Internet Sales Dashboard for Adventure Work Cycles

By

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Course

Data Visualization

Professor

Nipa

Overview

- About Company
- Data source
    - OLTP Database
    - Datawarehouse
- Business Questions
- Tools Used
- Connectivity
- Visualizations and dashboard
- Insights
- Conclusion

About Company

Advanture Work Cycles

The company manufactures and sells metal and composite bicycles to North American, European and Asian commercial markets. While its base operation is in Bothell, Washington with 290 employees, several regional sales teams are located throughout their market base.

OLTP – Transactional Database

- Sales
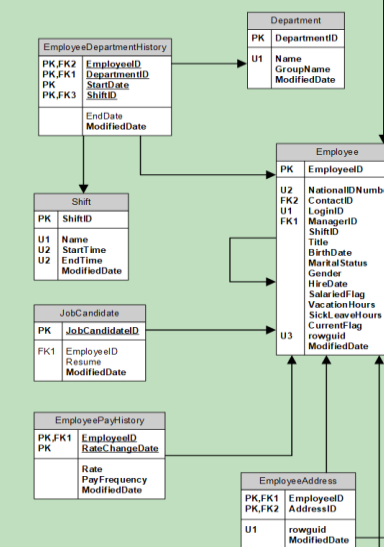- Person
- Production
- Purchasing
- Human Resource

Data Source

AdventureWorks OLTP Schema
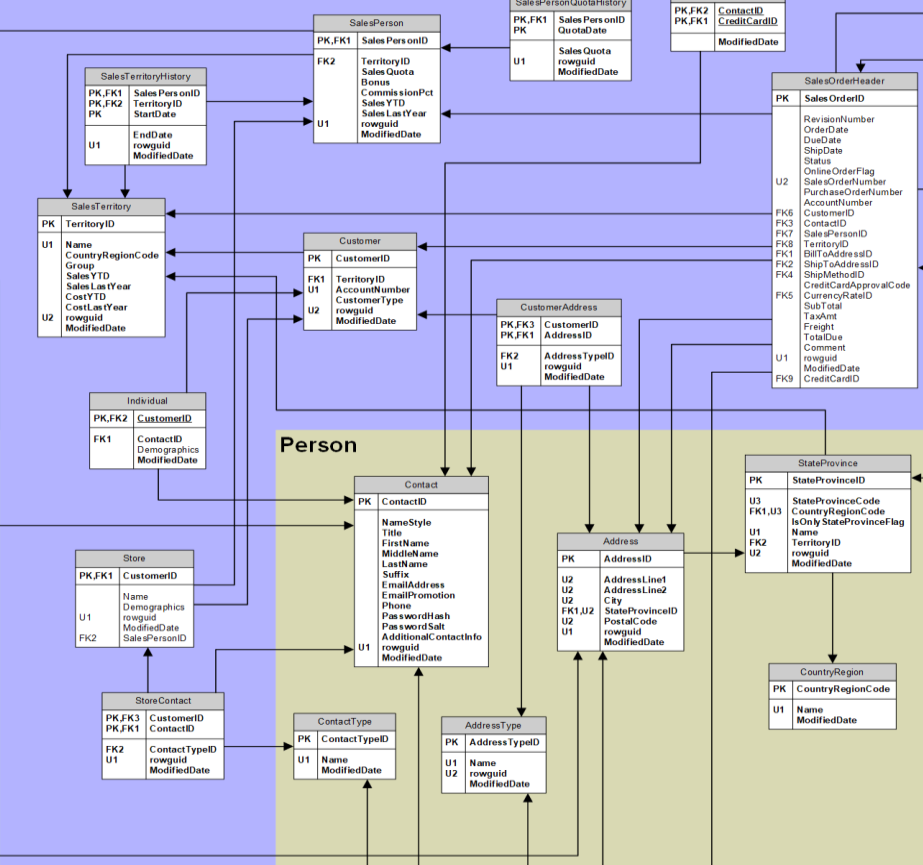## November 2005

Best Print Results if:
11X17 paper
Landscape
Fit to 1 sheet

Sales

dbo

HumanResources

Person

Production

Purchasing

Schemas

- Sales
- Purchasing
- Person
- Production
- HumanResources
- dbo

AWBuildVersion
| PK | SystemInformationID |
| Database Version |
| VersionDate |
| ModifiedDate |

ErrorLog
| PK | ErrorLogID |
| ErrorTime |
| UserName |
| ErrorNumber |
| ErrorSeverity |
| ErrorState |
| ErrorProcedure |
| ErrorLine |
| ErrorMessage |

DatabaseLog
| PK | DatabaseLogID |
| PostTime |
| DatabaseUser |
| Event |
| Schema |
| Object |
| TSQL |
| XmlEvent |

SalesPersonQuotaHistory
PK,FK1	SalesPersonID
PK	QuotaDate
	SalesQuota
U1	rowguid
	ModifiedDate

ContactCreditCard
PK,FK2	ContactID
PK,FK1	CreditCardID
	ModifiedDate

CreditCard
PK	CreditCardID
U1	CardType
	CardNumber
	ExpMonth
	ExpYear
	ModifiedDate

SalesPerson
PK,FK1	SalesPersonID
FK2	TerritoryID
	SalesQuota
	Bonus
	CommissionPct
	SalesYTD
	SalesLastYear
U1	rowguid
	ModifiedDate

SalesOrderHeaderSalesReason
PK,FK1	SalesOrderID
PK,FK2	SalesReasonID
	ModifiedDate

SalesReason
PK	SalesReasonID
	Name
	ReasonType
	ModifiedDate

SpecialOffer
PK	SpecialOfferID
	Description
	DiscountPct
	Type
	Category
	StartDate
	EndDate
	MinQty
	MaxQty
U1	rowguid
	ModifiedDate

SalesTerritoryHistory
PK,FK1	SalesPersonID
PK,FK2	TerritoryID
PK	StartDate
	EndDate
U1	rowguid
	ModifiedDate

SalesOrderHeader
PK	SalesOrderID
	RevisionNumber
	OrderDate
	DueDate
	ShipDate
	Status
U2	OnlineOrderFlag
	SalesOrderNumber
	PurchaseOrderNumber
	AccountNumber
FK6	CustomerID
FK3	ContactID
FK7	SalesPersonID
FK8	TerritoryID
FK1	BillToAddressID
FK2	ShipToAddressID
FK4	ShipMethodID
FK5	CreditCardApprovalCode
	CurrencyRateID
	SubTotal
	TaxAmt
	Freight
	TotalDue
	Comment
U1	rowguid
	ModifiedDate
FK9	CreditCardID

CurrencyRate
PK	CurrencyRateID
U1	CurrencyRateDate
FK1,U1	FromCurrencyCode
FK2,U1	ToCurrencyCode
	AverageRate
	EndOfDayRate
	ModifiedDate

Currency
PK	CurrencyCode
U1	Name
	ModifiedDate

SalesTerritory
PK	TerritoryID
U1	Name
	CountryRegionCode
	Group
	SalesYTD
	SalesLastYear
	CostYTD
	CostLastYear
U2	rowguid
	ModifiedDate

Customer
PK	CustomerID
FK1	TerritoryID
U1	AccountNumber
	CustomerType
U2	rowguid
	ModifiedDate

SalesOrderDetail
PK,FK1	SalesOrderID
PK	SalesOrderDetailID
	CarrierTrackingNumber
	OrderQty
FK2	ProductID
FK2	SpecialOfferID
	UnitPrice
	UnitPriceDiscount
	LineTotal
U1	rowguid
	ModifiedDate

SpecialOfferProduct
PK,FK2	SpecialOfferID
PK,FK1	ProductID
U1	rowguid
	ModifiedDate

CustomerAddress
PK,FK3	CustomerID
PK,FK1	AddressID
FK2	AddressTypeID
U1	rowguid
	ModifiedDate

SalesTaxRate
PK	SalesTaxRateID
FK1,U2	StateProvinceID
U2	TaxType
	TaxRate
U1	Name
	rowguid
	ModifiedDate

ShoppingCartItem
PK	ShoppingCartItemID
	ShoppingCartID
	Quantity
FK1	ProductID
	DateCreated
	ModifiedDate

Individual
PK,FK2	CustomerID
FK1	ContactID
	Demographics
	ModifiedDate

Contact
PK	ContactID
	NameStyle
	Title
	FirstName
	MiddleName
	LastName
	Suffix
	EmailAddress
	EmailPromotion
	Phone
	PasswordHash
	PasswordSalt
	AdditionalContactInfo
	rowguid
	ModifiedDate

StateProvince
PK	StateProvinceID
U3	StateProvinceCode
FK1,U3	CountryRegionCode
	IsOnlyStateProvinceFlag
U1	Name
FK2	TerritoryID
U2	rowguid
	ModifiedDate

Address
PK	AddressID
U2	AddressLine1
U2	AddressLine2
U2	City
FK1,U2	StateProvinceID
U2	PostalCode
U1	rowguid
	ModifiedDate

Store
PK,FK1	CustomerID
	Name
	Demographics
	rowguid
FK2	SalesPersonID
	ModifiedDate

CountryRegion
PK	CountryRegionCode
U1	Name
	ModifiedDate

StoreContact
PK,FK3	CustomerID
PK,FK1	ContactID
FK2	ContactTypeID
	rowguid
	ModifiedDate

ContactType
PK	ContactTypeID
U1	Name
	ModifiedDate

AddressType
PK	AddressTypeID
U1	Name
U2	rowguid
	ModifiedDate

Department
PK	DepartmentID
U1	Name
	GroupName
	ModifiedDate

EmployeeDepartmentHistory
PK,FK2	EmployeeID
PK,FK1	DepartmentID
PK	StartDate
PK,FK3	ShiftID
	EndDate
	ModifiedDate

Shift
PK	ShiftID
U1	Name
U2	StartTime
U2	EndTime
	ModifiedDate

Employee
PK	EmployeeID
U2	NationalIDNumber
FK2	ContactID
U1	LoginID
FK1	ManagerID
	Title
	BirthDate
	MaritalStatus
	Gender
	HireDate
	SalariedFlag
	VacationHours
	SickLeaveHours
	CurrentFlag
U3	rowguid
	ModifiedDate

JobCandidate
PK	JobCandidateID
FK1	EmployeeID
	Resume
	ModifiedDate

EmployeePayHistory
PK,FK1	EmployeeID
PK	RateChangeDate
	Rate
	PayFrequency
	ModifiedDate

EmployeeAddress
PK,FK1	EmployeeID
PK,FK2	AddressID
U1	rowguid
	ModifiedDate

ProductReview
PK	ProductReviewID
FK1	ProductID
	ReviewerName
	ReviewDate
	EmailAddress
	Rating
	Comments
	ModifiedDate

ProductListPriceHistory
PK,FK1	ProductID
PK	StartDate
	EndDate
	ListPrice
	ModifiedDate

ProductPhoto
PK	ProductPhotoID
	ThumbNailPhoto
	ThumbnailPhotoFileName
	LargePhoto
	LargePhotoFileName
	ModifiedDate

ProductModelIllustration
PK,FK2	ProductModelID
PK,FK1	IllustrationID
	ModifiedDate

Illustration
PK	IllustrationID
	Diagram
	ModifiedDate

ProductProductPhoto
PK,FK1	ProductID
PK,FK2	ProductPhotoID
	Primary
	ModifiedDate

ProductModel
PK	ProductModelID
U1	Name
	CatalogDescription
	Instructions
U2	rowguid
	ModifiedDate

ProductModelProductDescriptionCulture
PK,FK3	ProductModelID
PK,FK2	ProductDescriptionID
PK,FK1	CultureID
	ModifiedDate

Culture
PK	CultureID
U1	Name
	ModifiedDate

Product
PK	ProductID
U1	Name
U2	ProductNumber
	MakeFlag
	FinishedGoodsFlag
	Color
	SafetyStockLevel
	ReorderPoint
	StandardCost
	ListPrice
	Size
FK3	SizeUnitMeasureCode
FK4	WeightUnitMeasureCode
	Weight
	DaysToManufacture
	ProductLine
	Class
	Style
FK2	ProductSubcategoryID
FK1	ProductModelID
	SellStartDate
	SellEndDate
	DiscontinuedDate
	rowguid
	ModifiedDate

ProductSubcategory
PK	ProductSubcategoryID
FK1	ProductCategoryID
U1	Name
U2	rowguid
	ModifiedDate

ProductCategory
PK	ProductCategoryID
U1	Name
U2	rowguid
	ModifiedDate

ProductDescription
PK	ProductDescriptionID
	Description
U1	rowguid
	ModifiedDate

BillOfMaterials
PK	BillOfMaterialsID
FK1,U1	ProductAssemblyID
FK2,U1	ComponentID
U1	StartDate
	EndDate
FK3	UnitMeasureCode
	BOMLevel
	PerAssemblyQty
	ModifiedDate

ProductDocument
PK,FK2	ProductID
PK,FK1	DocumentID
	ModifiedDate

ProductCostHistory
PK,FK1	ProductID
PK	StartDate
	EndDate
	StandardCost
	ModifiedDate

UnitMeasure
PK	UnitMeasureCode
U1	Name
	ModifiedDate

VendorContact
PK,FK3	VendorID
PK,FK1	ContactID
FK2	ContactTypeID
	ModifiedDate

ShipMethod
PK	ShipMethodID
U1	Name
	ShipBase
	ShipRate
U2	rowguid
	ModifiedDate

TransactionHistory
PK	TransactionID
FK1	ProductID
	ReferenceOrderID
	TransactionDate
	TransactionType
	Quantity
	ActualCost
	ModifiedDate
	ReferenceOrderLineID

ProductInventory
PK,FK2	ProductID
PK,FK1	LocationID
	Shelf
	Bin
	Quantity
	rowguid
	ModifiedDate

WorkOrderRouting
PK,FK2	WorkOrderID
PK	ProductID
PK	OperationSequence
	LocationID
FK1	ScheduledStartDate
	ScheduledEndDate
	ActualStartDate
	ActualEndDate
	ActualResourceHrs
	PlannedCost
	ActualCost
	ModifiedDate

Document
PK	DocumentID
	Title
	FileName
	FileExtension
	Revision
	ChangeNumber
	Status
	DocumentSummary
	Document
	ModifiedDate

TransactionHistoryArchive
PK	TransactionID
	ProductID
	ReferenceOrderID
	TransactionDate
	TransactionType
	Quantity
	ActualCost
	ModifiedDate
	ReferenceOrderLineID

Vendor
PK	VendorID
U1	AccountNumber
	Name
	CreditRating
	PreferredVendorStatus
	ActiveFlag
	PurchasingWebServiceURL
	ModifiedDate

VendorAddress
PK,FK3	VendorID
PK,FK1	AddressID
FK2	AddressTypeID
	ModifiedDate

ProductVendor
PK,FK1	ProductID
PK,FK3	VendorID
	AverageLeadTime
	StandardPrice
	LastReceiptCost
	LastReceiptDate
	MinOrderQty
	MaxOrderQty
	OnOrderQty
FK2	UnitMeasureCode
	ModifiedDate

PurchaseOrderHeader
PK	PurchaseOrderID
PK,FK3	ShipMethodID
	RevisionNumber
	Status
FK1	EmployeeID
FK2	VendorID
	OrderDate
	ShipDate
	SubTotal
	TaxAmt
	Freight
	TotalDue
	ModifiedDate

PurchaseOrderDetail
PK,FK2	PurchaseOrderID
PK,FK2	PurchaseOrderID
PK	PurchaseOrderDetailID
	DueDate
	OrderQty
FK1	ProductID
	UnitPrice
	LineTotal
	ReceivedQty
	RejectedQty
	StockedQty
	ModifiedDate

Location
PK	LocationID
U1	Name
	CostRate
	Availability
	ModifiedDate

WorkOrder
PK	WorkOrderID
FK1	ProductID
	OrderQty
	StockedQty
	ScrappedQty
	StartDate
	EndDate
	DueDate
FK2	ScrapReasonID
	ModifiedDate

ScrapReason
PK	ScrapReasonID
U1	Name
	ModifiedDate

Datawarehouse schema

dbo

AdventureWorksDWBuildVersion
- DBVersion
- VersionDate

DatabaseLog
- DatabaseLogID
- PostTime
- DatabaseUser
- Event
- Schema
- Object
- TSQL
- XmlEvent

DimSalesReason
PK	SalesReasonKey
	SalesReasonAlternateKey
	SalesReasonName
	SalesReasonType

FactInternetSalesReason
PK,FK2	SalesOrderNumber
PK,FK2	SalesOrderLineNumber
PK,FK1	SalesReasonKey

FactInternetSales
	SalesOrderNumber
	SalesOrderLineNumber
FK2,I5	ProductKey
FK3,I4	OrderDateKey
FK4,I3	DueDateKey
FK5,I7	ShipDateKey
FK1,I2	CustomerKey
FK7	PromotionKey
FK6	CurrencyKey
FK8	SalesTerritoryKey
	RevisionNumber
	OrderQuantity
	UnitPrice
	ExtendedAmount
	UnitPriceDiscountPct
	DiscountAmount
	ProductStandardCost
	TotalProductCost
	SalesAmount
	TaxAmt
	Freight
	CarrierTrackingNumber
	CustomerPONumber

FactSurveyResponse
PK	SurveyResponseKey
	DateKey
	CustomerKey
	ProductCategoryKey
	EnglishProductCategoryname
	ProductSubCategoryKey
	EnglishProductSubcategoryName

DimReseller
PK	ResellerKey
FK1	GeographyKey
U1	ResellerAlternateKey
	Phone
	BusinessType
	ResellerName
	NumberEmployees
	OrderFrequency
	OrderMonth
	FirstOrderYear
	LastOrderYear
	ProductLine
	AddressLine1
	AddressLine2
	AnnualSales
	BankName
	MinPaymentType
	MinPaymentAmount
	AnnualRevenue
	YearOpened

ProspectiveBuyer
PK	ProspectiveBuyerKey
	ProspectAlternateKey
	FirstName
	MiddleName
	LastName
	BirthDate
	MaritalStatus
	Gender
	EmailAddress
	YearlyIncome
	TotalChildren
	NumberChildrenAtHome
	Education
	Occupation
	HouseOwnerFlag
	NumberCarsOwned
	AddressLine1
	AddressLine2
	City
	StateProvinceCode
	PostalCode
	Phone
	Salutation
	Unknown

DimCustomer
PK	CustomerKey
FK1,I1	GeographyKey
U1	CustomerAlternateKey
	Title
	FirstName
	MiddleName
	LastName
	NameStyle
	BirthDate
	MaritalStatus
	Suffix
	Gender
	EmailAddress
	YearlyIncome
	TotalChildren
	NumberChildrenAtHome
	EnglishEducation
	SpanishEducation
	FrenchEducation
	EnglishOccupation
	SpanishOccupation
	FrenchOccupation
	HouseOwnerFlag
	NumberCarsOwned
	AddressLine1
	AddressLine2
	Phone
	DateFirstPurchase
	CommuteDistance

DimGeography
PK	GeographyKey
	City
	StateProvinceCode
	StateProvinceName
	CountryRegionCode
	EnglishCountryRegionName
	SpanishCountryRegionName
	FrenchCountryRegionName
	PostalCode
FK1	SalesTerritoryKey

DimAccount
PK	AccountKey
FK1	ParentAccountKey
U1	AccountCodeAlternateKey
	ParentAccountCodeAlternateKey
	AccountDescription
	AccountType
	Operator
	CustomMembers
	ValueType
	CustomMemberOptions

DimDepartmentGroup
PK	DepartmentGroupKey
FK1	ParentDepartmentGroupKey
	DepartmentGroupName

DimScenario
PK	ScenarioKey
	ScenarioName

DimCurrency
PK	CurrencyKey
U1	CurrencyAlternateKey
	CurrencyName

DimPromotion
PK	PromotionKey
U1	PromotionAlternateKey
	EnglishPromotionName
	SpanishPromotionName
	FrenchPromotionName
	DiscountPct
	EnglishPromotionType
	SpanishPromotionType
	FrenchPromotionType
	EnglishPromotionCategory
	SpanishPromotionCategory
	FrenchPromotionCategory
	StartDate
	EndDate
	MinQty
	MaxQty

DimProduct
PK	ProductKey
U1	ProductAlternateKey
FK1,I1	ProductSubCategoryKey
	WeightUnitMeasureCode
	SizeUnitMeasureCode
	EnglishProductName
	SpanishProductName
	FrenchProductName
	StandardCost
	FinishedGoodsFlag
	Color
	SafetyStockLevel
	ReorderPoint
	ListPrice
	Size
	SizeRange
	Weight
	DaysToManufacture
	ProductLine
	DealerPrice
	Class
	Style
	ModelName
	LargePhoto
	EnglishDescription
	FrenchDescription
	ChineseDescription
	ArabicDescription
	HebrewDescription
	ThaiDescription
	GermanDescription
	JapaneseDescription
	TurkishDescription
	StartDate
	EndDate
	Status

FactCurrencyRate
FK1	CurrencyKey
FK2	DateKey
	AverageRate
	EndOfDayRate

FactResellerSales
	SalesOrderNumber
	SalesOrderLineNumber
FK1,I5	ProductKey
FK2,I4	OrderDateKey
FK3,I3	DueDateKey
FK4,I7	ShipDateKey
FK8	ResellerKey
FK6	PromotionKey
FK5	CurrencyKey
FK7	SalesTerritoryKey
	RevisionNumber
	OrderQuantity
	UnitPrice
	ExtendedAmount
	UnitPriceDiscountPct
	DiscountAmount
	ProductStandardCost
	TotalProductCost
	SalesAmount
	TaxAmt
	Freight
	CarrierTrackingNumber
	CustomerPONumber

DimEmployee
PK	EmployeeKey
FK1,I1	ParentEmployeeKey
	EmployeeNationalIDAlternateKey
	ParentEmployeeNationalIDAlternateKey
FK2,I2	SalesTerritoryKey
	FirstName
	LastName
	MiddleName
	NameStyle
	Title
	HireDate
	BirthDate
	LoginID
	EmailAddress
	Phone
	MaritalStatus
	EmergencyContactName
	EmergencyContactPhone
	SalariedFlag
	Gender
	PayFrequency
	BaseRate
	VacationHours
	SickLeaveHours
	CurrentFlag
	SalesPersonFlag
	DepartmentName
	StartDate
	EndDate
	Status

FactFinance
PK	FinanceKey
FK5	DateKey
FK3	OrganizationKey
FK2	DepartmentGroupKey
FK4	ScenarioKey
FK1	AccountKey
	Amount

DimDate
PK	DateKey
U1	FullDateAlternateKey
	DayNumberOfWeek
	EnglishDayNameOfWeek
	SpanishDayNameOfWeek
	FrenchDayNameOfWeek
	DayNumberOfMonth
	DayNumberOfYear
	EnglishMonthName
	SpanishMonthName
	FrenchMonthName
	WeekNumberOfYear
	MonthNumberOfYear
	CalendarQuarter
	CalendarYear
	CalendarSemester
	FiscalQuarter
	FiscalYear
	FiscalSemester

DimSalesTerritory
PK	SalesTerritoryKey
U1	SalesTerritoryAlternateKey
	SalesTerritoryRegion
	SalesTerritoryCountry
	SalesTerritoryGroup
FK1	GeographyKey

DimOrganization
PK	OrganizationKey
FK1	ParentOrganizationKey
	PercentageOfOwnership
	OrganizationName
	CurrencyKey

DimProductSubcategory
PK	ProductSubCategoryKey
U1	ProductSubCategoryAlternateKey
	EnglishProductSubCategoryName
	SpanishProductSubCategoryName
	FrenchProductSubCategoryName
FK1	ProductCategoryKey

DimProductCategory
PK	ProductCategoryKey
U1	ProductCategoryAlternateKey
	EnglishProductCategoryName
	SpanishProductCategoryName
	FrenchProductCategoryName

FactSalesQuota
| PK	SalesQuotaKey
FK1,I1	EmployeeKey
FK2,I2	DateKey
	CalendarYear
	CalendarQuarter
	SalesAmountQuota

SQL Server

Business Questions

Internet sales Business Questions

Let's say VP of internet sales USA would like to have answer for following business question:

- Total online sales
- Percentage Sales by Country
- Sales by different sates of countries
- Sales by Year
- Sales by product category
- Sales by product Sub-category
- Units sold by year
- Top products in term of sales

Goal:

By the answering these question VP would be able to find weak areas and strong areas of sales and to make better business decisions and marketing strategies.
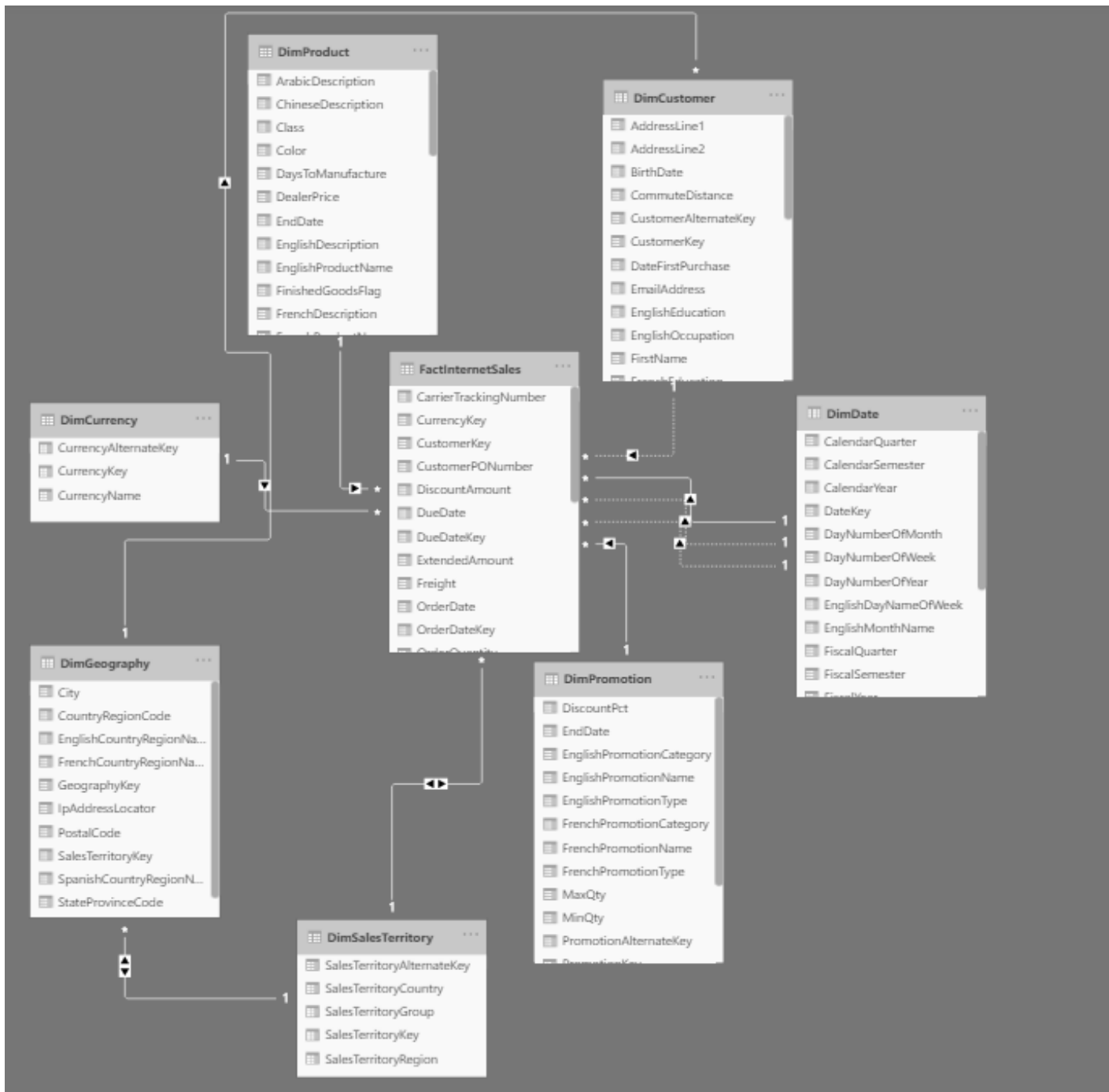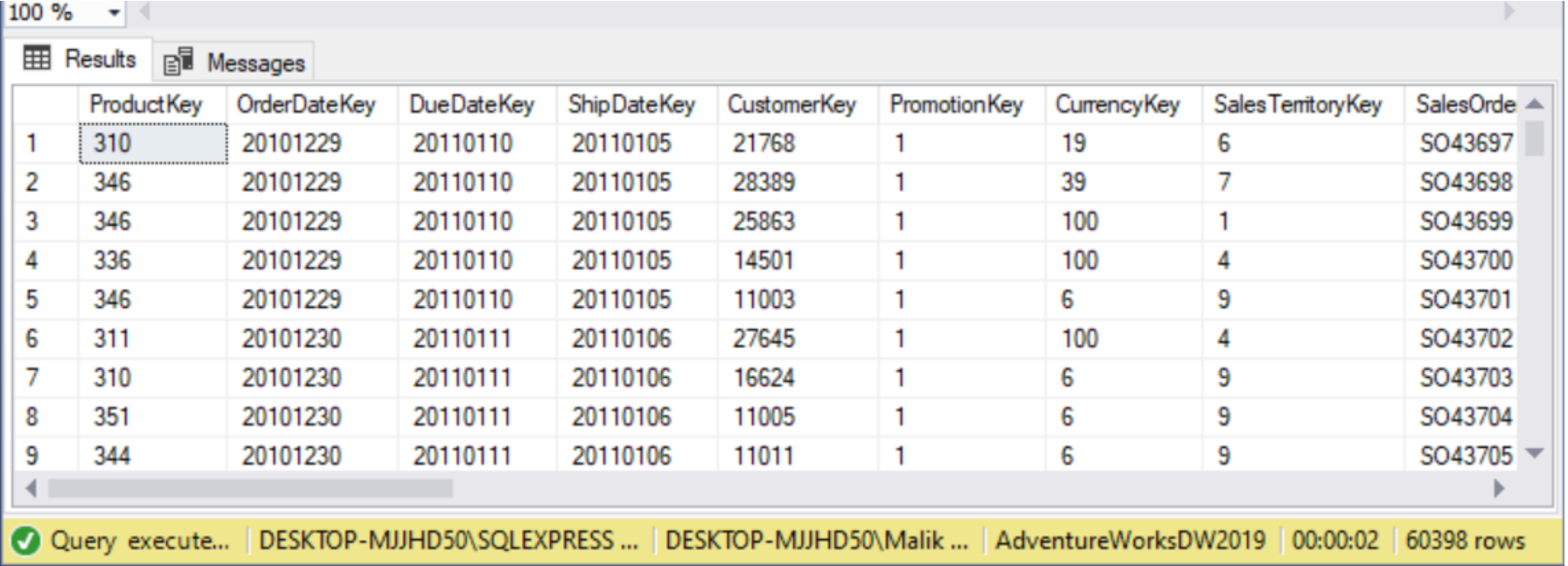
Data form dates:
Dec 2010 – Jan 2014

Connection

Fact Internet Sales

60398 records

Tableau Data Source Connection

FactInternetSales+ (AdventureWorksDW)

Connection
◉ Live   ○ Extract

Filters
0 | Add

FactInternetSales — DimDate

DimProduct — DimProductSubcategory — DimProductCategory

DimSalesTerritory — DimGeography — DimReseller
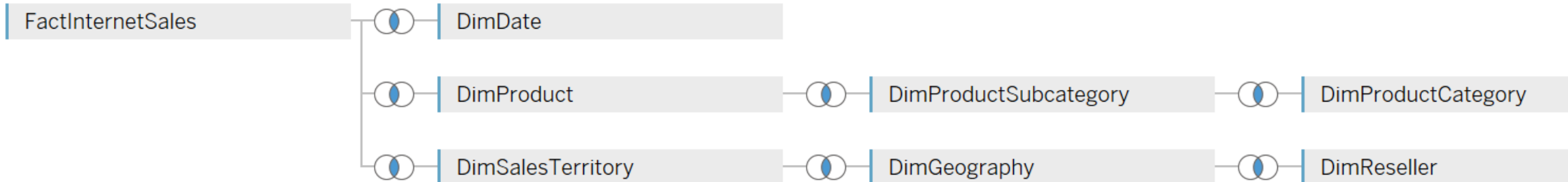
Dimensions
and
Measures

Data | Analytics

⚲ FactInternetSales+ (AdventureWorksDW)

Dimensions

> ⊞ **DimDate**
> ⊞ **DimGeography**
> ⊞ **DimProduct**
> ⊞ **DimProductCategory**
> ⊞ **DimProductSubcategory**
> ⊞ **DimSalesTerritory**
> ⊞ **FactInternetSales**
> ⊼ Country /province hierarchy
> ⊼ Product hierarchy
  Abc *Measure Names*

Measures

> ⊞ **DimDate**
> ⊞ **DimProduct**
> ⊞ **FactInternetSales**
  ⌗ index
  ⌗ Percetage of Total Sales
  ⌗ Profit
  ⊕ *Latitude (generated)*
  ⊕ *Longitude (generated)*
  ⌗ *Number of Records*

Sets

  ⊛ Top 10 Products by sales

Dashboard Design

Calculated Fields and Hierarchies

Profit

[Sales Amount] - [Total Product Cost]

Percetage of Total Sa

Totals summarize values from Table (across).
SUM([Sales Amount]) / TOTAL(SUM([Sales Amount]))

index

Results are computed along Table (across).
INDEX()

Country /province hiera
- ⊕ Country
- ⊕ State

Product hierarchy
- Abc Product Category
- Abc Product Subcategory
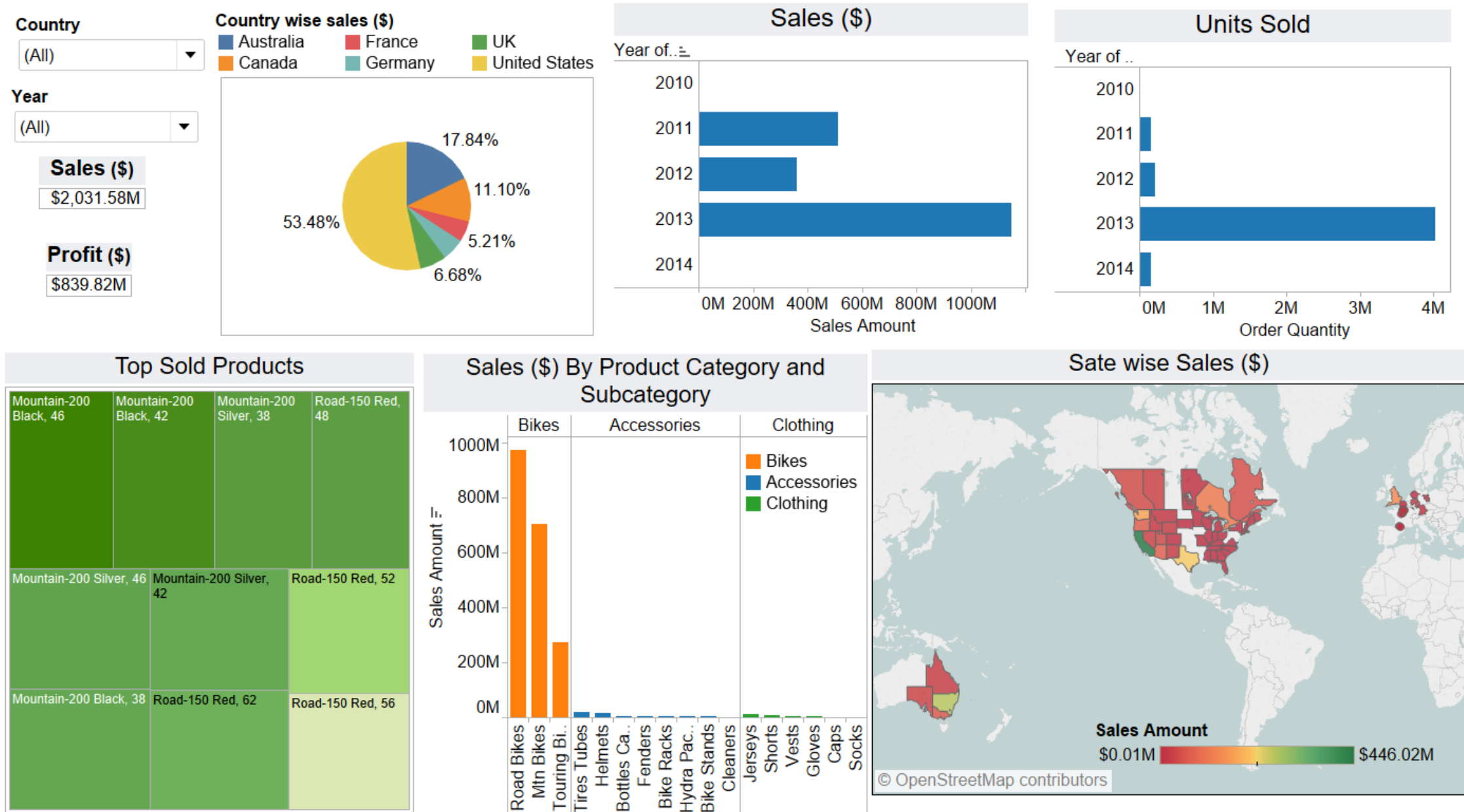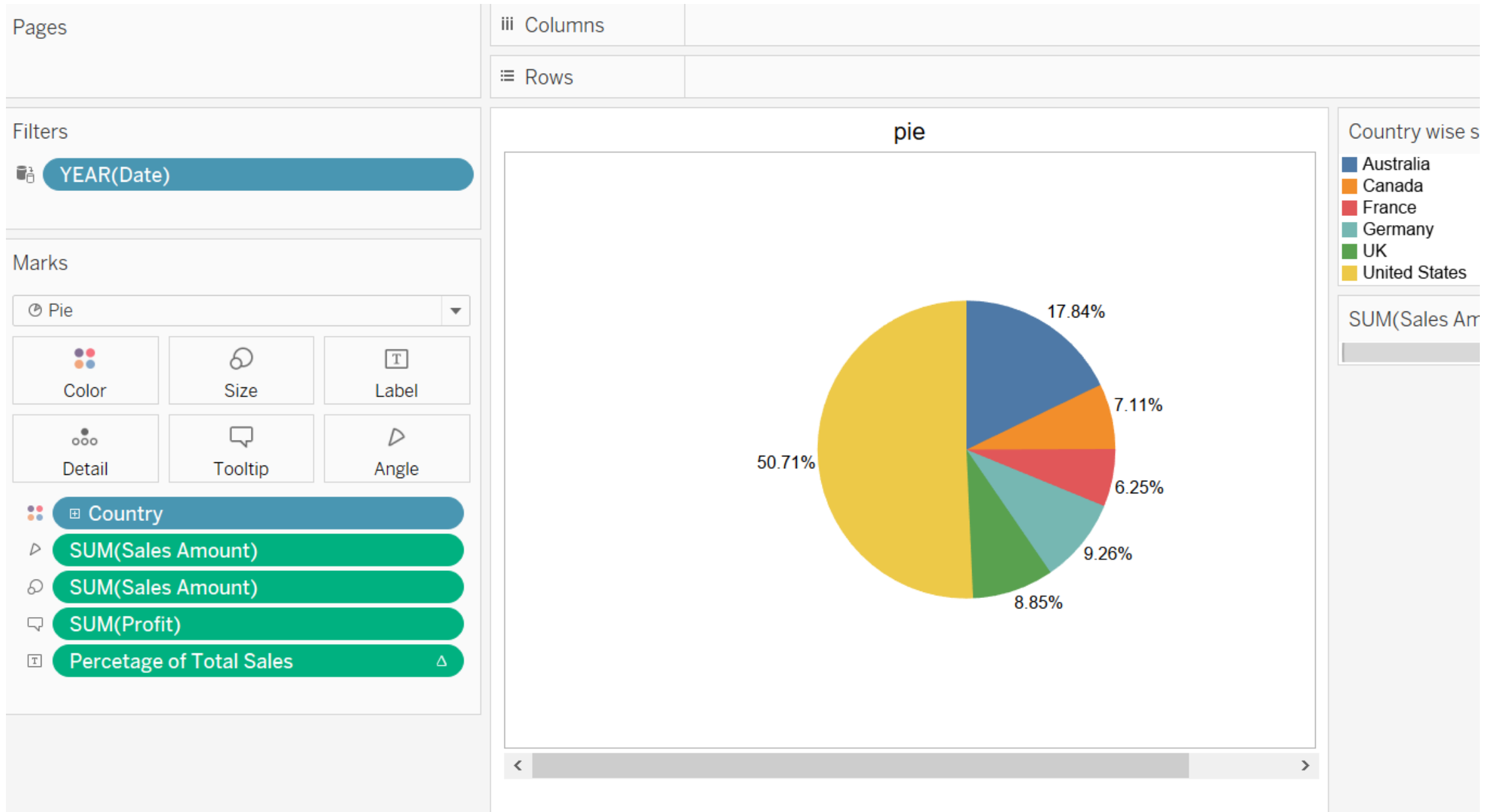
Dashboard

Pie chart of overall sales and profit
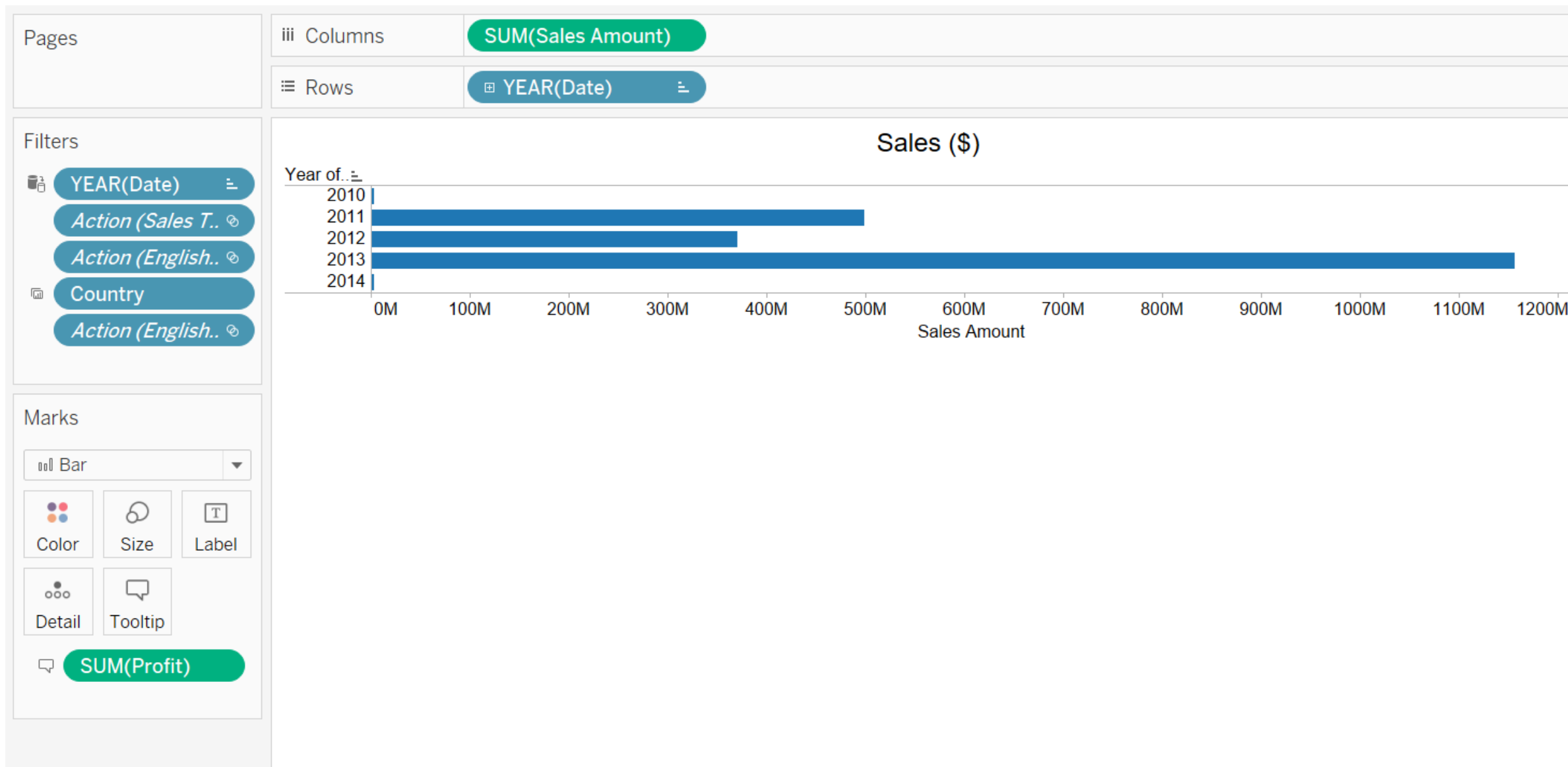
Sales by year
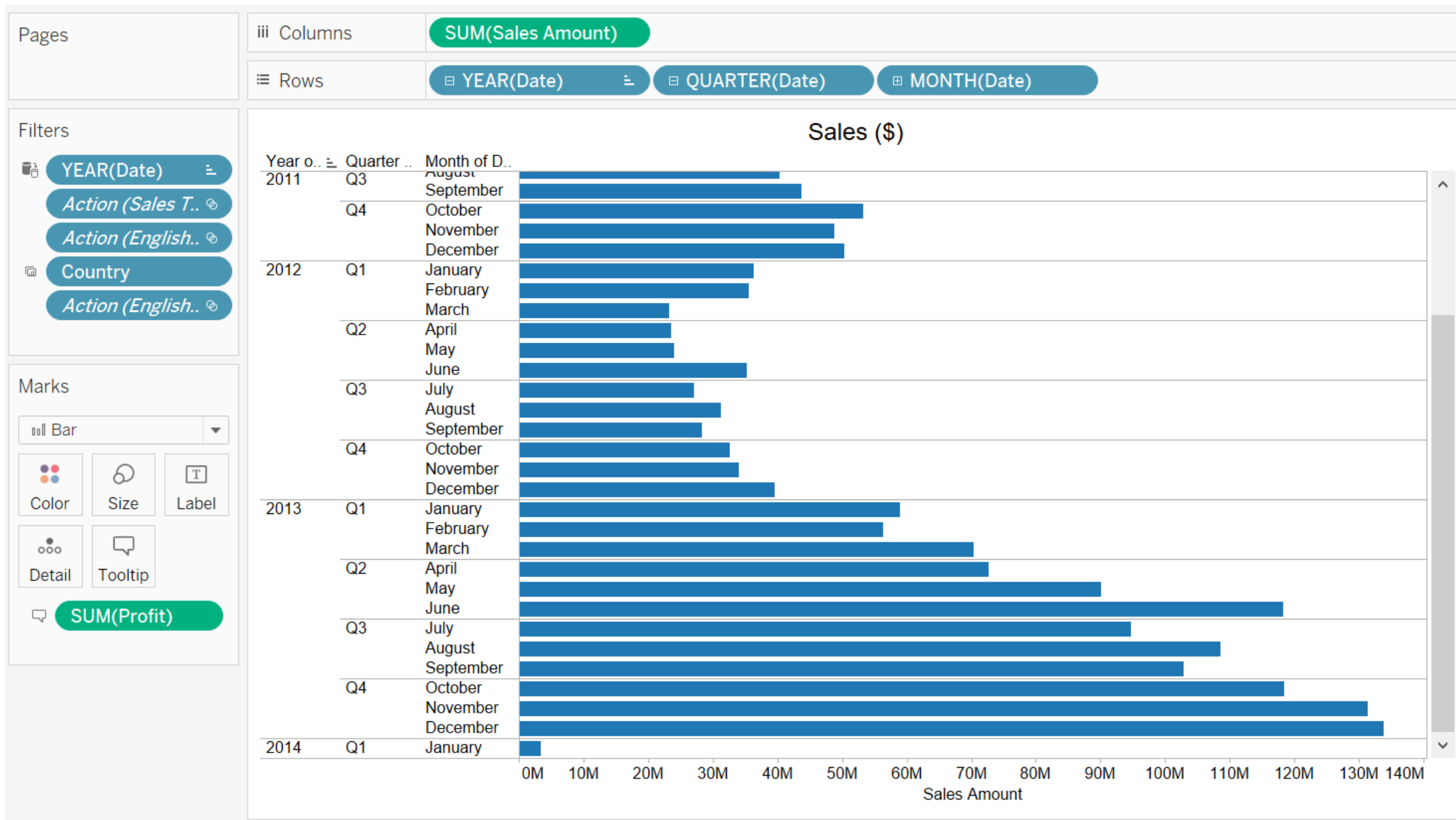
Sales by Date drilldown
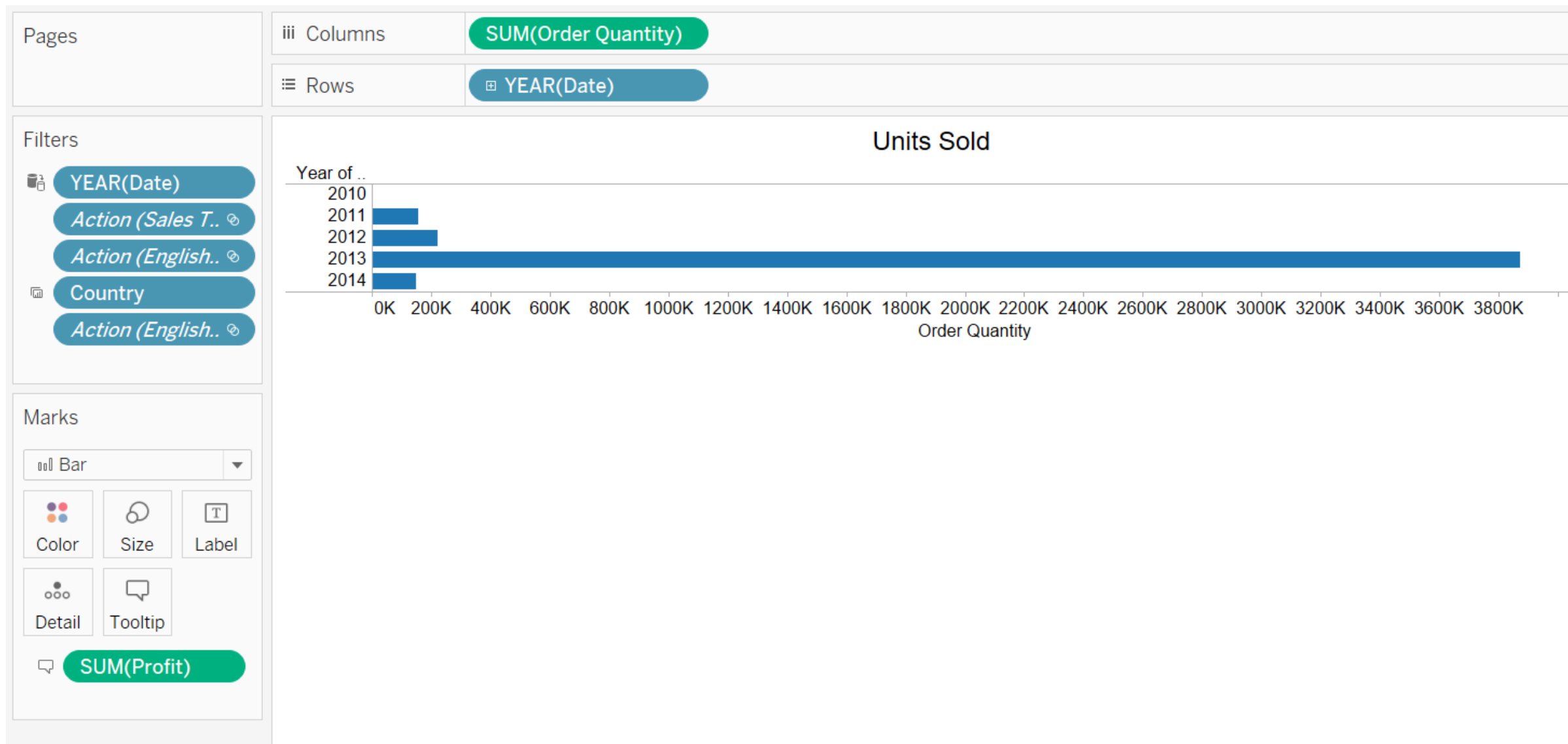
Units sold
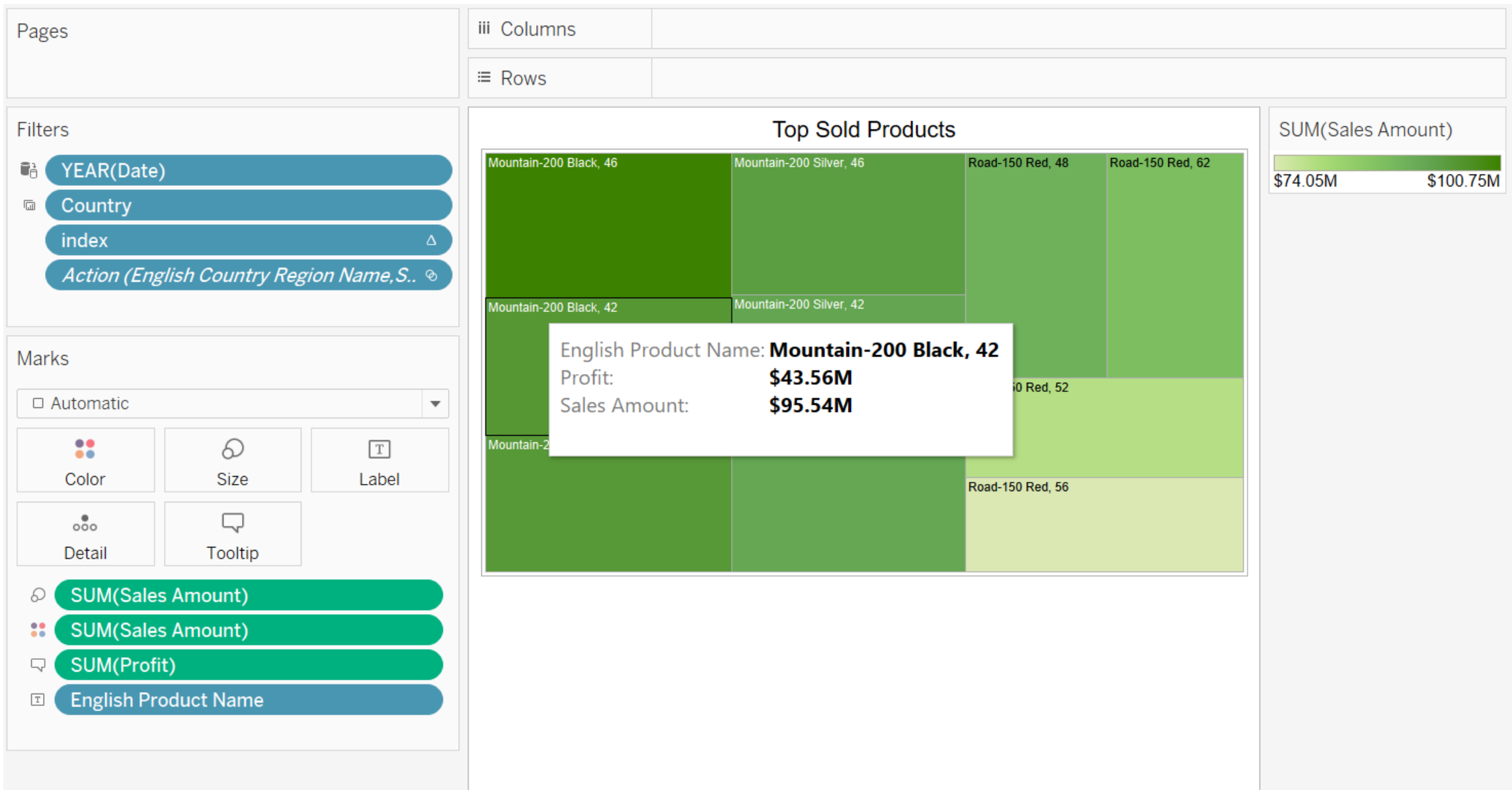
Top sold product
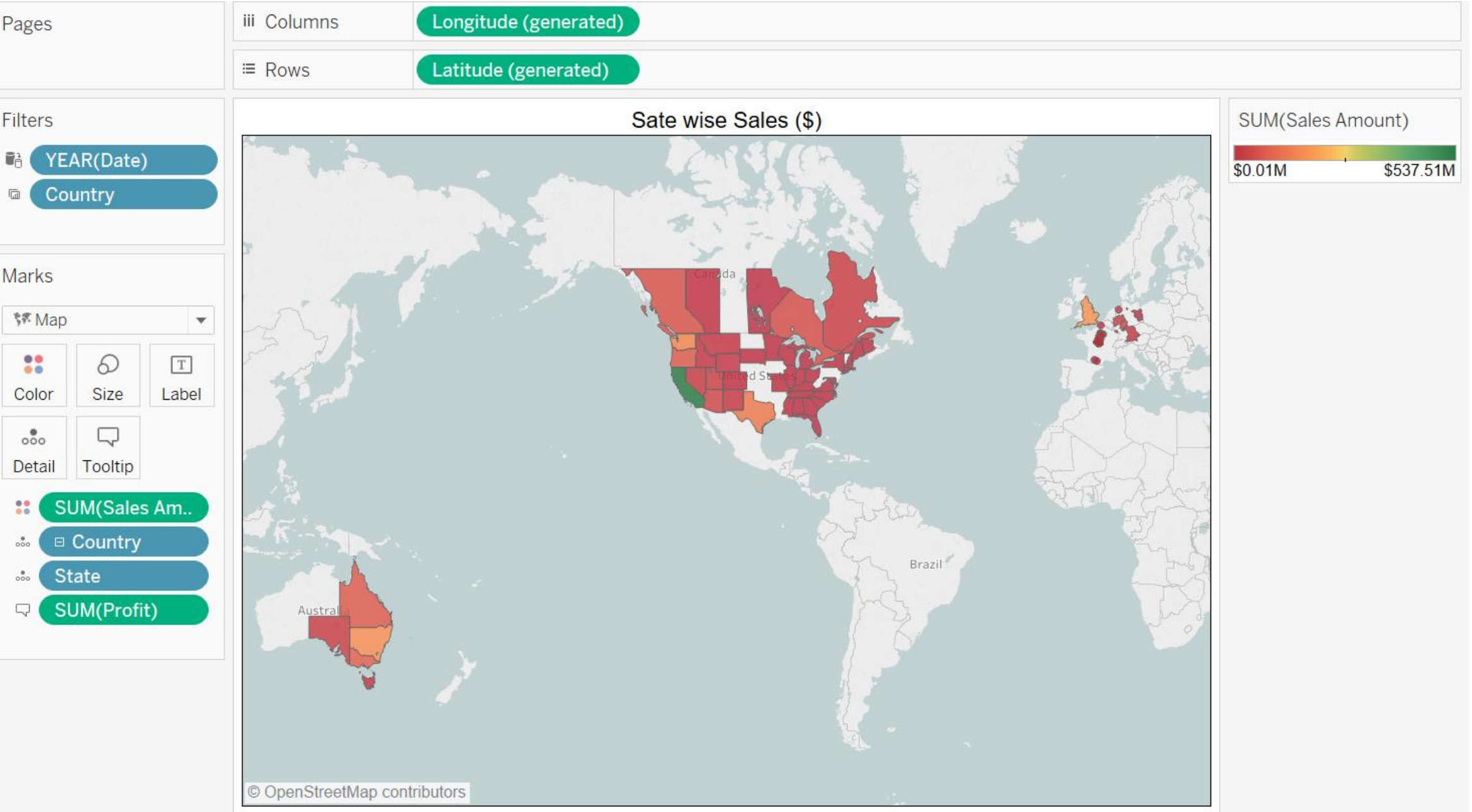
Sales by sates
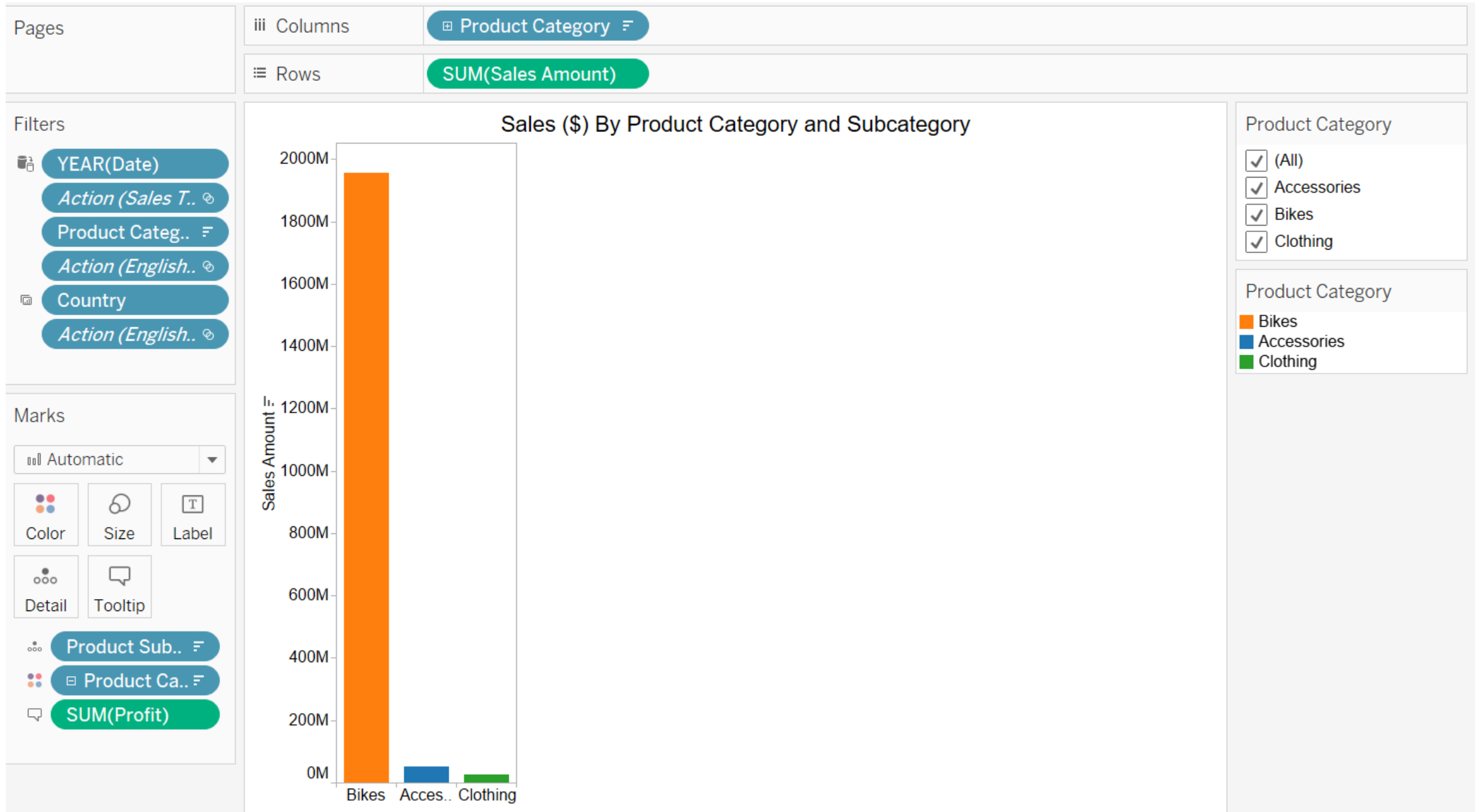
Sales by categories and subcategories
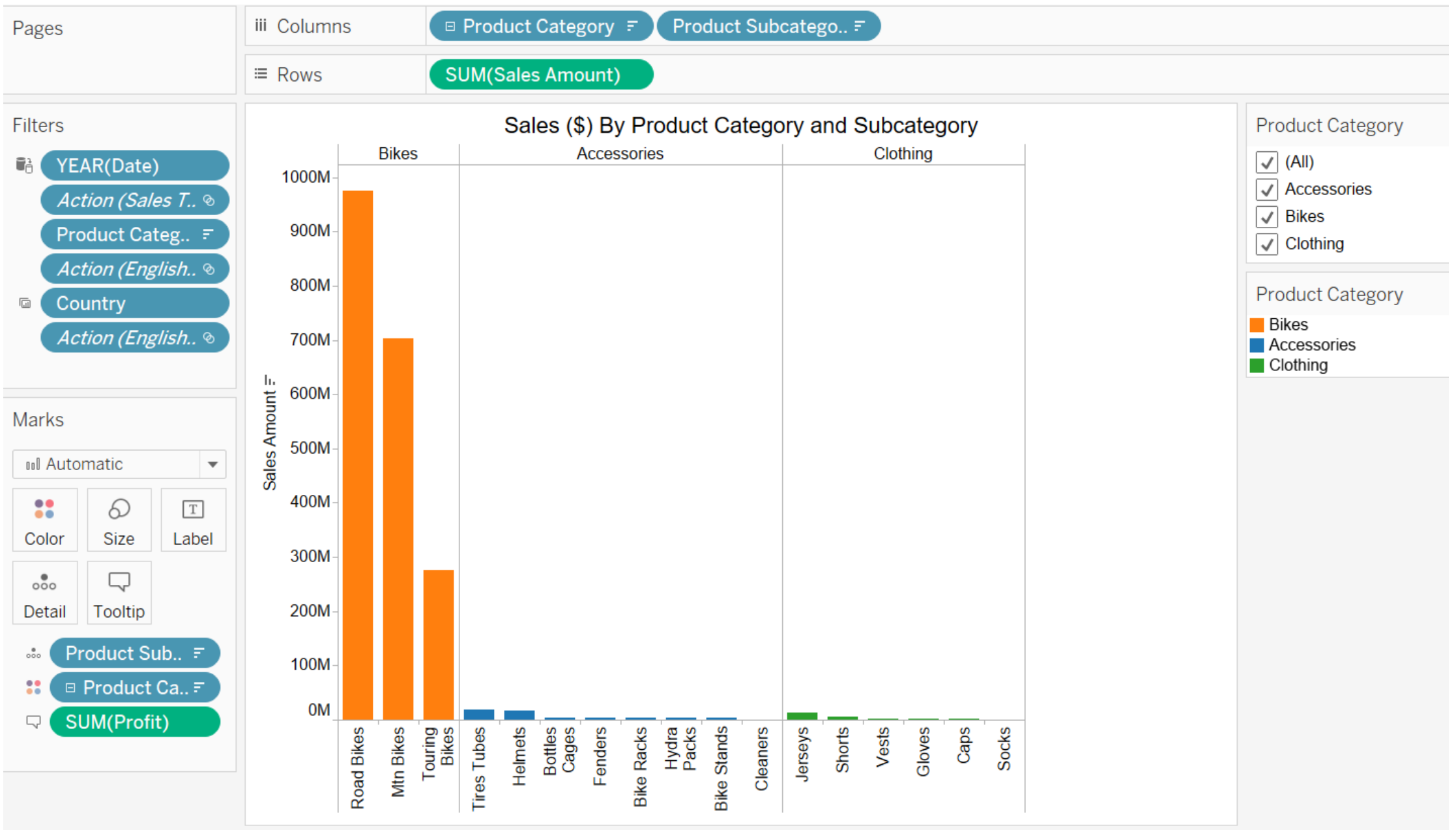
Sales by categories and subcategories drill down

Dashboard

Country

(All)

Year

(All)

Sales ($)

$2,031.58M

Profit ($)

$839.82M

Country wise sales ($)

- Australia
- France
- UK
- Canada
- Germany
- United States

17.84%
11.10%
5.21%
6.68%
53.48%

Sales ($)

Year of..

Year	Sales Amount

2010
2011
2012
2013
2014

0M 200M 400M 600M 800M 1000M
Sales Amount

Units Sold

Year of ..

2010
2011
2012
2013
2014

0M 1M 2M 3M 4M
Order Quantity

Top Sold Products

Mountain-200 Black, 46
Mountain-200 Black, 42
Mountain-200 Silver, 38
Road-150 Red, 48

Mountain-200 Silver, 46
Mountain-200 Silver, 42
Road-150 Red, 52

Mountain-200 Black, 38
Road-150 Red, 62
Road-150 Red, 56

Sales ($) By Product Category and Subcategory

Bikes | Accessories | Clothing

- Bikes
- Accessories
- Clothing

Sales Amount:
1000M
800M
600M
400M
200M
0M

Road Bikes, Mtn Bikes, Touring Bi.., Tires Tubes, Helmets, Bottles Ca.., Fenders, Bike Racks, Hydra Pac.., Bike Stands, Cleaners, Jerseys, Shorts, Vests, Gloves, Caps, Socks

Sate wise Sales ($)

Sales Amount
$0.01M ──── $446.02M

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Dashboard

Insights

Insights

Based on Exploring the dashboard.

- USA has more then 50% of overall sales. We have sales in Almost every state.
- Other countries has less sales as compared to USA because:
  - Smaller area and lesser population.
  - No sales in some regions
- Overall, sales of 1031.41 million USD

Insights 2010

For USA:

- 2010 December stared selling online.
- Only Bikes were sold at that time.
- South East, mid west, north east has no sales.
- Overall, sales of 1.7 million USD

Insights 2011

- Kept selling bikes only.
- Still no sales in South East and a few states in mid west.
- Overall, sales of 271.41 million USD

Insights 2012

- Added new products of categories accessories and clothing

- Also expanded to south east and north east sides of USA

- Overall, sales of 154.72 million USD dropped from 271.41 million.

Insights 2013

- All 3 categories kept selling with the spike in mountain bikes.

- Sales from accessories and cloths also has raised to approx.. 9 and 6 million USD.

- No further expansion to other areas.

- Overall, sales of 600.72 million USD

Insights 2014

- Just the January of 2014.
- So far, no sales for bikes. That's maybe because of cold weather.

Conclusion

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- We need to conduct research on the central sates of USA where we have no sales. It could be weather or local popular brand or maybe people don't do cycling that much.

- Need marketing and awareness campaigns in such area to increase sales.

- Expending to other regions drops the overall sales. May need to look at marketing budget sate wise. Or focus more on hot sates where more sales are made.

- Mountain bikes has given more profit than road bikes. However, road bikes has more sales. We might need to look for adding other products related to road bikes. Which could sell along with road bikes.

Tools

- SQL Server
- Tableau

Data Source

link

Thank you

Any Question?