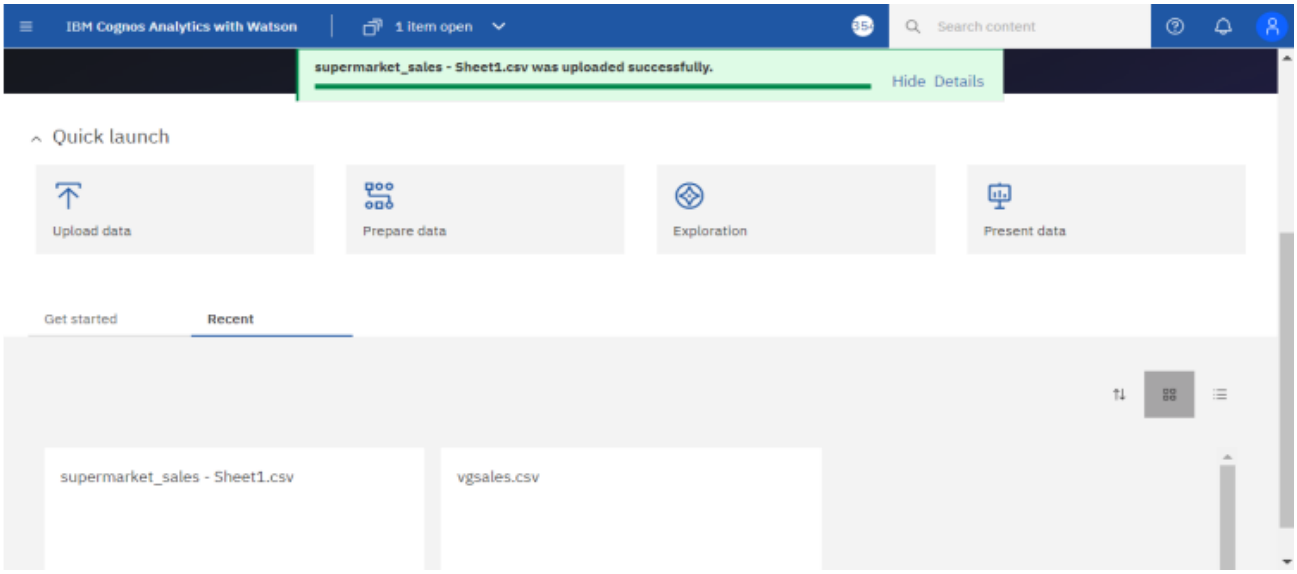
SUPERMARKET SALES DATA ANALYSIS

IBM ID – 2k20cse062@kiot.ac.in

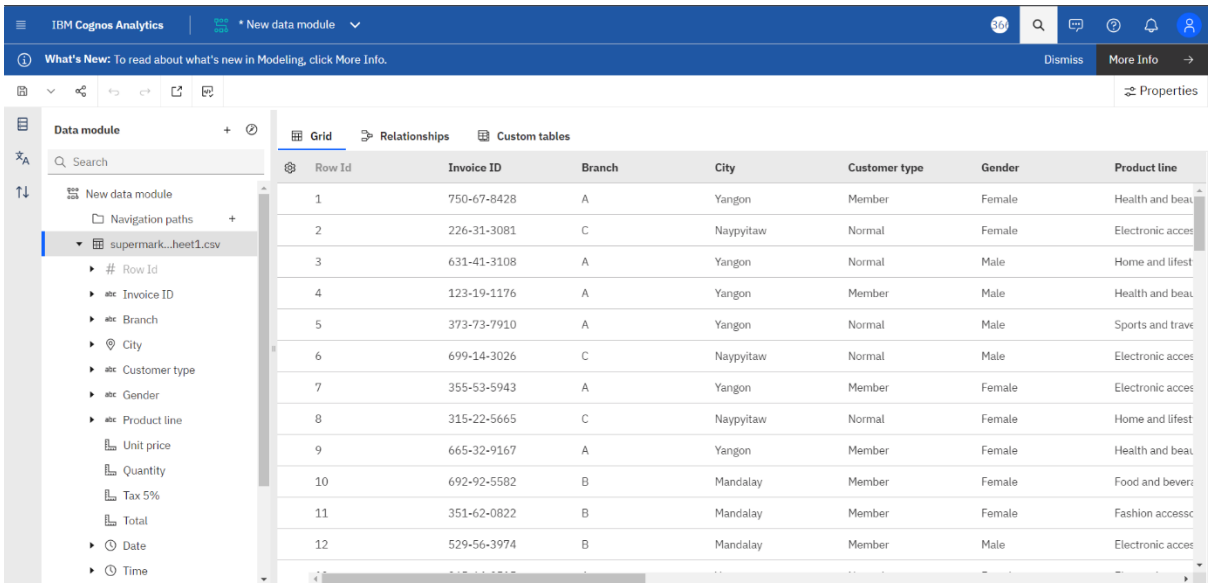
NAME – A.P Jerinangel

TASKS:

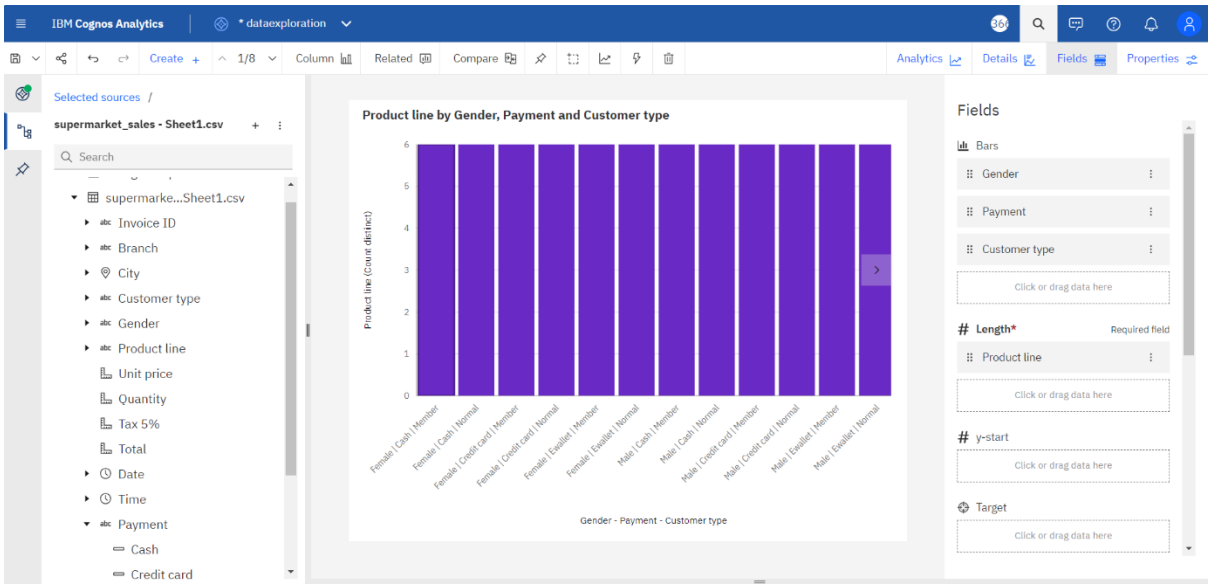
1.Uploading the Dataset

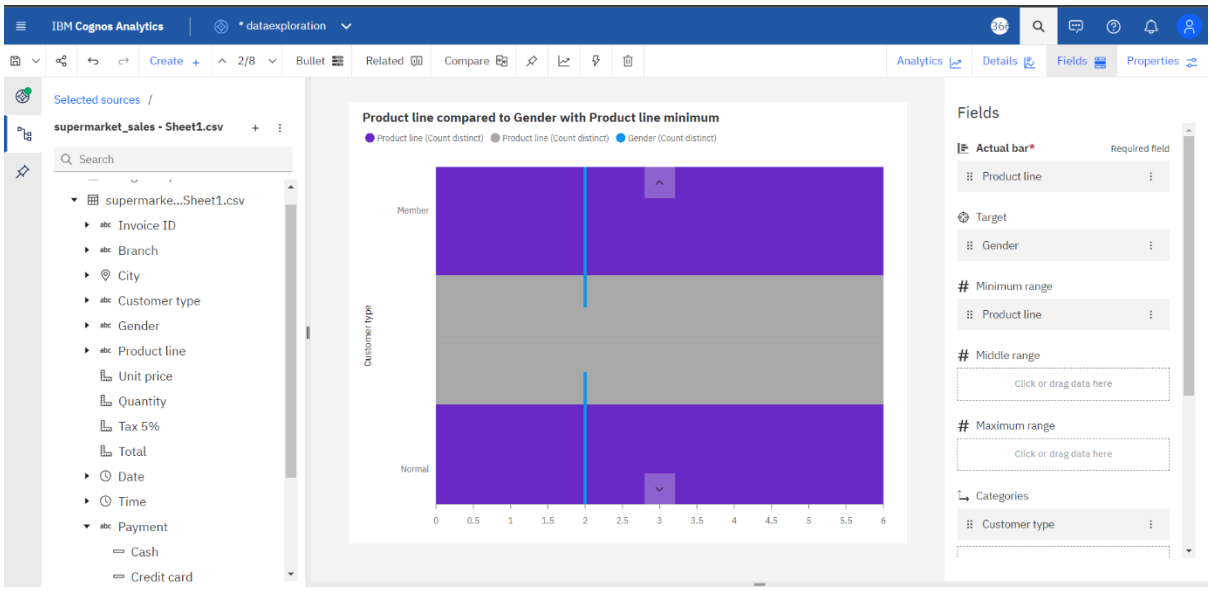


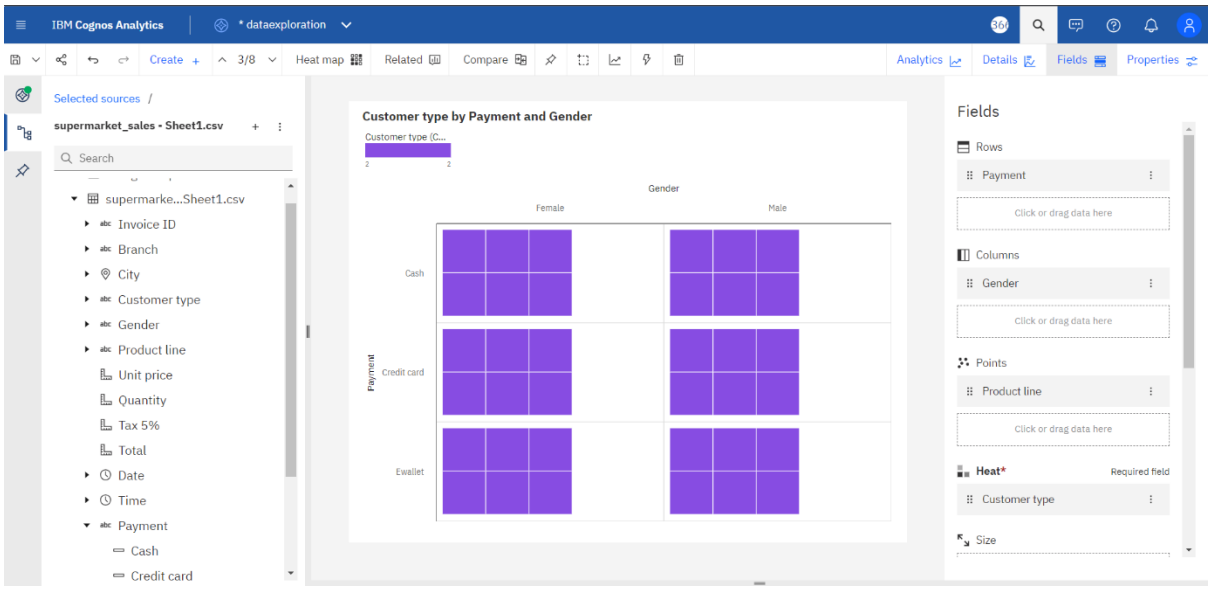
2. Creating the Data Module

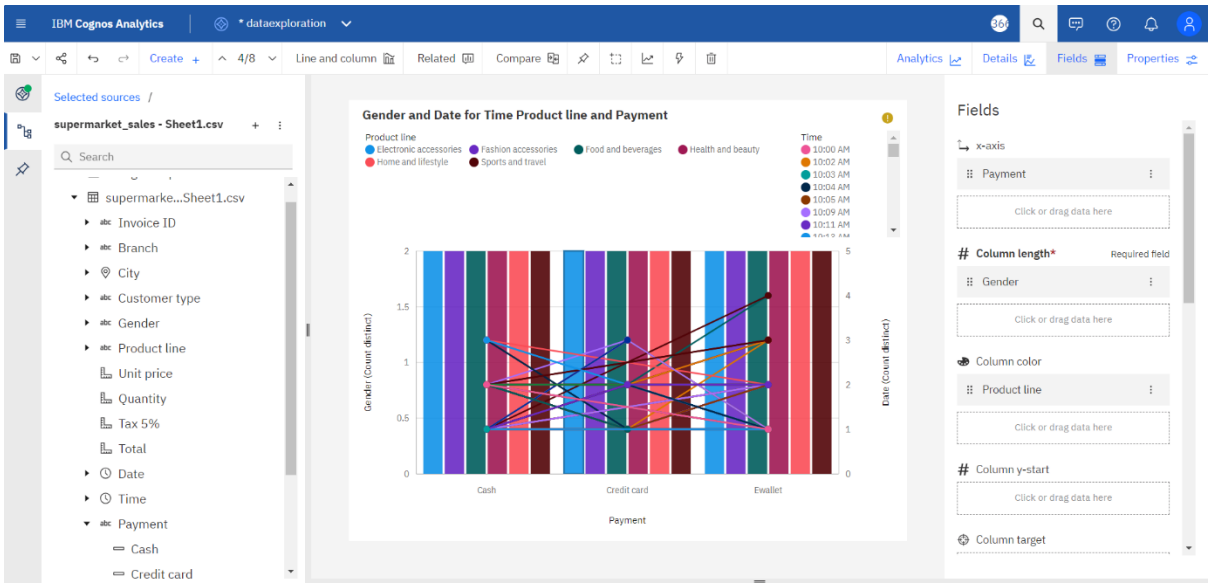


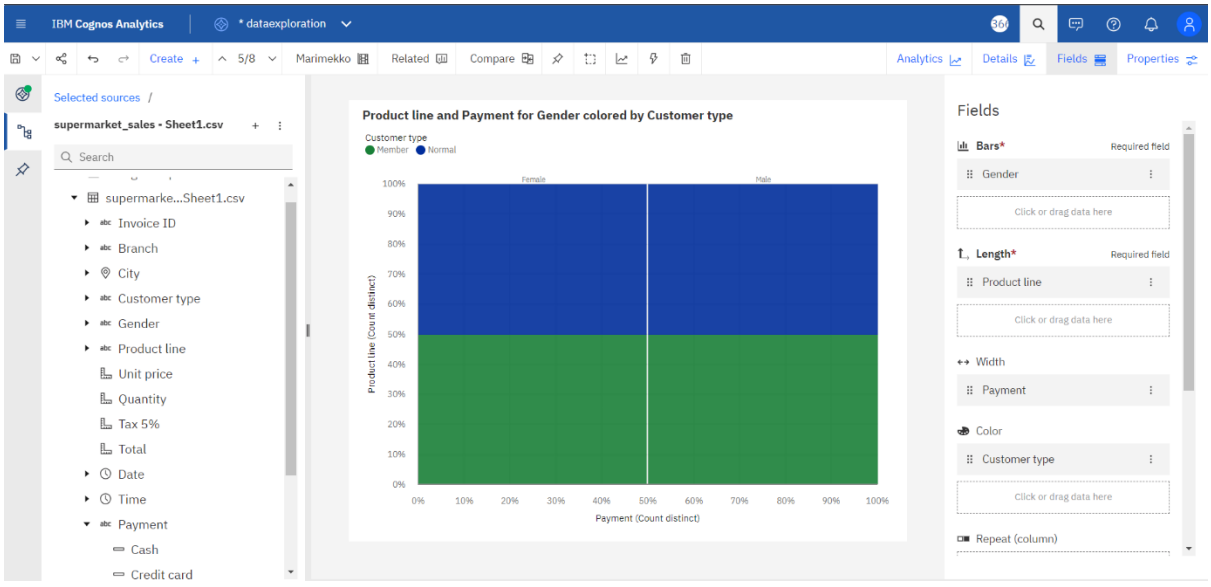
3.Data Exploration

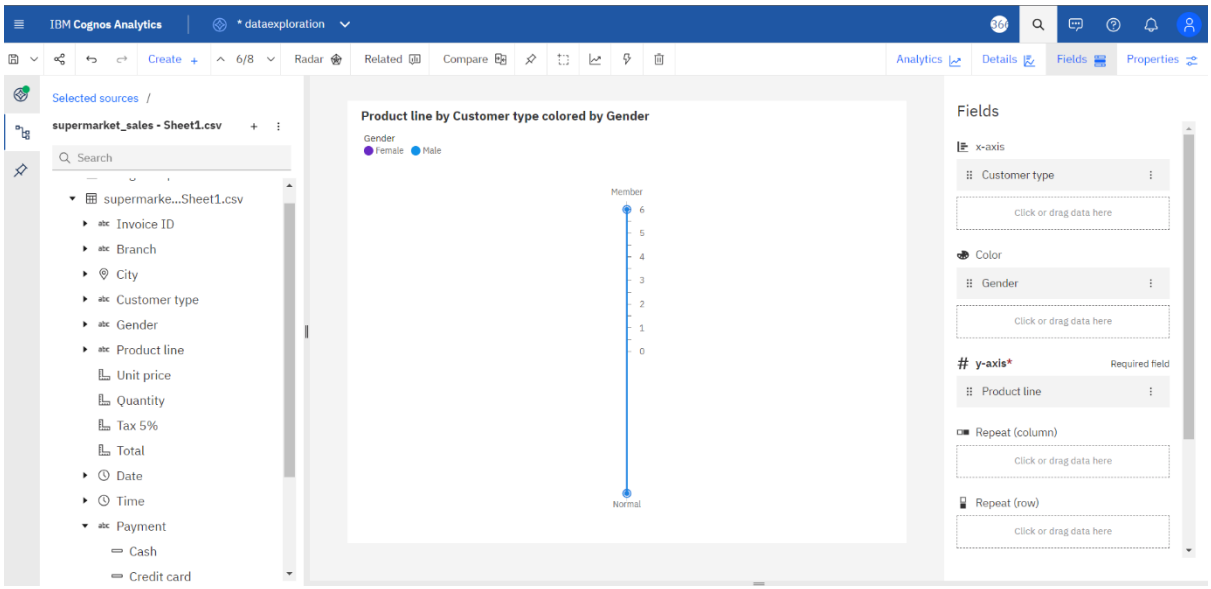


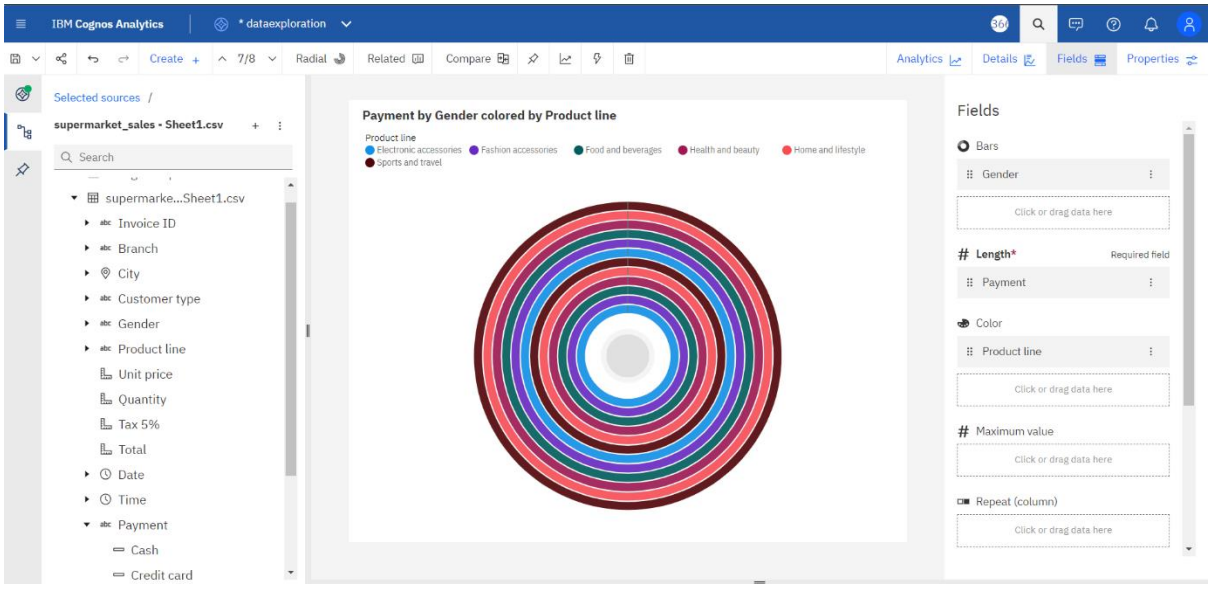

IBM Cognos Analytics
* dataexploration
Create
2/8
Bullet
Related
Compare
Analytics
Details
Fields
Properties
Selected sources /
supermarket_sales - Sheet1.csv
Search
supermarke...Sheet1.csv
Invoice ID
Branch
City
Customer type
Gender
Product line
Unit price
Quantity
Tax 5%
Total
Date
Time
Payment
Cash
Credit card
Product line compared to Gender with Product line minimum
Product line (Count distinct)
Product line (Count distinct)
Gender (Count distinct)
Member
Normal
Customer type
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
5.5
6
Fields
Actual bar*
Required field
Product line
Target
Gender
Minimum range
Product line
Middle range
Click or drag data here
Maximum range
Click or drag data here
Categories
Customer type

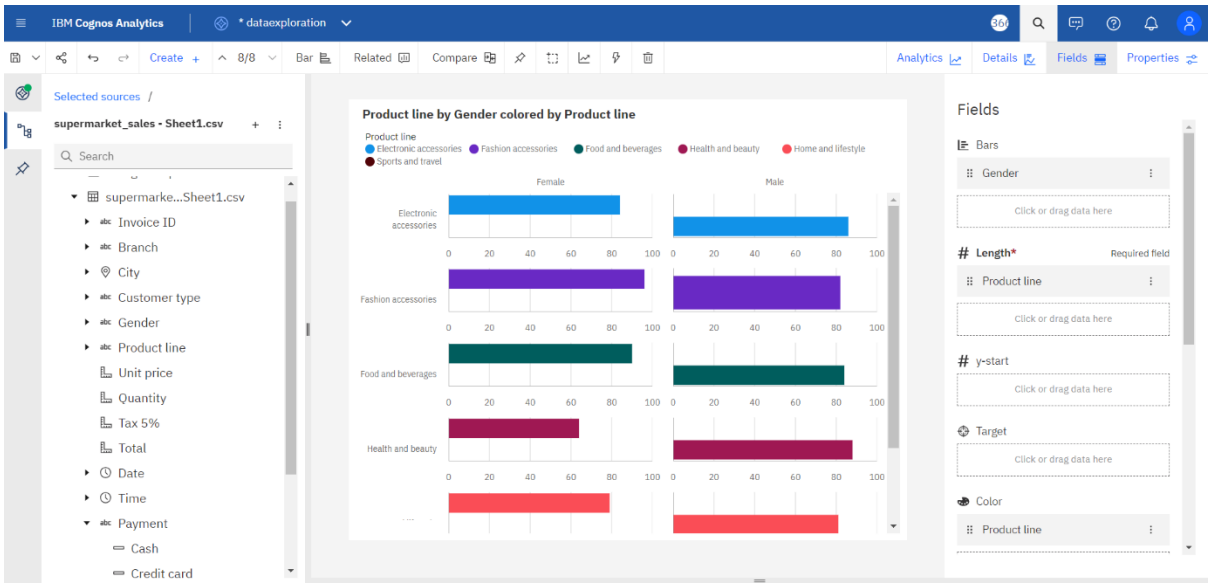

IBM Cognos Analytics
* dataexploration
Create
3/8
Heat map
Related
Compare
Analytics
Details
Fields
Properties
Selected sources /
supermarket_sales - Sheet1.csv
Search
supermarke...Sheet1.csv
Invoice ID
Branch
City
Customer type
Gender
Product line
Unit price
Quantity
Tax 5%
Total
Date
Time
Payment
Cash
Credit card
Customer type by Payment and Gender
Customer type (C...
Gender
Female
Male
Cash
Credit card
Ewallet
Payment
Fields
Rows
Payment
Click or drag data here
Columns
Gender
Click or drag data here
Points
Product line
Click or drag data here
Heat*
Required field
Customer type
Size


IBM Cognos Analytics
* dataexploration
Create
4/8
Line and column
Related
Compare
Analytics
Details
Fields
Properties
Selected sources
supermarket_sales - Sheet1.csv
Search
supermarke...Sheet1.csv
Invoice ID
Branch
City
Customer type
Gender
Product line
Unit price
Quantity
Tax 5%
Total
Date
Time
Payment
Cash
Credit card
Gender and Date for Time Product line and Payment
Product line
Electronic accessories
Fashion accessories
Food and beverages
Health and beauty
Home and lifestyle
Sports and travel
Time
10:00 AM
10:02 AM
10:03 AM
10:04 AM
10:05 AM
10:09 AM
10:11 AM
Gender (Count distinct)
Date (Count distinct)
Cash
Credit card
Ewallet
Payment
Fields
x-axis
Payment
Click or drag data here
Column length*
Required field
Gender
Column color
Product line
Column y-start
Column target


IBM Cognos Analytics
* dataexploration
Create
5/8
Marimekko
Related
Compare
Analytics
Details
Fields
Properties
Selected sources
supermarket_sales - Sheet1.csv
Search
supermarke...Sheet1.csv
Invoice ID
Branch
City
Customer type
Gender
Product line
Unit price
Quantity
Tax 5%
Total
Date
Time
Payment
Cash
Credit card
Product line and Payment for Gender colored by Customer type
Customer type
Member
Normal
Female
Male
Product line (Count distinct)
Payment (Count distinct)
Fields
Bars*
Required field
Gender
Length*
Required field
Product line
Width
Payment
Color
Customer type
Repeat (column)

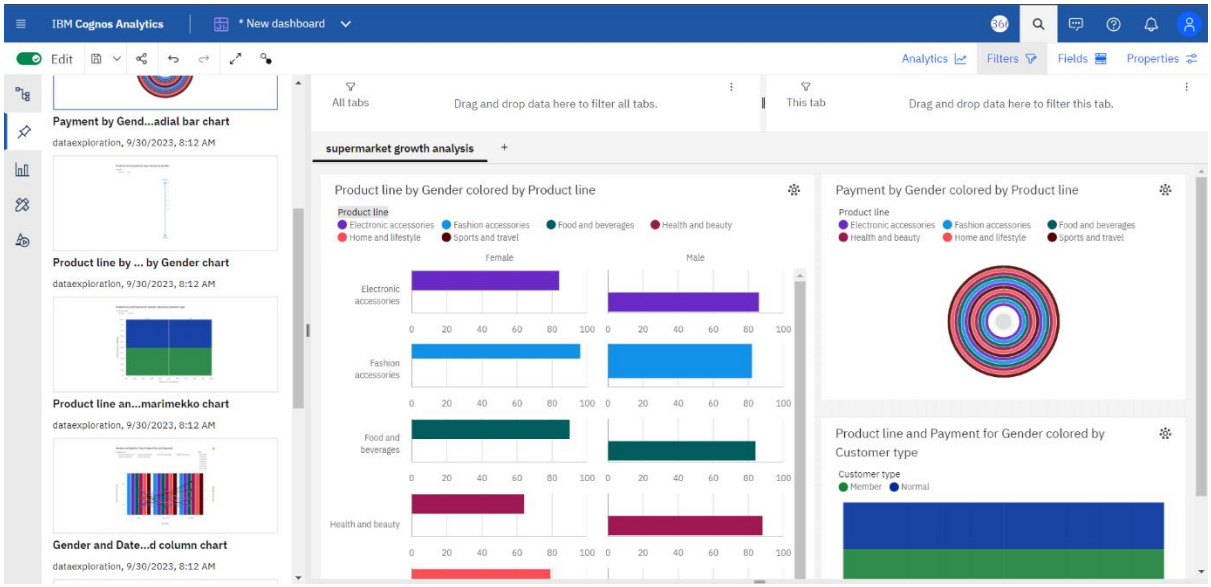

IBM Cognos Analytics
* dataexploration
Create
6/8
Radar
Related
Compare
Analytics
Details
Fields
Properties
Selected sources /
supermarket_sales - Sheet1.csv
Search
supermarke...Sheet1.csv
Invoice ID
Branch
City
Customer type
Gender
Product line
Unit price
Quantity
Tax 5%
Total
Date
Time
Payment
Cash
Credit card
Product line by Customer type colored by Gender
Gender
Female
Male
Member
6
5
4
3
2
1
0
Normal
Fields
x-axis
Customer type
Click or drag data here
Color
Gender
Click or drag data here
y-axis*
Required field
Product line
Repeat (column)
Click or drag data here
Repeat (row)
Click or drag data here

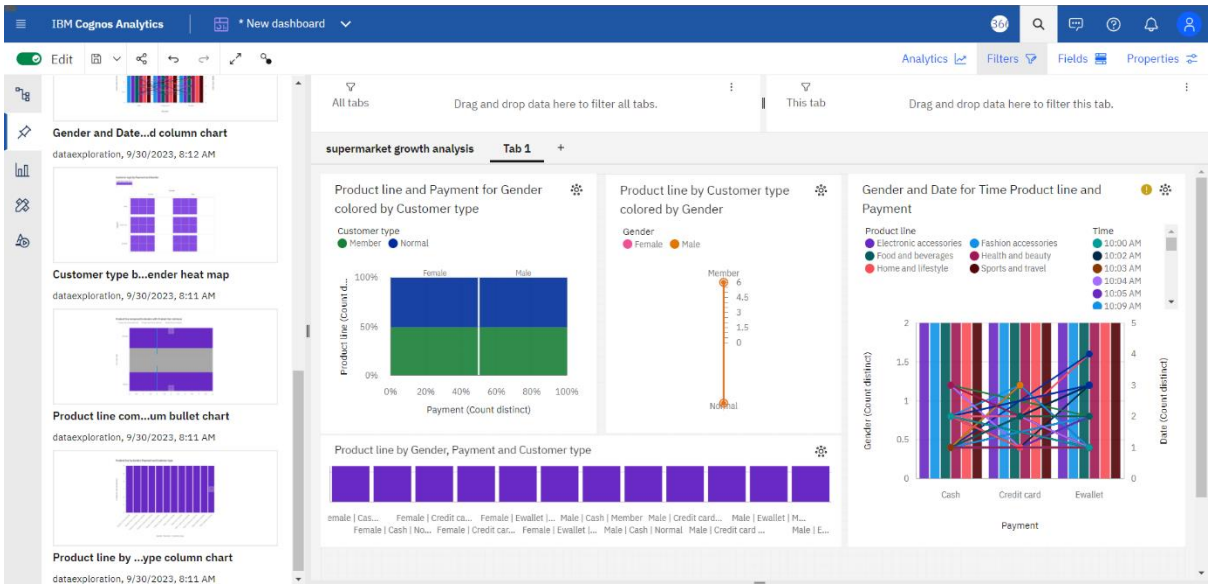

IBM Cognos Analytics
* dataexploration
Create
7/8
Radial
Related
Compare
Analytics
Details
Fields
Properties
Selected sources /
supermarket_sales - Sheet1.csv
Search
supermarke...Sheet1.csv
Invoice ID
Branch
City
Customer type
Gender
Product line
Unit price
Quantity
Tax 5%
Total
Date
Time
Payment
Cash
Credit card
Payment by Gender colored by Product line
Product line
Electronic accessories
Fashion accessories
Food and beverages
Health and beauty
Home and lifestyle
Sports and travel
Fields
Bars
Gender
Click or drag data here
Length*
Required field
Payment
Color
Product line
Click or drag data here
Maximum value
Click or drag data here
Repeat (column)
Click or drag data here

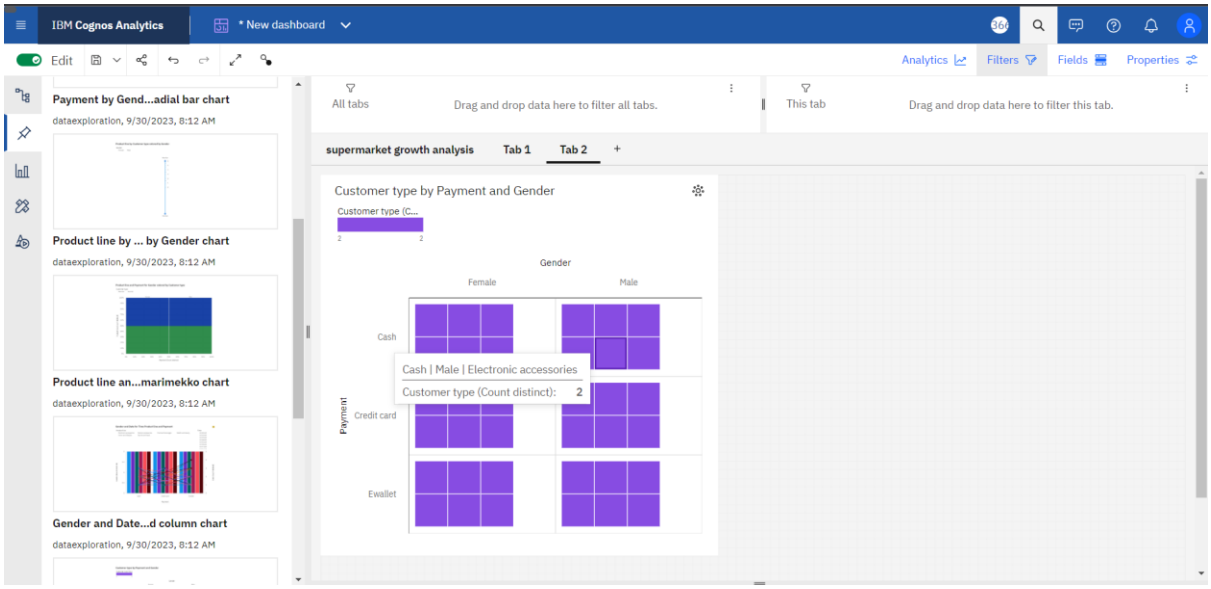


4.DATA VISUALIZATION:

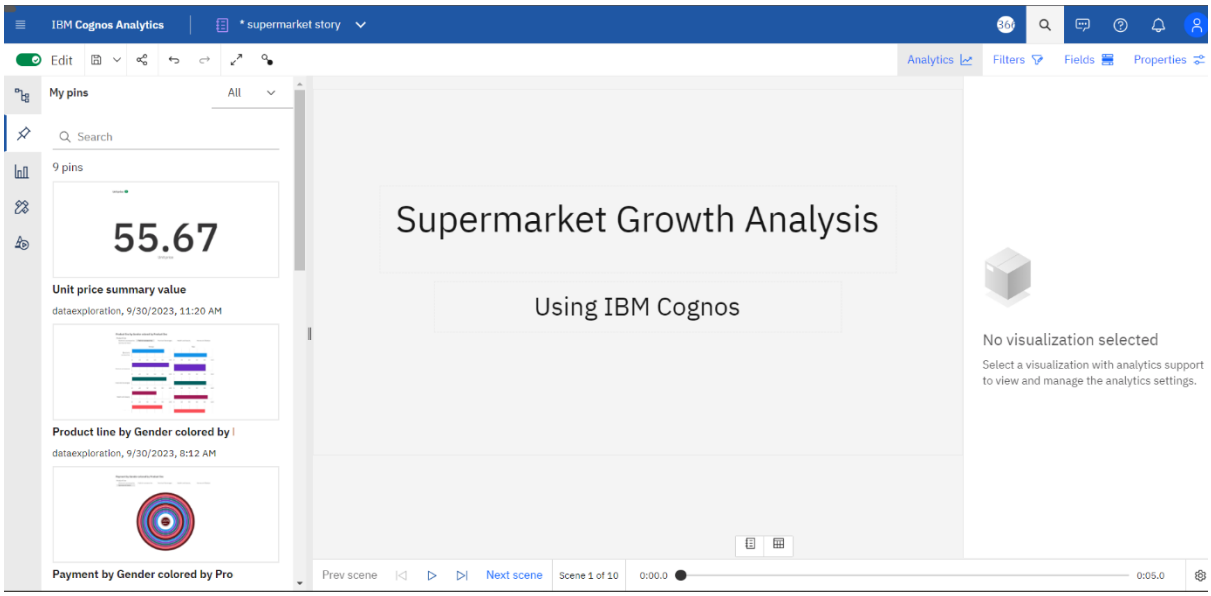
a) DASHBOARD

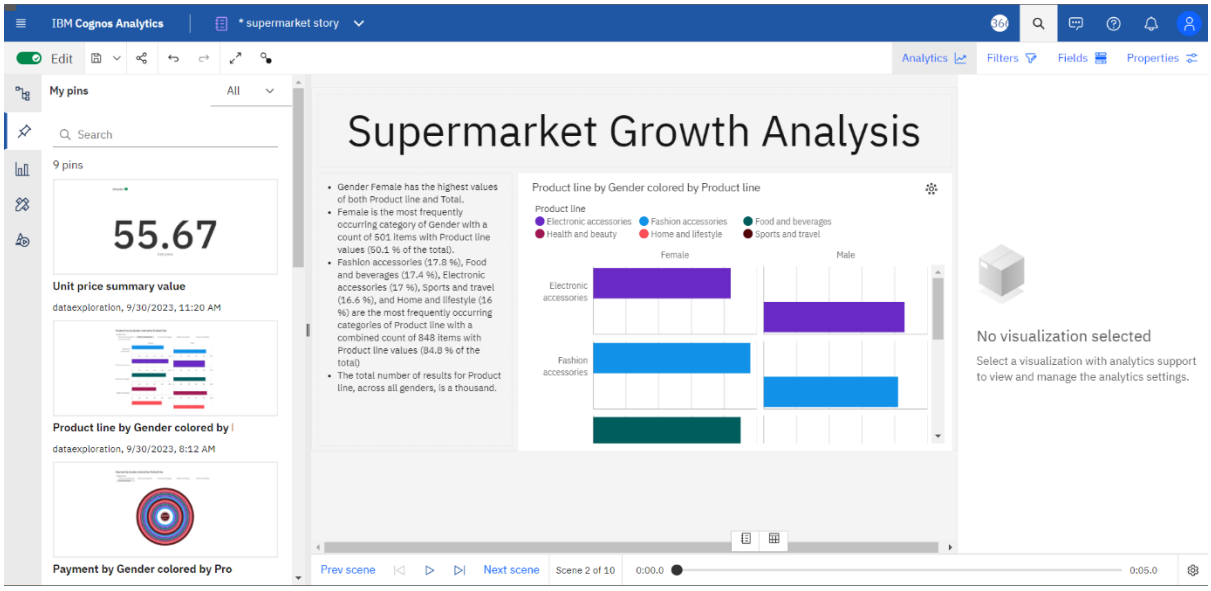


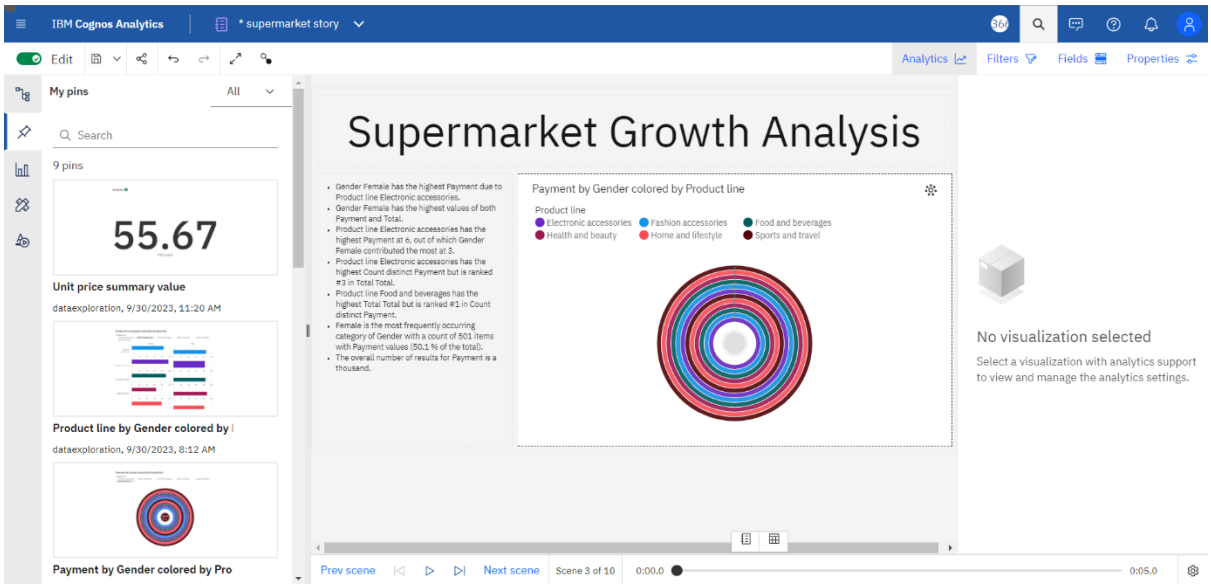

IBM Cognos Analytics
* New dashboard
Edit
Analytics
Filters
Fields
Properties
Gender and Date...d column chart
dataexploration, 9/30/2023, 8:12 AM
Customer type b...ender heat map
dataexploration, 9/30/2023, 8:11 AM
Product line com...um bullet chart
dataexploration, 9/30/2023, 8:11 AM
Product line by ...ype column chart
dataexploration, 9/30/2023, 8:11 AM
All tabs
Drag and drop data here to filter all tabs.
This tab
Drag and drop data here to filter this tab.
supermarket growth analysis
Tab 1
Product line and Payment for Gender colored by Customer type
Customer type
Member
Normal
Female
Male
Product line (Count d...
100%
50%
0%
0%
20%
40%
60%
80%
100%
Payment (Count distinct)
Product line by Customer type colored by Gender
Gender
Female
Male
Member
Normal
Gender and Date for Time Product line and Payment
Product line
Electronic accessories
Fashion accessories
Food and beverages
Health and beauty
Home and lifestyle
Sports and travel
Time
10:00 AM
10:02 AM
10:03 AM
10:04 AM
10:05 AM
10:09 AM
Gender (Count distinct)
Date (Count distinct)
Cash
Credit card
Ewallet
Payment
Product line by Gender, Payment and Customer type

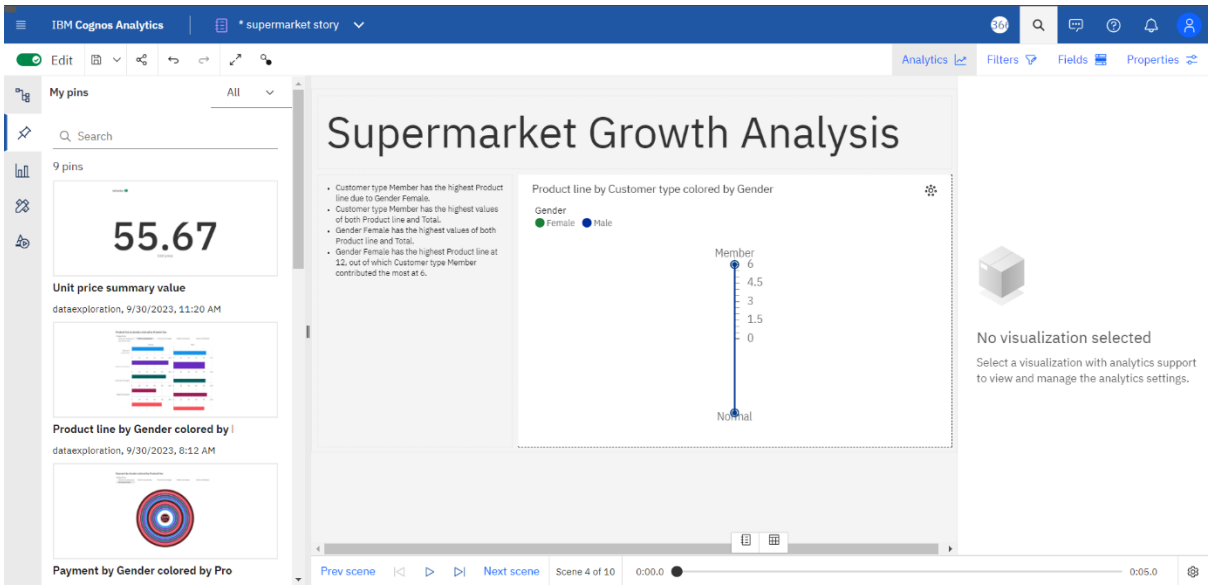

IBM Cognos Analytics
* New dashboard
Edit
Analytics
Filters
Fields
Properties
Payment by Gend...adial bar chart
dataexploration, 9/30/2023, 8:12 AM
Product line by ... by Gender chart
dataexploration, 9/30/2023, 8:12 AM
Product line an...marimekko chart
dataexploration, 9/30/2023, 8:12 AM
Gender and Date...d column chart
dataexploration, 9/30/2023, 8:12 AM
All tabs
Drag and drop data here to filter all tabs.
This tab
Drag and drop data here to filter this tab.
supermarket growth analysis
Tab 1
Tab 2
Customer type by Payment and Gender
Customer type (C...
Gender
Female
Male
Cash
Credit card
Ewallet
Payment
Cash | Male | Electronic accessories
Customer type (Count distinct): 2

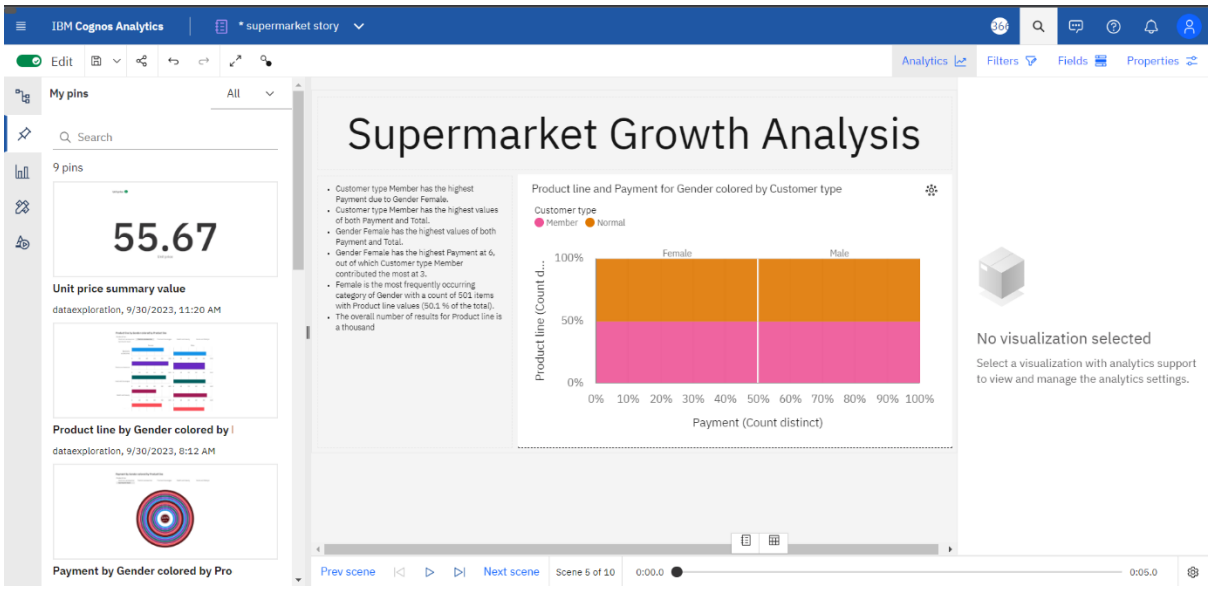
b) Story Generation

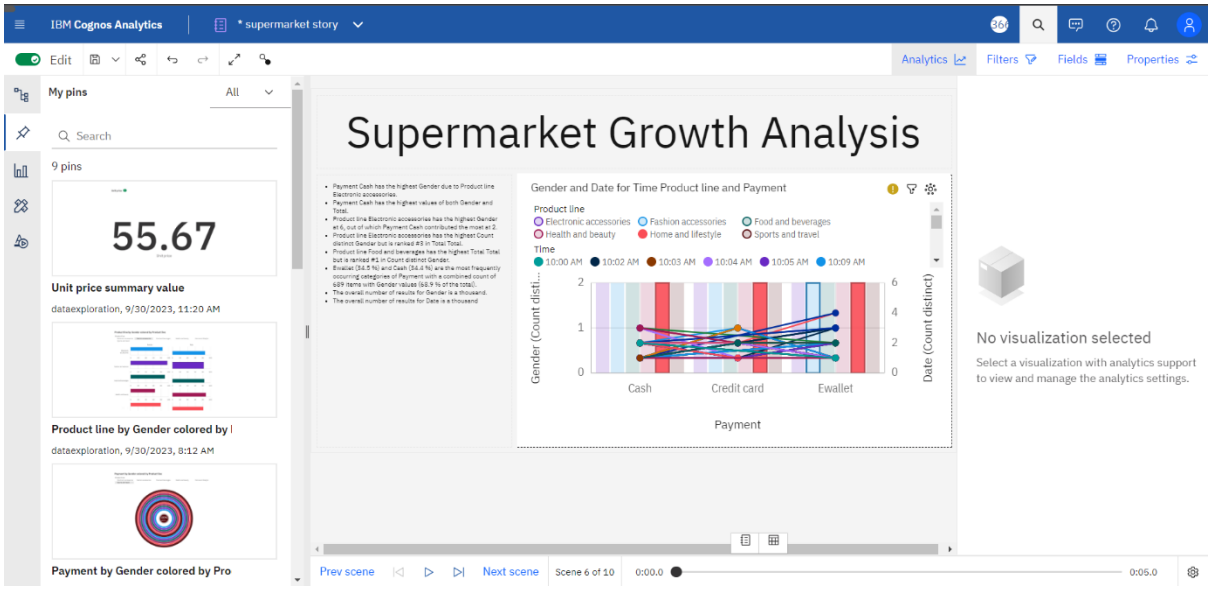


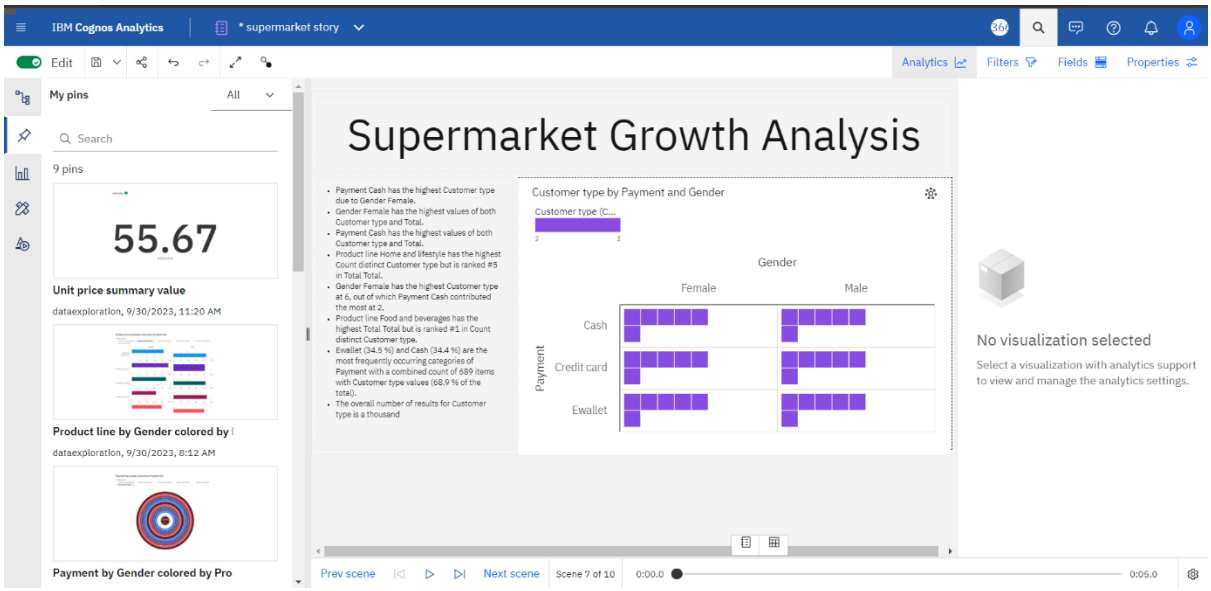


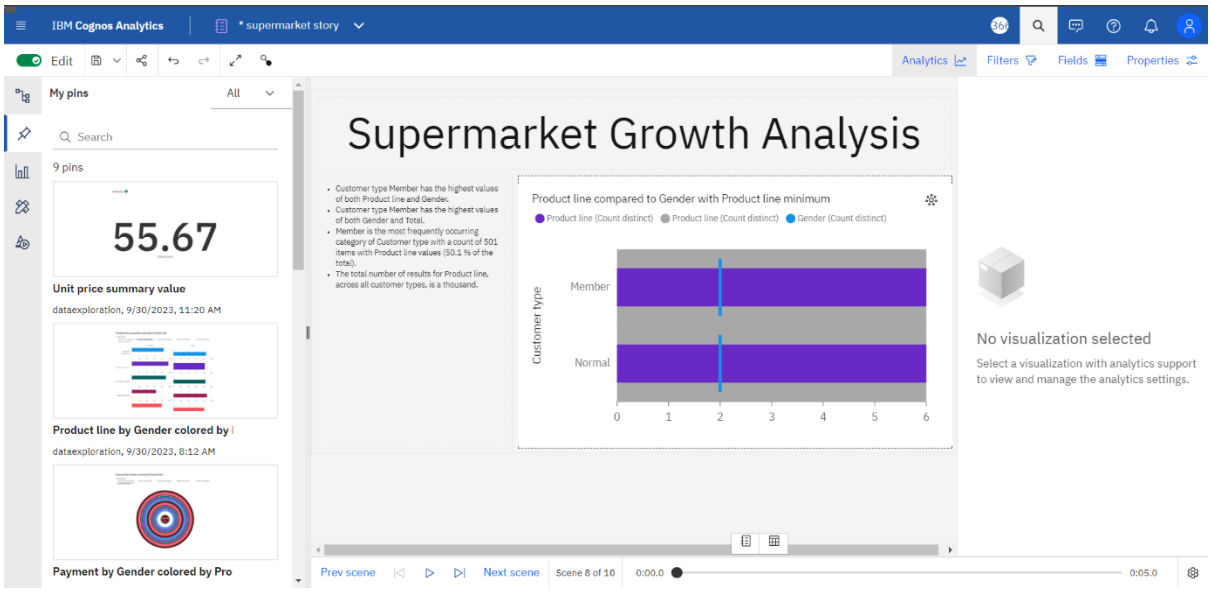

IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Gender Female has the highest Payment due to Product line Electronic accessories.
Gender Female has the highest values of both Payment and Total.
Product line Electronic accessories has the highest Payment at 6, out of which Gender Female contributed the most at 3.
Product line Electronic accessories has the highest Count distinct Payment but is ranked #3 in Total Total.
Product line Food and beverages has the highest Total Total but is ranked #1 in Count distinct Payment.
Female is the most frequently occurring category of Gender with a count of 501 items with Payment values (50.1 % of the total).
The overall number of results for Payment is a thousand.
Payment by Gender colored by Product line
Product line
Electronic accessories
Fashion accessories
Food and beverages
Health and beauty
Home and lifestyle
Sports and travel
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 3 of 10
0:00.0
0:05.0

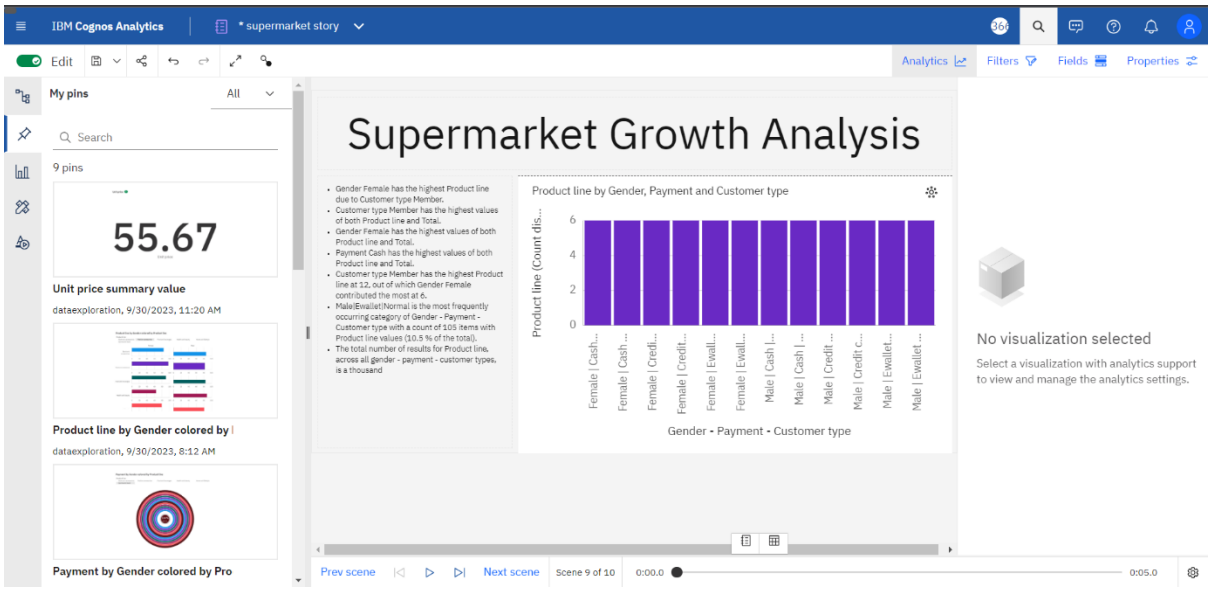

IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Customer type Member has the highest Product line due to Gender Female.
Customer type Member has the highest values of both Product line and Total.
Gender Female has the highest values of both Product line and Total.
Gender Female has the highest Product line at 12, out of which Customer type Member contributed the most at 6.
Product line by Customer type colored by Gender
Gender
Female
Male
Member
6
4.5
3
1.5
0
Normal
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 4 of 10
0:00.0
0:05.0

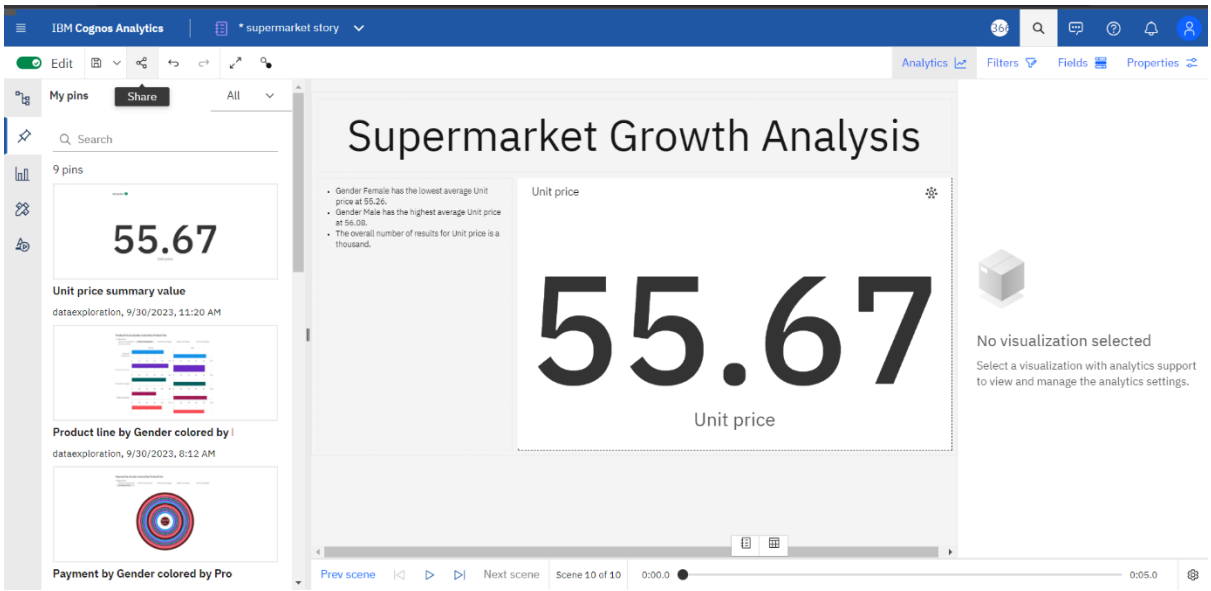
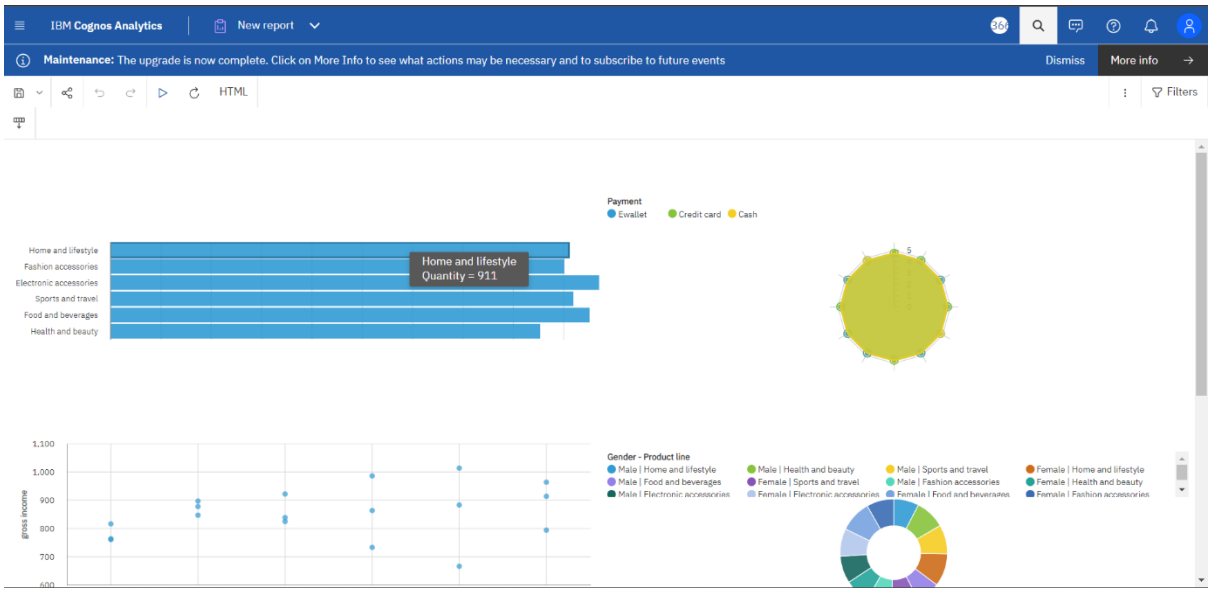
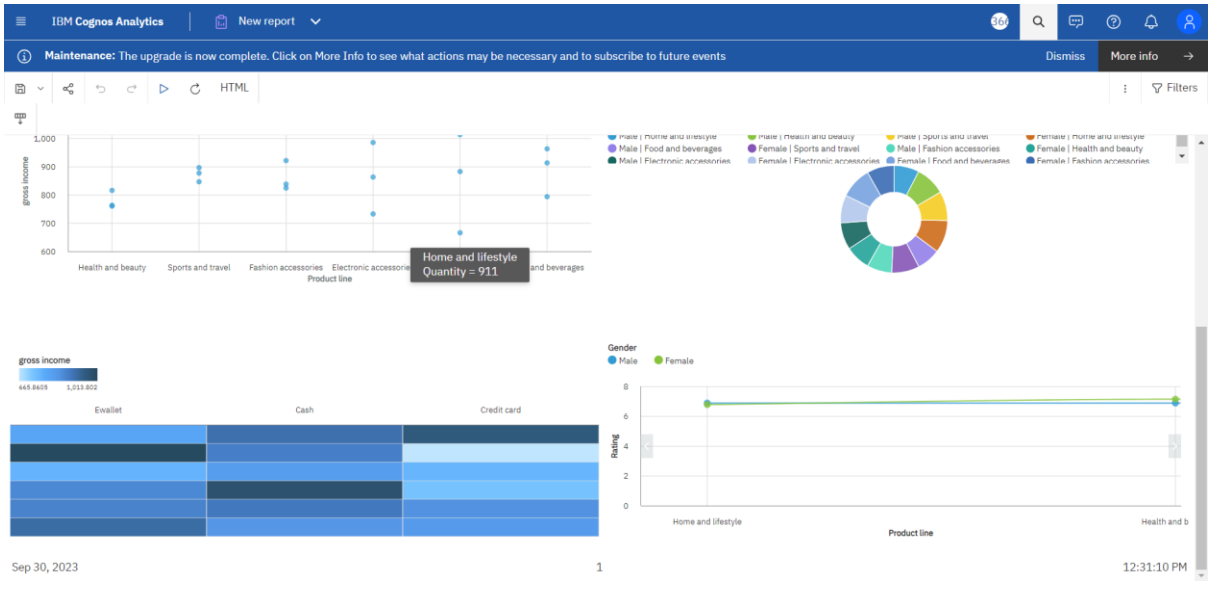

IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Customer type Member has the highest Payment due to Gender Female.
Customer type Member has the highest values of both Payment and Total.
Gender Female has the highest values of both Payment and Total.
Gender Female has the highest Payment at 6, out of which Customer type Member contributed the most at 3.
Female is the most frequently occurring category of Gender with a count of 501 items with Product line values (50.1 % of the total).
The overall number of results for Product line is a thousand
Product line and Payment for Gender colored by Customer type
Customer type
Member
Normal
Female
Male
Product line (Count d...
100%
50%
0%
0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Payment (Count distinct)
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 5 of 10
0:00.0
0:05.0


IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Payment Cash has the highest Gender due to Product line Electronic accessories.
Payment Cash has the highest values of both Gender and Total.
Product line Electronic accessories has the highest Gender at 6, out of which Payment Cash contributed the most at 2.
Product line Electronic accessories has the highest Count distinct Gender but is ranked #3 in Total Total.
Product line Food and beverages has the highest Total Total but is ranked #1 in Count distinct Gender.
Ewallet (36.5 %) and Cash (34.4 %) are the most frequently occurring categories of Payment with a combined count of 689 items with Gender values (68.9 % of the total).
The overall number of results for Gender is a thousand.
The overall number of results for Date is a thousand
Gender and Date for Time Product line and Payment
Product line
Electronic accessories
Fashion accessories
Food and beverages
Health and beauty
Home and lifestyle
Sports and travel
Time
10:00 AM
10:02 AM
10:03 AM
10:04 AM
10:05 AM
10:09 AM
Gender (Count disti...
2
1
0
Cash
Credit card
Ewallet
Payment
6
4
2
0
Date (Count distinct)
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 6 of 10
0:00.0
0:05.0


IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Payment Cash has the highest Customer type due to Gender Female.
Gender Female has the highest values of both Customer type and Total.
Payment Cash has the highest values of both Customer type and Total.
Product line Home and lifestyle has the highest Count distinct Customer type but is ranked #5 in Total Total.
Gender Female has the highest Customer type at 6, out of which Payment Cash contributed the most at 2.
Product line Food and beverages has the highest Total Total but is ranked #1 in Count distinct Customer type.
Ewallet (34.5 %) and Cash (34.4 %) are the most frequently occurring categories of Payment with a combined count of 689 items with Customer type values (68.9 % of the total).
The overall number of results for Customer type is a thousand
Customer type by Payment and Gender
Customer type (C...
Gender
Female
Male
Payment
Cash
Credit card
Ewallet
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 7 of 10
0:00.0
0:05.0


IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Customer type Member has the highest values of both Product line and Gender.
Customer type Member has the highest values of both Gender and Total.
Member is the most frequently occurring category of Customer type with a count of 501 items with Product line values (50.1 % of the total).
The total number of results for Product line, across all customer types, is a thousand.
Product line compared to Gender with Product line minimum
Product line (Count distinct)
Product line (Count distinct)
Gender (Count distinct)
Customer type
Member
Normal
0
1
2
3
4
5
6
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 8 of 10
0:00.0
0:05.0


IBM Cognos Analytics
* supermarket story
Edit
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Gender Female has the highest Product line due to Customer type Member.
Customer type Member has the highest values of both Product line and Total.
Gender Female has the highest values of both Product line and Total.
Payment Cash has the highest values of both Product line and Total.
Customer type Member has the highest Product line at 12, out of which Gender Female contributed the most at 6.
Male|Ewallet|Normal is the most frequently occurring category of Gender - Payment - Customer type with a count of 105 items with Product line values (10.5 % of the total).
The total number of results for Product line, across all gender - payment - customer types, is a thousand
Product line by Gender, Payment and Customer type
Product line (Count dis...
6
4
2
0
Female | Cash...
Female | Cash ...
Female | Credi...
Female | Credit...
Female | Ewall...
Female | Ewall...
Male | Cash |...
Male | Cash |...
Male | Credit ...
Male | Credit c...
Male | Ewallet...
Male | Ewallet ...
Gender - Payment - Customer type
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 9 of 10
0:00.0
0:05.0


IBM Cognos Analytics
* supermarket story
Edit
Share
Analytics
Filters
Fields
Properties
My pins
All
Search
9 pins
55.67
Unit price summary value
dataexploration, 9/30/2023, 11:20 AM
Product line by Gender colored by
dataexploration, 9/30/2023, 8:12 AM
Payment by Gender colored by Pro
Supermarket Growth Analysis
Gender Female has the lowest average Unit price at 55.26.
Gender Male has the highest average Unit price at 56.08.
The overall number of results for Unit price is a thousand.
Unit price
55.67
Unit price
No visualization selected
Select a visualization with analytics support to view and manage the analytics settings.
Prev scene
Next scene
Scene 10 of 10
0:00.0
0:05.0

c) Report Generation