled "%GT Sum of ReturnQuantity" and ranges from 0% to 100%. The x-axis lists ProductCategoryName: TV and Video, Home Appliances, Computers, Cell phones, Cameras and camcord... The bars are color-coded by continent: TV and Video (light blue), Home Appliances (dark blue), and Computers (medium blue).

ProductCategoryName	Continent	Value
TV and Video	North America	15.38%
	Europe	11.21%
	Asia	23.91%
Home Appliances	North America	11.01%
	Europe	7.77%
	Asia	26.59%
Computers	North America	15.98%
	Europe	11.01%
	Asia	23.75%
Cell phones	North America	15.61%
	Europe	11.12%
	Asia	23.31%
Cameras and camcord...	North America	11.12%
	Europe	7.37%
	Asia	27.09%
TV and Video	North America	8.36%
	Europe	8.14%
	Asia	8.32%

CAT-CAT CHANNEL & PRODUCT

Raw Counts

ProductCategoryName	Catalog	Online	Reseller	Store	Total
Audio	305	833	556	2239	3793
Cameras and camcorders	1451	3907	2631	11448	19437
Cell phones	1046	2838	1889	8153	13136
Total	9514	29155	16773	69493	124495

Percentages of overall total

ProductCategoryName	Catalog	Online	Reseller	Store	Total
Audio	0.24%	0.67%	0.45%	1.79%	7.62%
Cameras and camcorders	1.16%	3.13%	2.11%	9.16%	23.34%
Cell phones	0.84%	2.27%	1.51%	6.53%	13.43%
Computers	1.80%	4.83%	3.10%	14.02%	55.62%
Total	7.62%	23.34%	13.43%	55.62%	100%

Percentages of row totals

ProductCategoryName	Catalog	Online	Reseller	Store	Total
Audio	7.75%	21.18%	14.14%	56.93%	100%
Cameras and camcorders	7.47%	20.10%	13.54%	58.90%	100%
Cell phones	7.51%	20.38%	13.56%	58.55%	100%
Computers	7.59%	20.33%	13.07%	59.01%	100%
Total	7.62%	23.34%	13.43%	55.62%	100%

Percentages of column totals

ProductCategoryName	Catalog	Online	Reseller	Store	Total
Audio	3.21%	2.86%	3.31%	3.22%	100.00%
Cameras and camcorders	15.25%	13.40%	15.69%	16.47%	100.00%
Cell phones	10.99%	9.73%	11.26%	11.73%	100.00%
Computers	23.67%	20.69%	23.11%	25.21%	100.00%
Games and Toys	7.78%	19.99%	7.39%	2.61%	100.00%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Raw Counts

%GT of overall total

Percentages of row totals

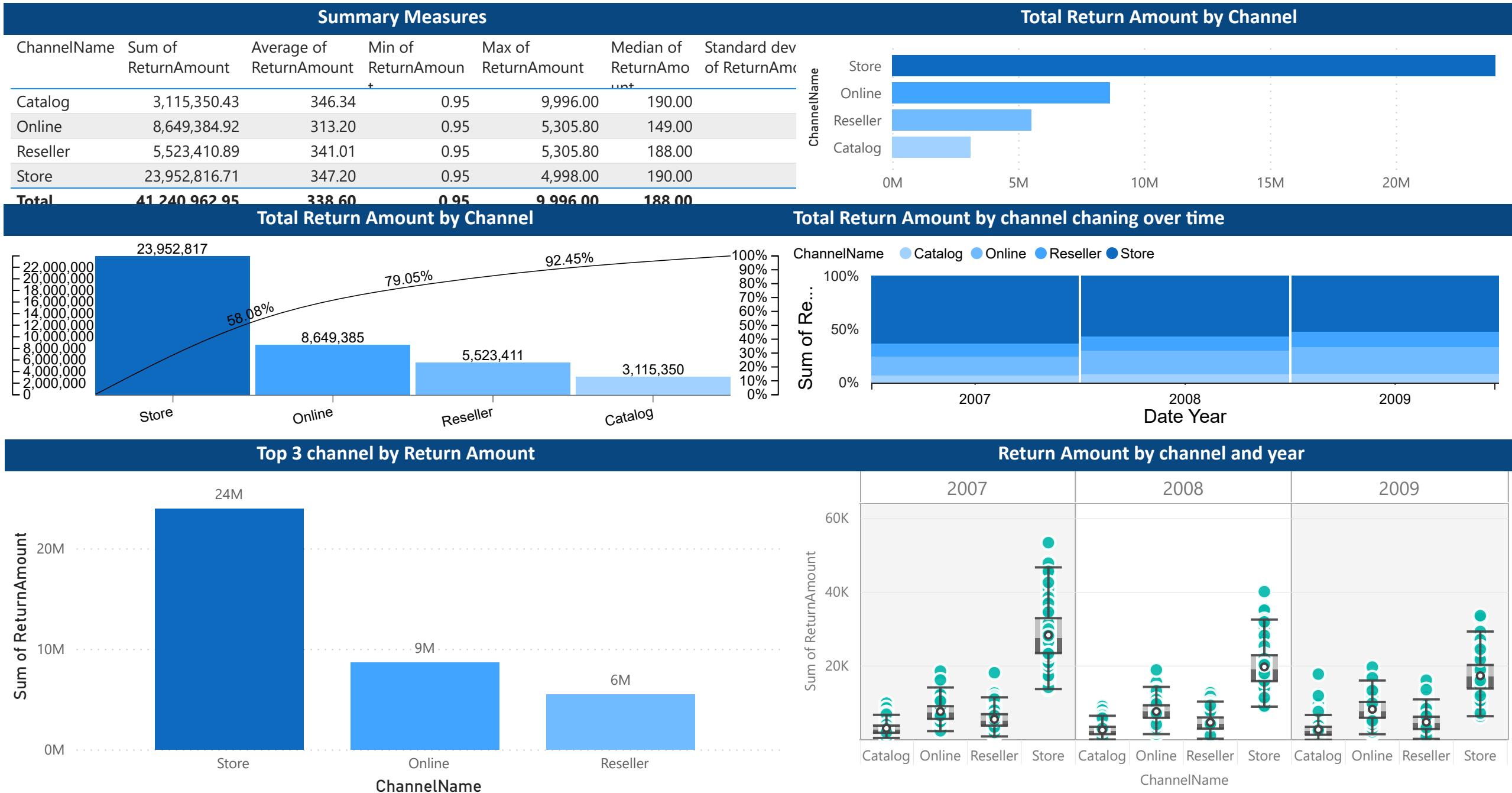
Percentages of column totals

Percentages of overall total

Percentages of column totals



CAT-NUM (CHANNEL & RETURN AMOUNT)



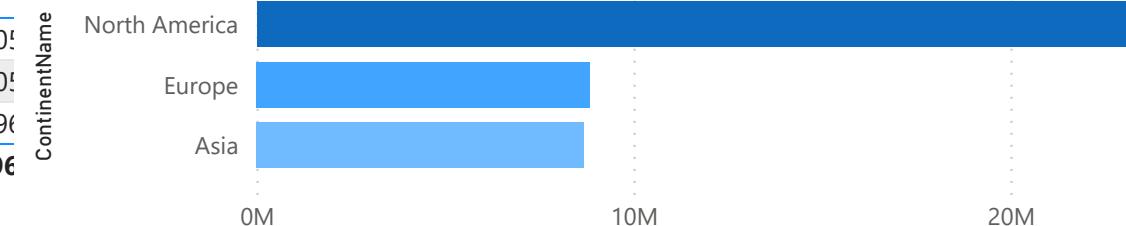


CAT-NUM(GEO & RETURN AMOUNT)

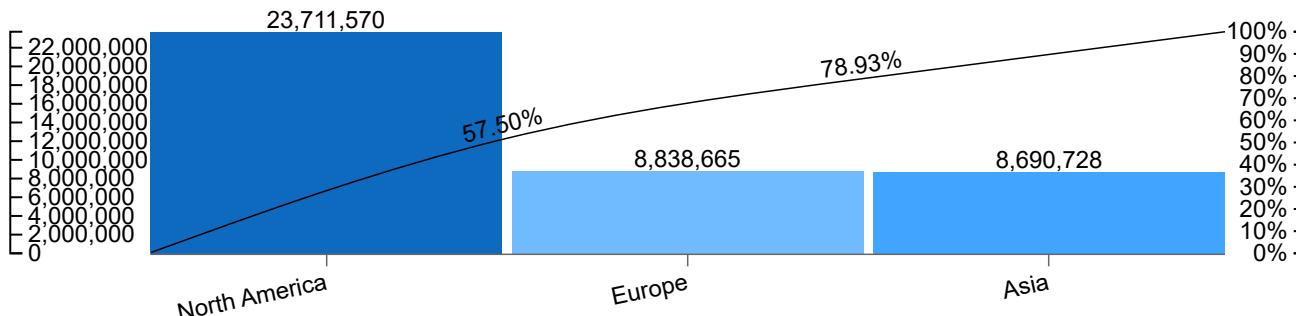
Summary Measures

ContinentName	Sum of ReturnAmount	Average of ReturnAmount	Min of ReturnAmount	Max of ReturnA
Asia	8,690,727.82	346.48	0.95	5,305
Europe	8,838,664.74	337.21	0.95	5,305
North America	23,711,570.39	336.32	0.95	9,996
Total	41,240,962.95	338.60	0.95	9,996

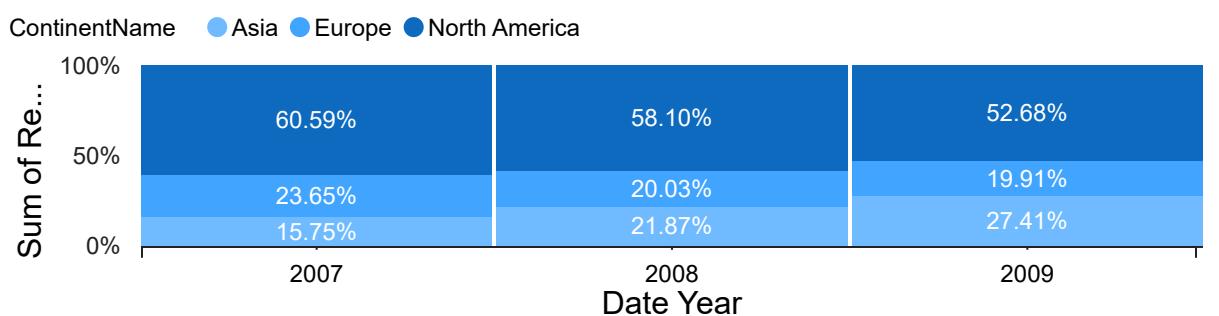
Total Return Amount by Geo



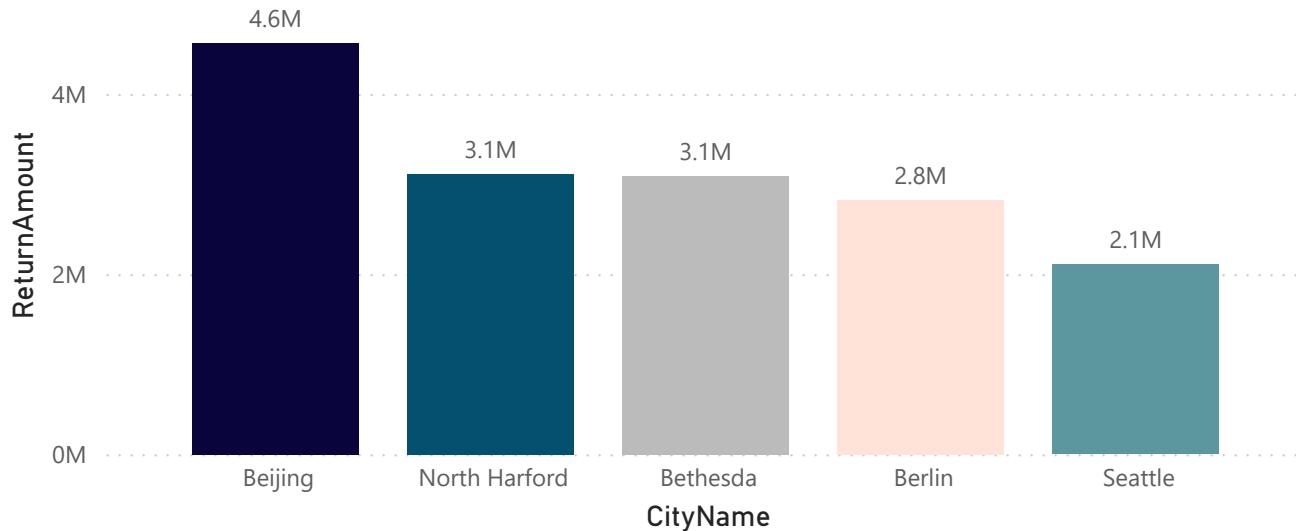
Total Return Amount by Geo



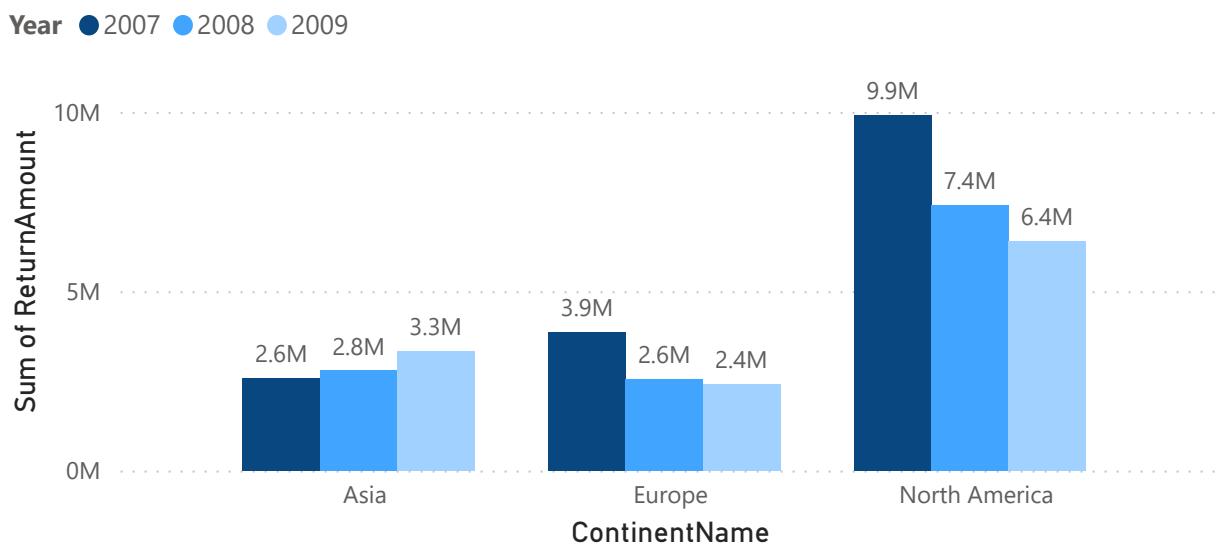
Total Return Amount by Geo chaning over time



Top 5 cities by Return Amount



Return Amount by Geo and year



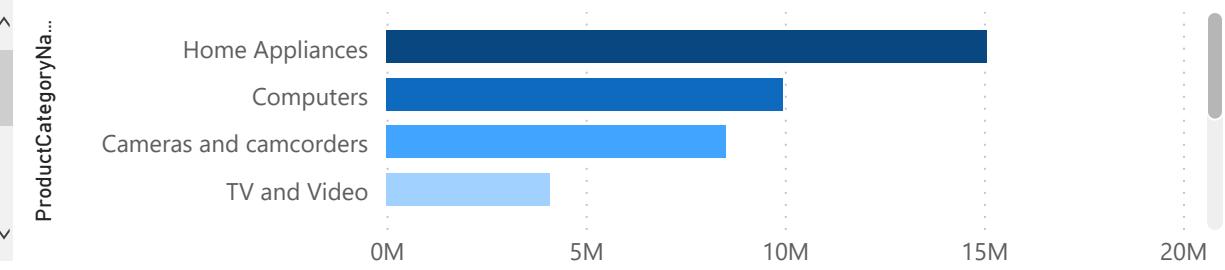


CAT-NUM (PRODUCT & RETURN AMOUNT)

Summary Measures

ProductCategoryName	Sum of ReturnAmount	Average of ReturnAmount	Min of ReturnAmount	Max of ReturnAmount
Audio	483,439.85	126.06	21.57	
Cameras and camcorders	8,524,584.70	448.87	6.95	
Cell phones	2,135,045.82	157.08	3.35	
Computers	9,958,030.91	343.66	0.95	
Total	41,240,962.95	338.60	0.95	

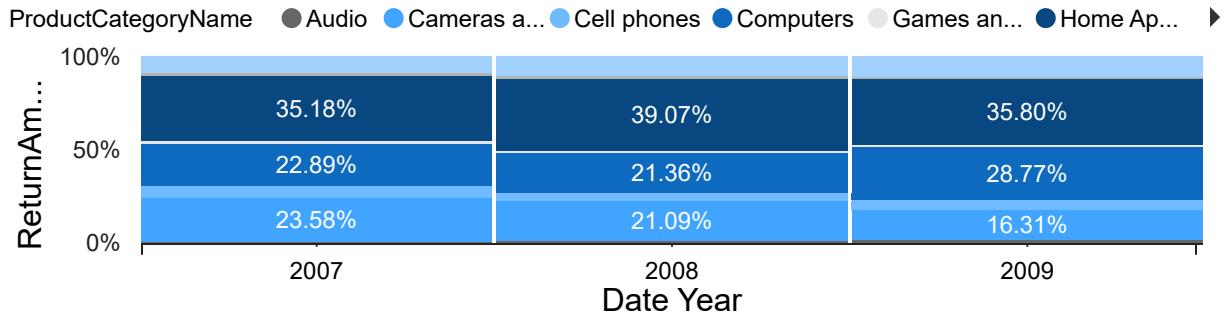
Total Return Amount by Product



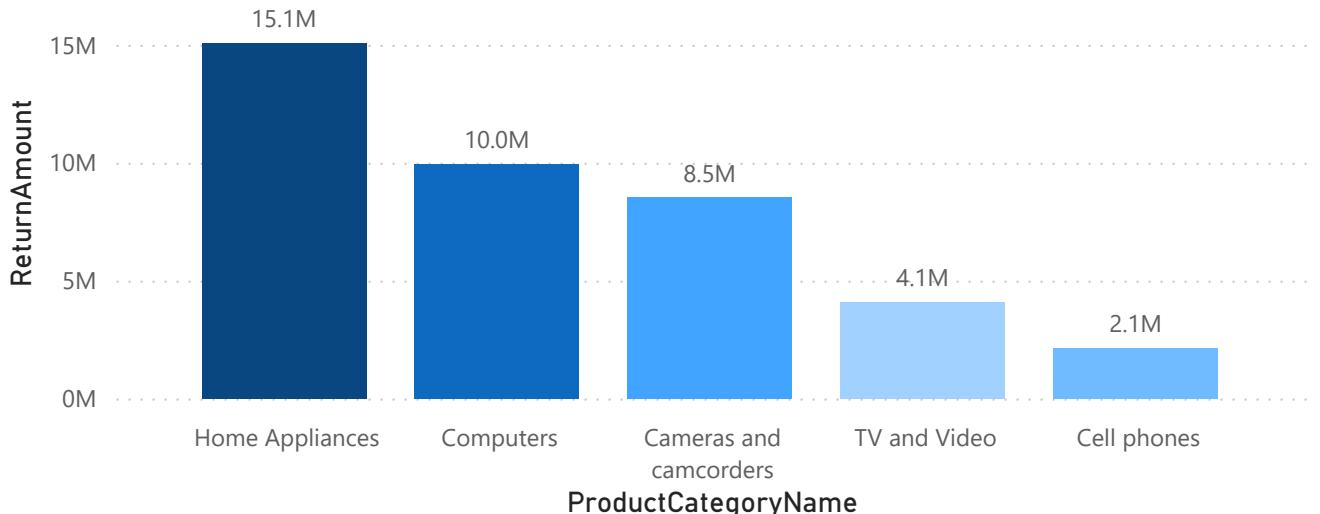
Total Return Amount by Product



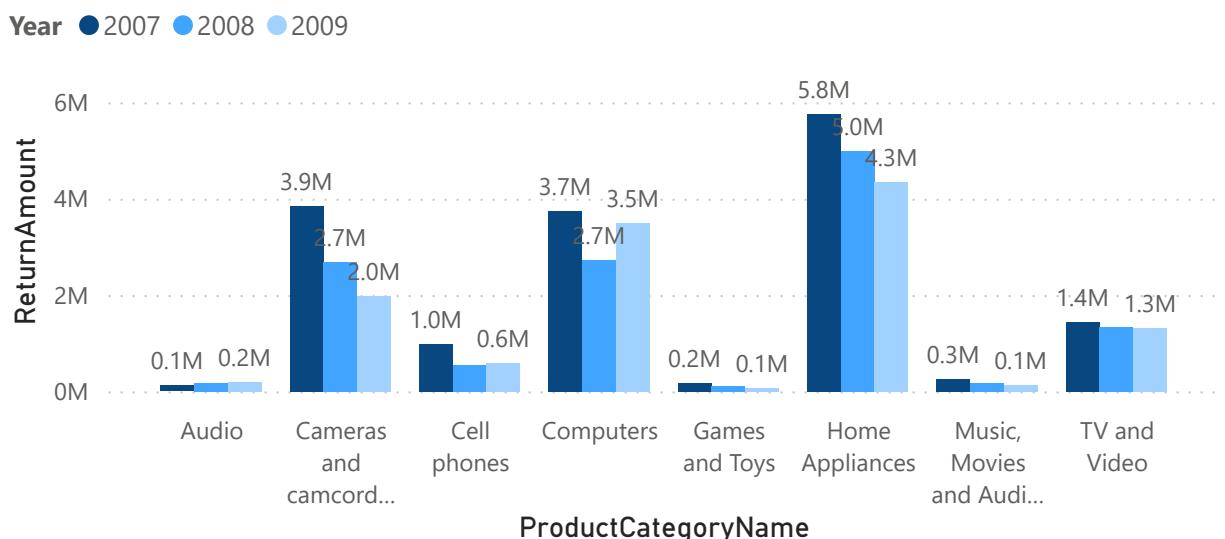
Total Return Amount by Product changing over time



Top 5 Products by Return Amount

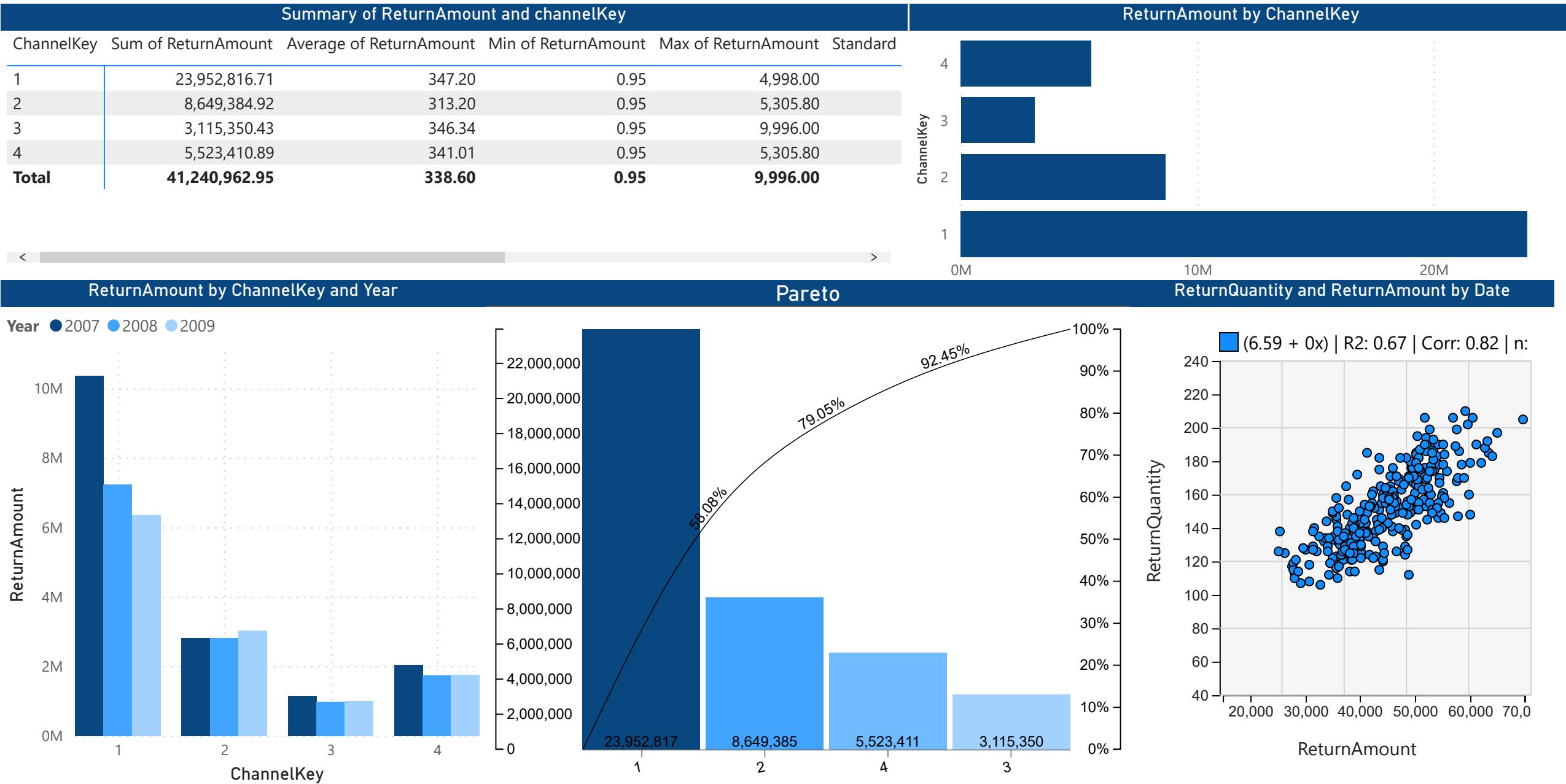


Return Amount by Product and year





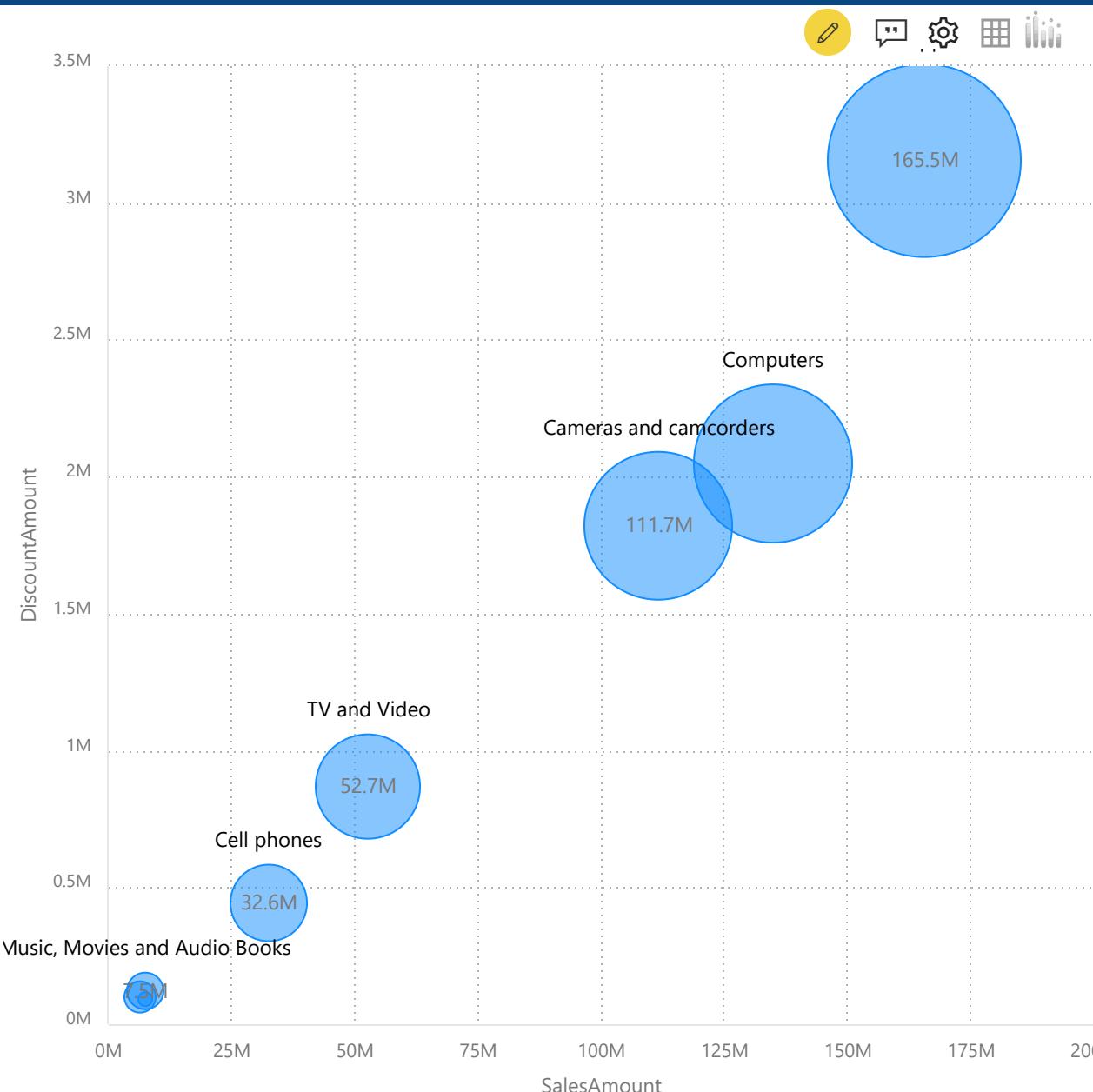
RELATIONSHIP AMONG NUMERICAL



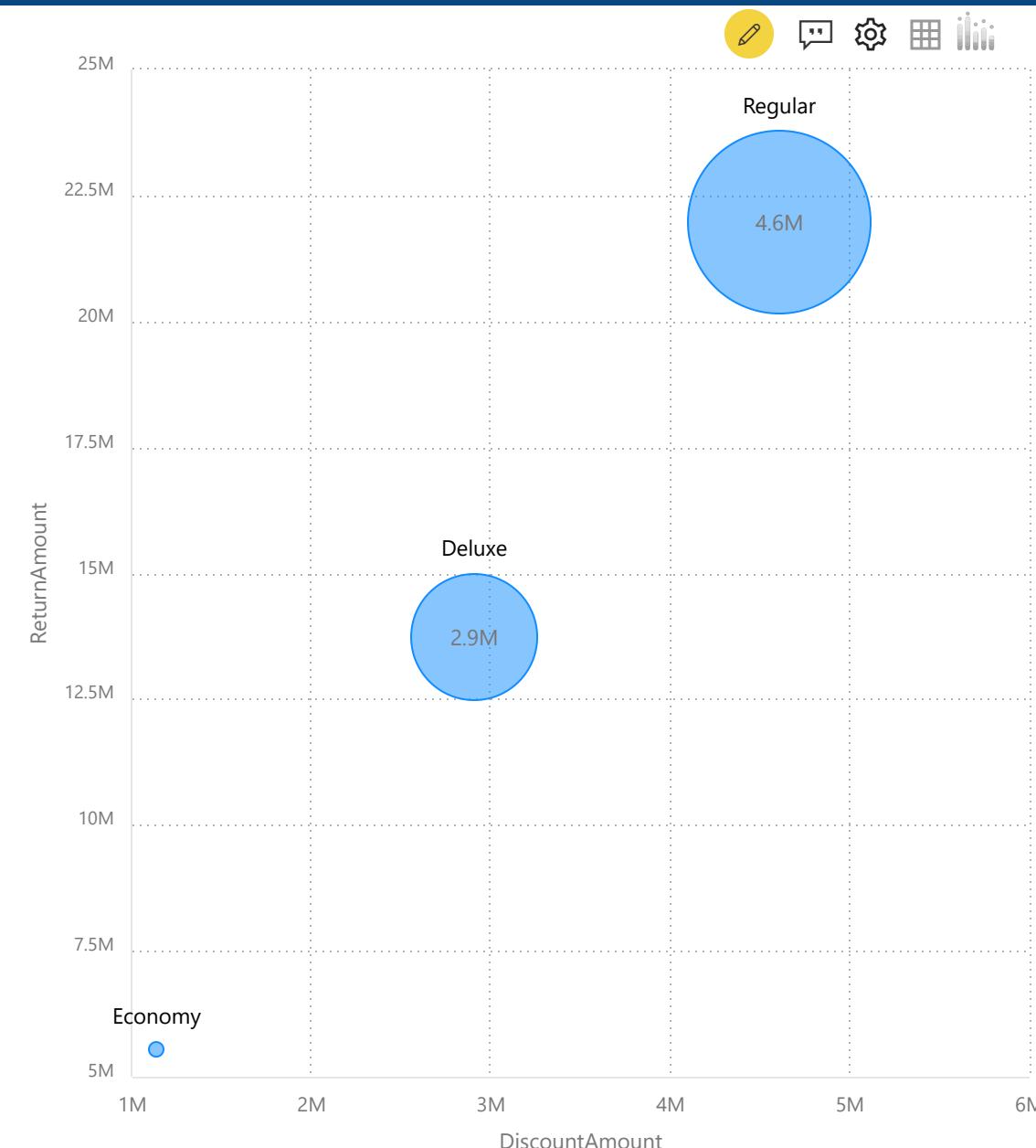


1 CAT - 3 NUM

SalesAmount, DiscountAmount and ReturnAmount by ProductCategoryName

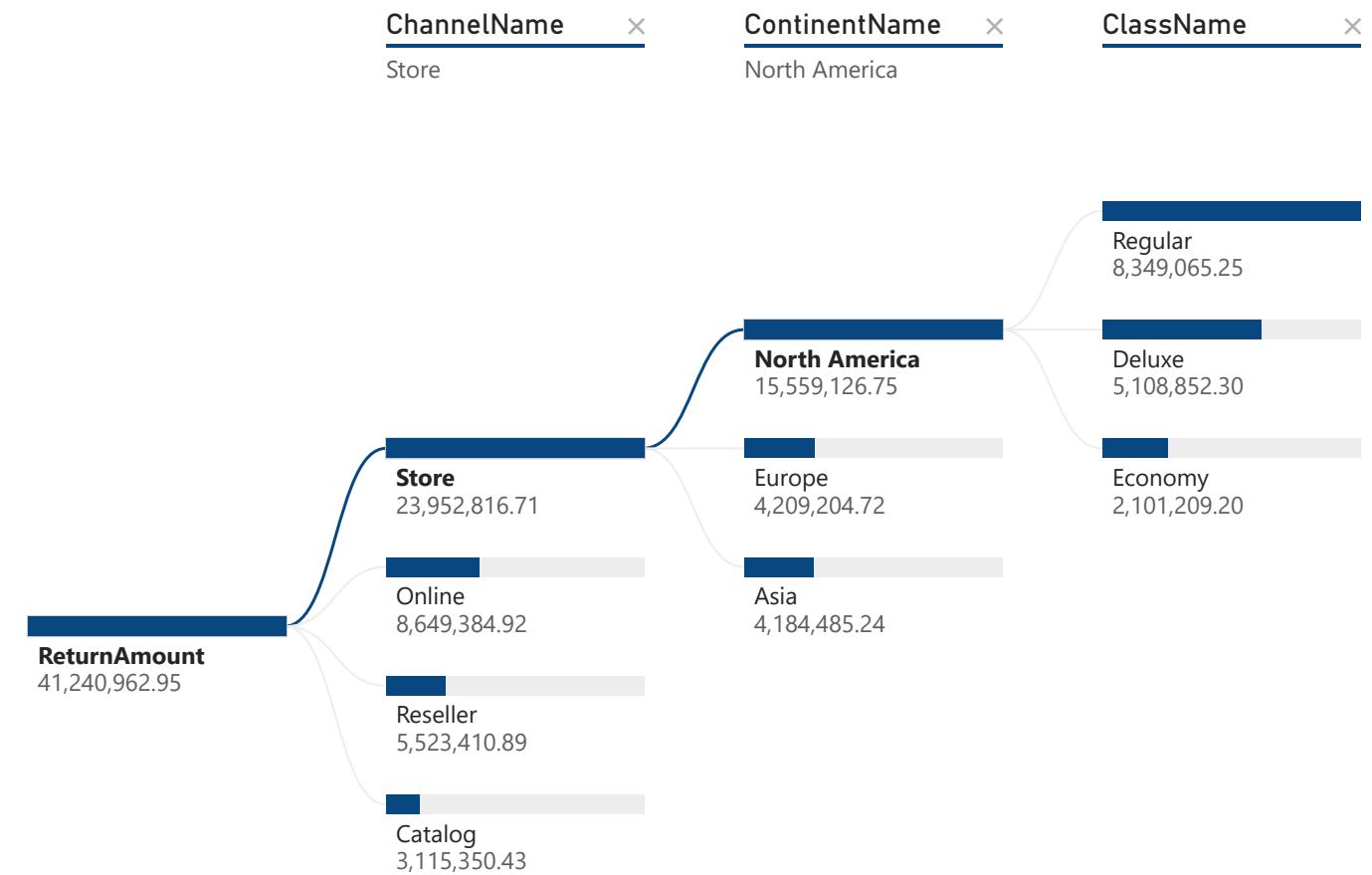
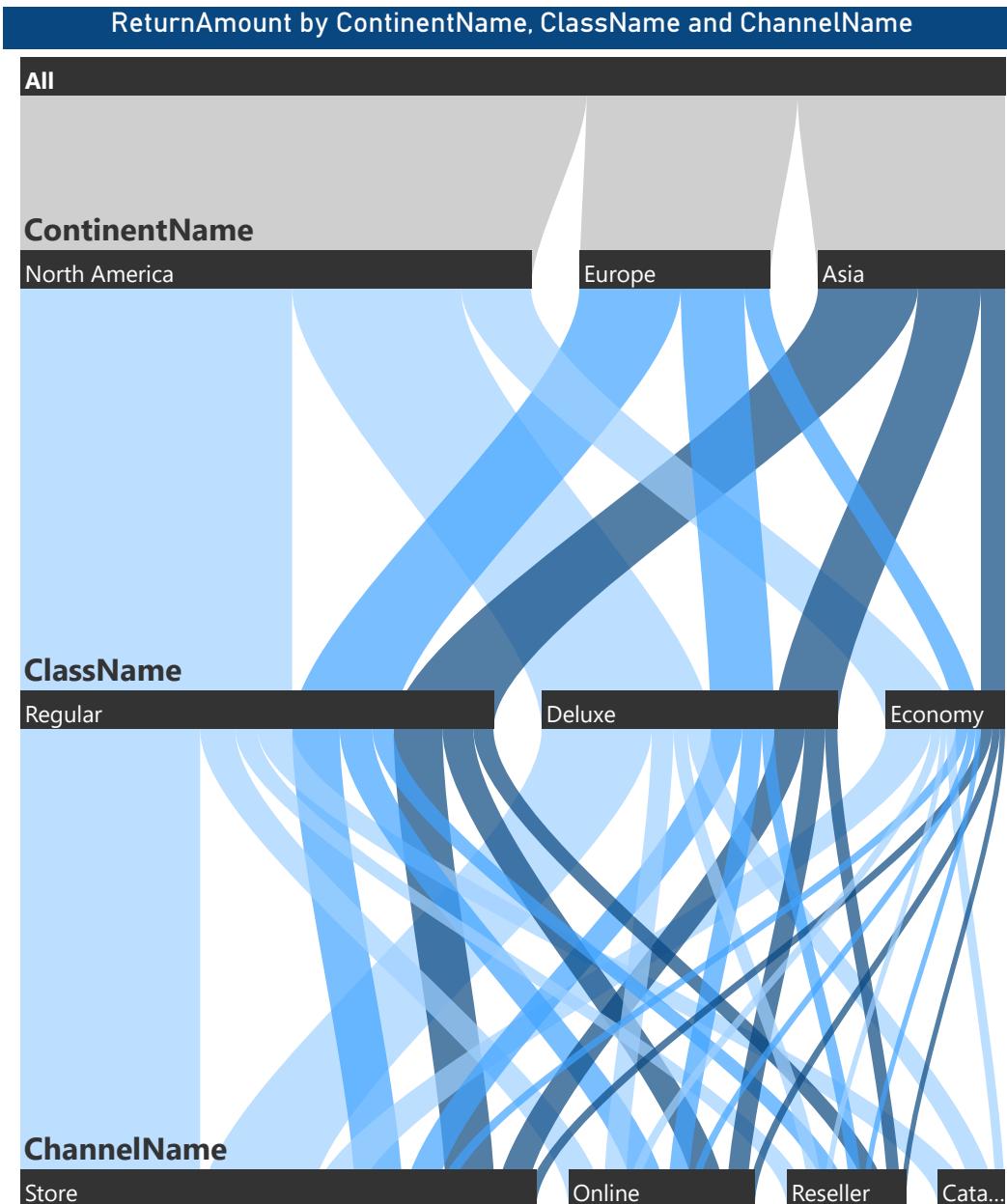


DiscountAmount, ReturnAmount and SalesAmount by ClassName





1 CAT - 3 NUM





MULTIDIMENSIONAL ANALYTICS- SALES AMOUNT BY PRODUCT

Key influencers Top segments



What influences ReturnAmount to Decrease



?

When...

....the average of
ReturnAmount decreases by

ProductCategoryName is
Games and Toys



ProductCategoryName is
Audio



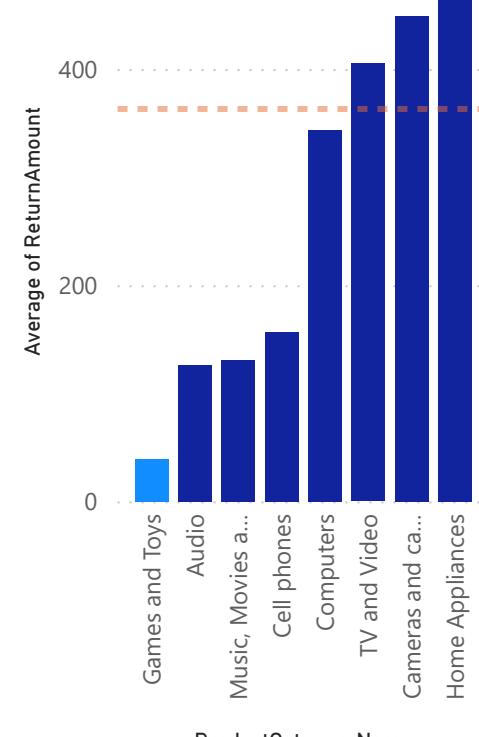
ProductCategoryName is
Music, Movies and Audio
Books



ProductCategoryName is
Cell phones



← ReturnAmount is more likely to decrease
when ProductCategoryName is Games and
Toys than otherwise (on average).



Sort by: **Impact** Count

ProductCategory...

Average of ReturnA...
338.60

Home Appliances
463.71

Cameras and camcord...
448.87

TV and Video
405.11

Computers
343.66

Cell phones
157.08

Average return Amount by Product

ProductCategoryName	Average of ReturnAmount
Audio	126.06
Cameras and camcorders	448.87
Cell phones	157.08
Computers	343.66
Games and Toys	39.58
Home Appliances	463.71
Music, Movies and Audio Books	130.58
Total	338.60



MULTIDIMENSIONAL ANALYTICS- SALES AMOUNT BY CLASS NAME

Key influencers Top segments



ClassName X

What influences ReturnAmount to Decrease ▼ ?

When...

...the average of
ReturnAmount decreases by

ClassName is Economy

372.3

Manufacturer is Contoso,
Ltd

89.51

BrandName is Contoso

89.51

BrandName is Southridge
Video

162.8

Manufacturer is Southridge
Video

162.8

BrandName is Tailspin Toys

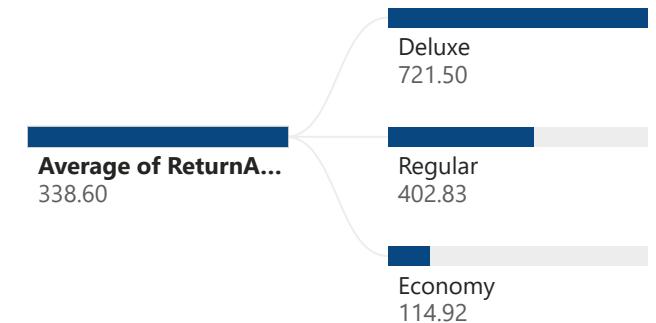
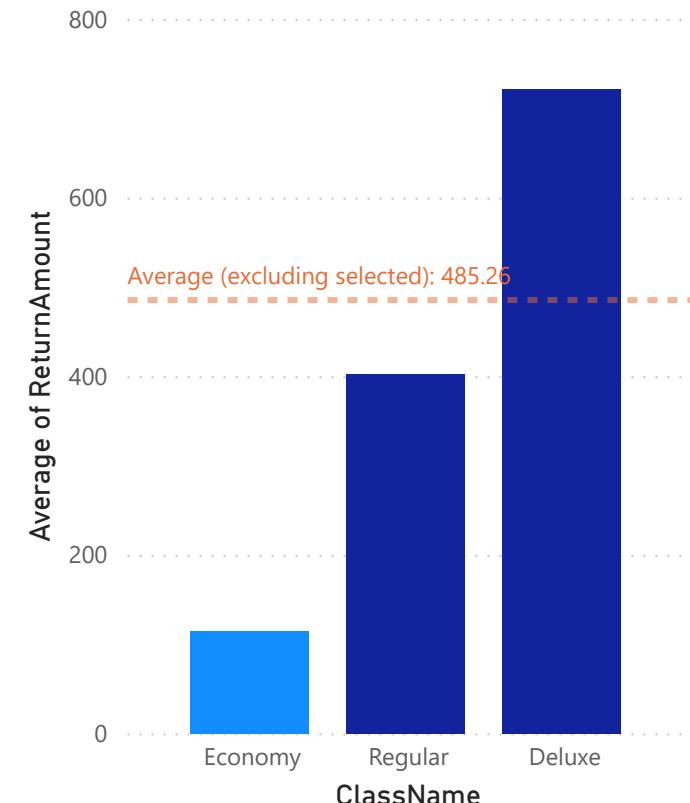
310.1

Manufacturer is Tailspin
Toys

310.1

Sort by: Impact Count

← ReturnAmount is more likely to decrease when ClassName is Economy than otherwise (on average).



Average Return Amount by Class Name

ClassName	Average of ReturnAmount
Deluxe	721.50
Economy	114.92
Regular	402.83
Total	338.60