

Data Visualization on Supermarket Growth Analysis

Name: Devadharshini A.K

IBMid: devaarun2003@gmail.com

My IBM

Home

us1.ca.analytics.ibm.com/bi/?perspective=home

IBM Cognos Analytics with Watson

360 Search content

?

1

Person

Hello. Welcome to Cognos Analytics with Watson.

You can get started right away by taking a look at our introduction video, product tour and Getting Started tab.

[Watch video](#)

[Take a product tour](#)



Quick launch



Upload data

Upload or drag and drop spreadsheets, csv files, and other data sources.



Prepare data

Use data modules to clean and connect data from multiple resources.



Exploration

Quickly find unbiased answers by identifying trends in your data with data exploration.



Present data

Create sophisticated, multi-page, multi-query dashboards, reports, or stories.

IBM Cognos Analytics with Watson

4 items open

353

Search content

?

Bell

X

Select sources



My content

Type any text to filter items in this folder

- New
4/24/2023, 8:56 AM
- SM_New Dashboard
4/23/2023, 8:07 AM
- SM_New exploration
4/23/2023, 7:36 AM
- SM_story
4/23/2023, 11:19 AM
- Supermarket_data module
4/23/2023, 4:58 AM
- supermarket_exploration
4/23/2023, 5:39 AM
- supermarket_sales - Sheet1.csv
4/23/2023, 4:56 AM
- supermarket_sales - Sheet1.xlsx
4/23/2023, 4:46 AM
- supermarket_exploration
4/23/2023, 5:08 AM

Y ↑

Filter by

Reset filters

Type

- Folders
- Packages
- Files
- Data sets
- Modules

Modified

- All
- Today
- Yesterday
- Past week
- Past month

Cancel

OK

Data module

Grid Relationships Custom tables

Row Id	Invoice ID	Branch	City	Customer type	Gender	Product line
1	750-67-8428	A	Yangon	Member	Female	Health and beau
2	226-31-3081	C	Naypyitaw	Normal	Female	Electronic acces
3	631-41-3108	A	Yangon	Normal	Male	Home and lifest
4	123-19-1176	A	Yangon	Member	Male	Health and beau
5	373-73-7910	A	Yangon	Normal	Male	Sports and trav
6	699-14-3026	C	Naypyitaw	Normal	Male	Electronic acces
7	355-53-5943	A	Yangon	Member	Female	Electronic acces
8	315-22-5665	C	Naypyitaw	Normal	Female	Home and lifest
9	665-32-9167	A	Yangon	Member	Female	Health and beau
10	692-92-5582	B	Mandalay	Member	Female	Food and bevera
11	351-62-0822	B	Mandalay	Member	Female	Fashion accesso
12	529-56-3974	B	Mandalay	Member	Male	Electronic acces
13	365-64-0515	A	Yangon	Normal	Female	Electronic acces
14	252-56-2699	A	Yangon	Normal	Male	Food and bevera



Data module

Search

New data module

Navigation paths

supermark...heet1.csv

- Invoice ID
- Branch
- City
- Customer type
- Gender
- Product line
- Unit price
- Quantity
- Tax 5%
- Total
- Date
- Time
- Payment
- cogs
- gross margin percentage

Grid Relationships Custom tables

Invoice ID	Branch	City	Customer type	Gender	Product line	Unit price
750-67-8428	A	Yangon	Member	Female	Health and beauty	74.69
226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28
631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33
123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22
373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31
699-14-3026	C	Naypyitaw	Normal	Male	Electronic accessories	85.39
355-53-5943	A	Yangon	Member	Female	Electronic accessories	68.84
315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56
665-32-9167	A	Yangon	Member	Female	Health and beauty	36.26
692-92-5582	B	Mandalay	Member	Female	Food and beverages	54.84
351-62-0822	B	Mandalay	Member	Female	Fashion accessories	14.48
529-56-3974	B	Mandalay	Member	Male	Electronic accessories	25.51
365-64-0515	A	Yangon	Normal	Female	Electronic accessories	46.95
252-56-2600	A	Yangon	Normal	Male	Food and beverages	13.19

Hello. Welcome to

You can get started right away by the Started tab.

[Watch video](#)

Add a data source to explore

[My content](#)[Team content](#)

Name	Type	Last Accessed
Supermarket_data module	Data module	4/23/2023, 4:58 AM
supermarket_sales - Sheet1.csv	Uploaded file	4/23/2023, 4:56 AM
supermarket_sales - Sheet1.xlsx	Uploaded file	4/23/2023, 4:46 AM

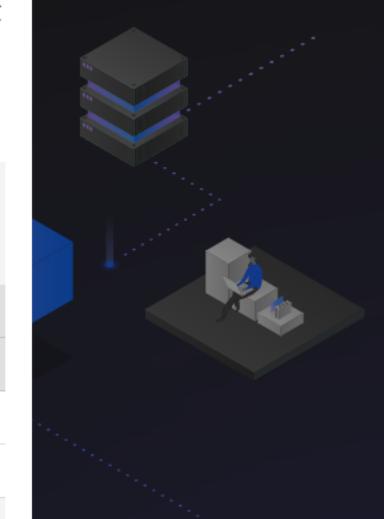
[Cancel](#)[Add](#)

Quick launch



Upload data

Upload or drag and drop spreadsheets, csv files, and other data sources.



IBM Cognos Analytics with Watson * New exploration 353 Search content

Cards

Data relationships

The diagram illustrates the relationships between various data points. A central node labeled 'Total' is connected to five other nodes: 'Tax 5%' (top-left), 'gross income' (bottom-left), 'Unit price' (bottom-right), 'cogs' (right), and 'Quantity' (top). Each connection is represented by a purple curved line.

Explore data relationships
Supermarket_data module

Reset to original

Search: Total

Edit diagram

Select single or multiple nodes to see visualizations.

Relationship diagram ①

10% ————— 100%

323K Total

Add +

Total

Add +

Total and Unit price by Date

Figure showing a line chart with bars at the bottom, representing data over time. The chart shows a general downward trend from approximately 323K down to 100%.

Customer type...y word cloud
SM_New exploration, 4/23/2023, 7:22 AM

Tax 5% for Bra...terfall chart
SM_New exploration, 4/23/2023, 7:08 AM

Unit price by ...type pie chart
New exploration, 4/23/2023, 7:02 AM

gross income b...ity line chart
New exploration, 4/23/2023, 4:59 AM

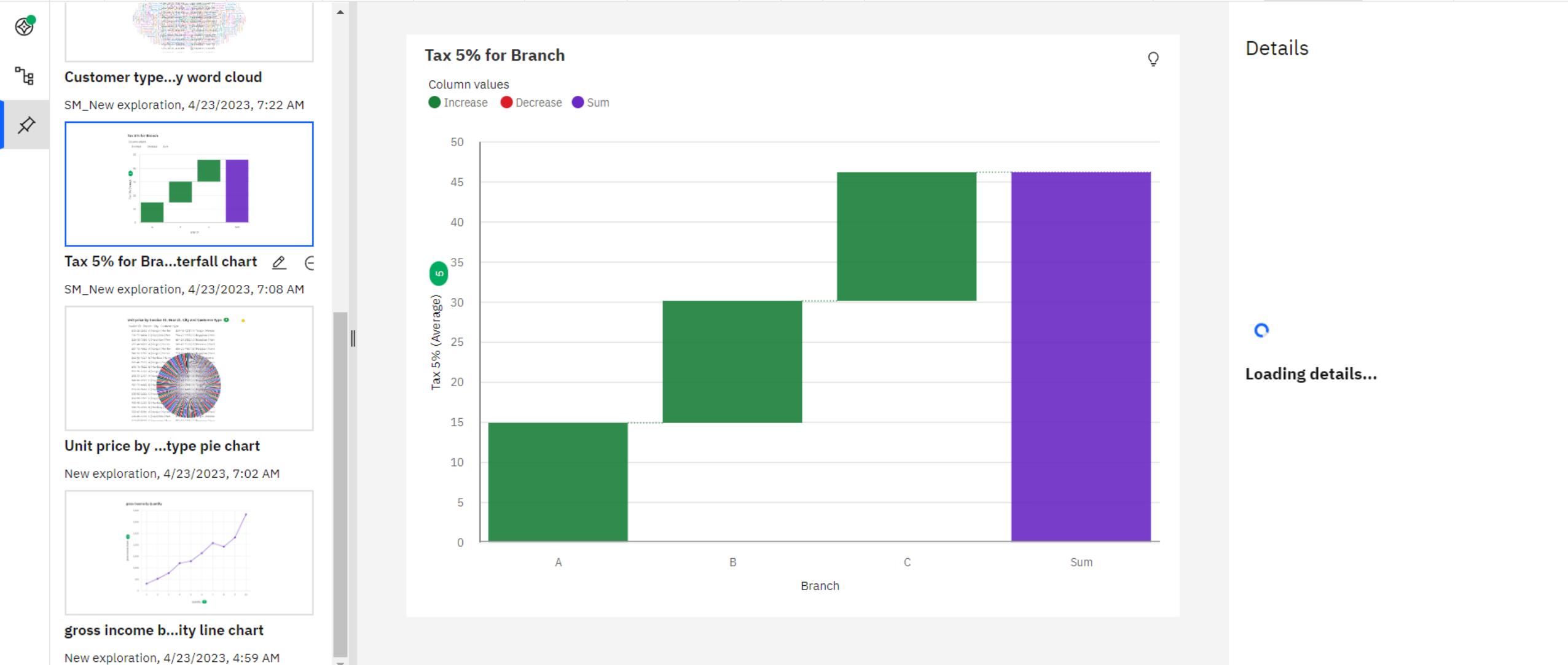
Unit price by Invoice ID, Branch, City and Customer type 4

Invoice ID - Branch - City - Customer type

- 333-23-2632 | A | Yangon | Member...
- 239-48-4278 | A | Yangon | Member...
- 516-77-6464 | C | Naypyitaw | Me...
- 784-21-9238 | C | Naypyitaw | Me...
- 115-38-7388 | C | Naypyitaw | Me...
- 664-14-2882 | C | Naypyitaw | Me...
- 237-44-6163 | A | Yangon | Normal
- 545-46-3100 | B | Mandalay | Me...
- 587-73-4862 | A | Yangon | Member...
- 565-91-4567 | B | Mandalay | Nor...
- 642-32-2990 | A | Yangon | Normal
- 790-38-4466 | C | Naypyitaw | No...
- 152-03-4217 | B | Mandalay | Nor...
- 886-54-6089 | A | Yangon | Normal
- 865-41-9075 | A | Yangon | Normal
- 389-25-3394 | C | Naypyitaw | No...
- 343-75-9322 | B | Mandalay | Me...
- 482-17-1179 | A | Yangon | Member...

Details

Loading details...



My pins All

Search

6 pins

Rating by category heat map

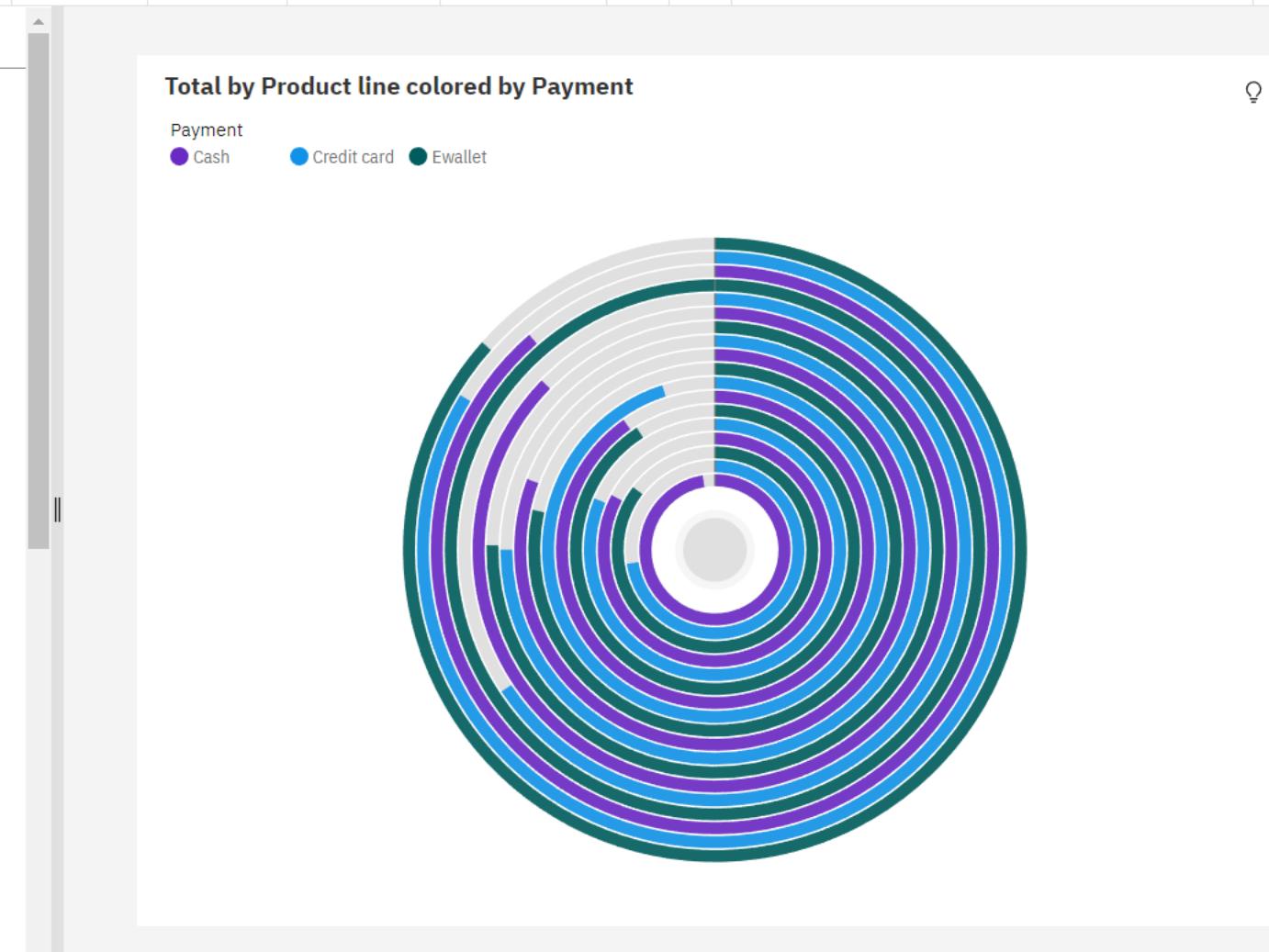
SM_New exploration, 4/23/2023, 7:36 AM

Total by Product line colored by Payment

SM_New exploration, 4/23/2023, 7:31 AM

Customer type...y word cloud

SM_New exploration, 4/23/2023, 7:30 AM



DASHBOARD

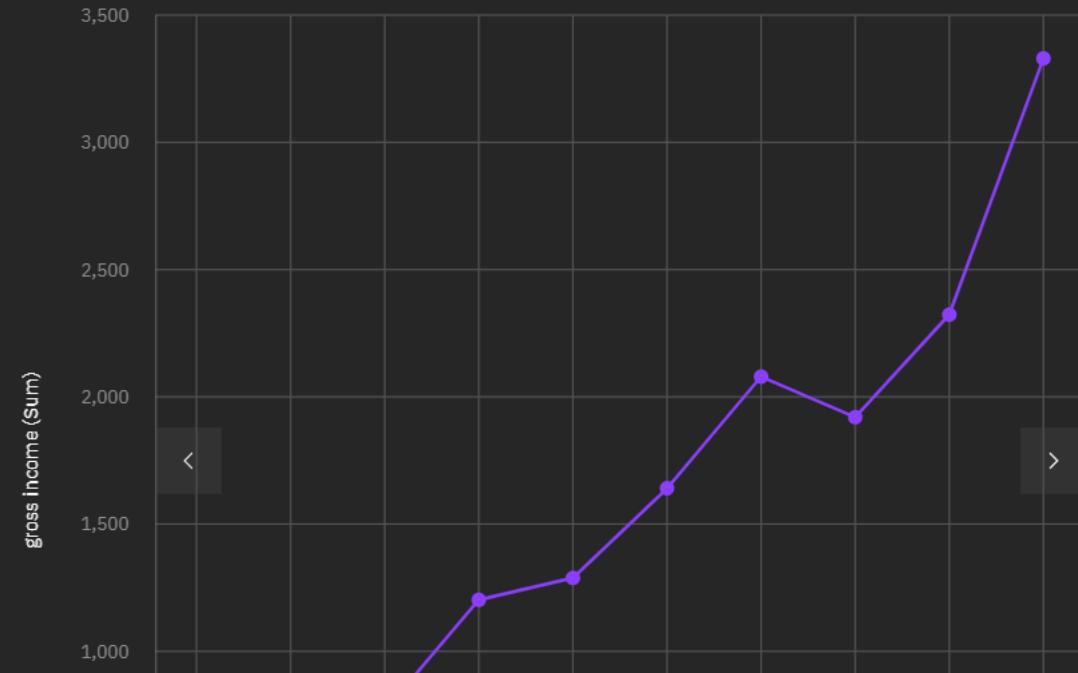
All tabs Drag and drop data here to filter all tabs.

This tab Drag and drop data here to filter this tab.

SM-1 SM-2 SM-3 +

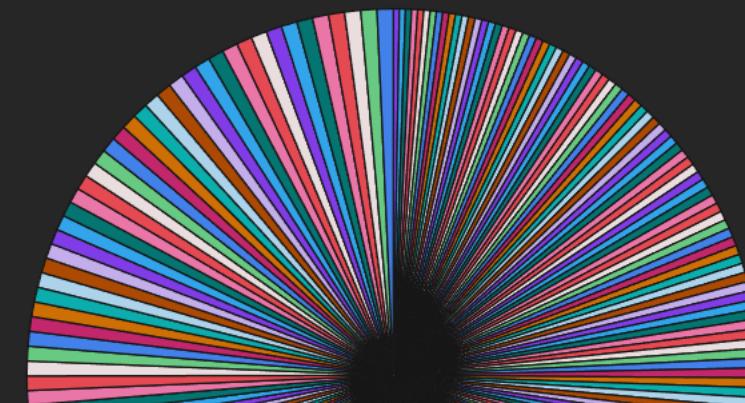
Super Market Growth Analysis

gross income by Quantity



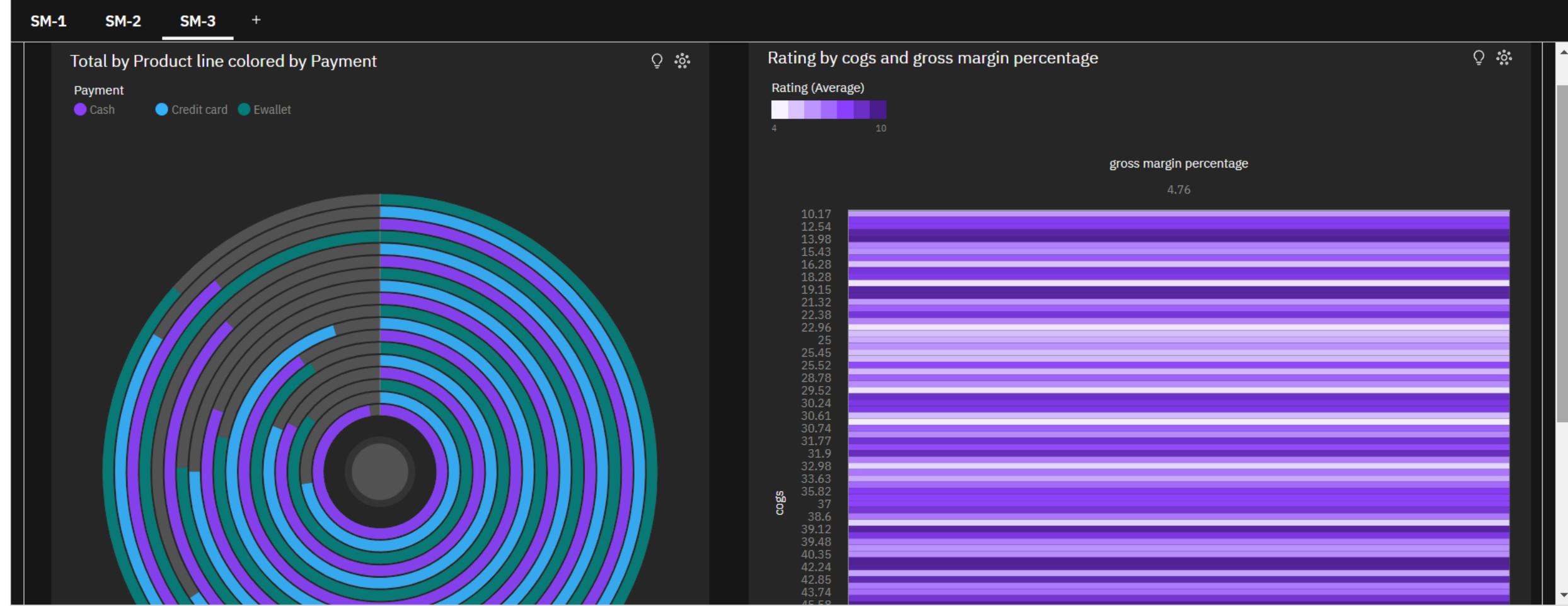
Unit price by Invoice ID, Branch, City and Customer type

Invoice ID - Branch - City - Customer type
333-23-2632 A Yangon Memb...
784-21-9238 C Naypyitaw Me...
237-44-6163 A Yangon Normal
565-91-4567 B Mandalay Nor...
152-03-4217 B Mandalay Nor...
389-25-3394 C Naypyitaw No...
633-91-1052 A Yangon Normal
239-48-4278 A Yangon Memb...
115-38-7388 C Naypyitaw Me...
545-46-3100 B Mandalay Me...
886-54-6089 A Yangon Normal
343-75-9322 B Mandalay Me...
273-84-2164 C Naypyitaw Me...
516-77-6464 C Naypyitaw Me...
664-14-2882 C Naypyitaw Me...
587-73-4862 A Yangon Memb...
790-38-4466 C Naypyitaw No...
865-41-9075 A Yangon Normal
482-17-1179 A Yangon Memb...
308-39-1707 A Yangon Normal



All tabs Drag and drop data here to filter all tabs.

This tab Drag and drop data here to filter this tab.



STORY

SUPER MARKET GROWTH ANALYSIS



Story properties

Scenes

Story type

Scene transition

Canvas

Color and theme

Advanced

Prev scene



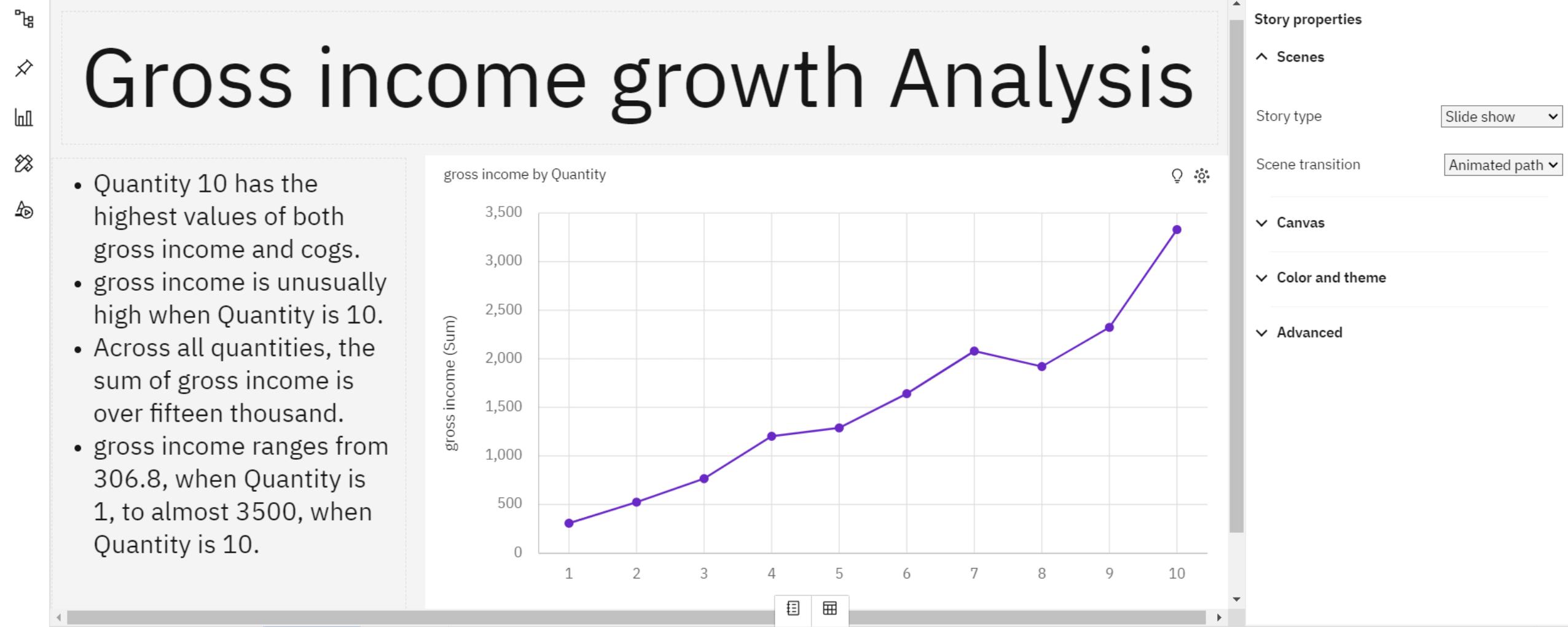
Next scene

Scene 1 of 7

0:00.0

0:05.0





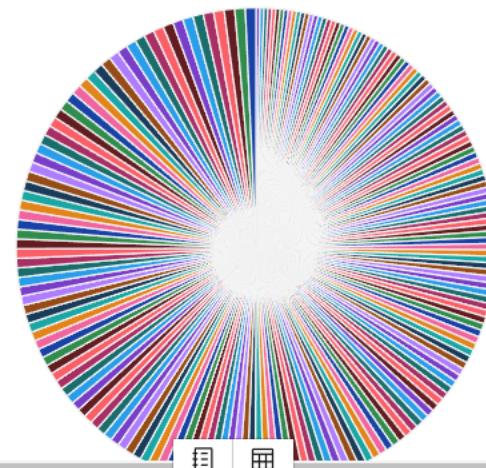
Unit price Analysis

- Branch C has the highest values of both Unit price and cogs.
- City Naypyitaw has the highest values of both Unit price and Total.
- Customer type Member has the highest values of both Unit price and Total.
- Invoice ID - Branch - City - Customer type strongly affects Unit price (100%).
- Over all invoice id - branch - city - customer types, the average of Unit price is 0.992.

Unit price by Invoice ID, Branch, City and Customer type

Invoice ID - Branch - City - Customer type

Invoice ID	Branch	City	Customer Type	Value
333-23-2632	A	Yangon	Member	516-77-6464 C Naypyitaw Member
784-21-9238	C	Naypyitaw	Member	664-14-2882 C Naypyitaw Member
237-44-6163	A	Yangon	Normal	587-73-4862 A Yangon Member
565-91-4567	B	Mandalay	Normal	790-38-4466 C Naypyitaw Normal
152-03-4217	B	Mandalay	Normal	886-54-6089 A Yangon Normal



Story properties

Scenes

Story type Slide show

Scene transition Animated path

Canvas

Color and theme

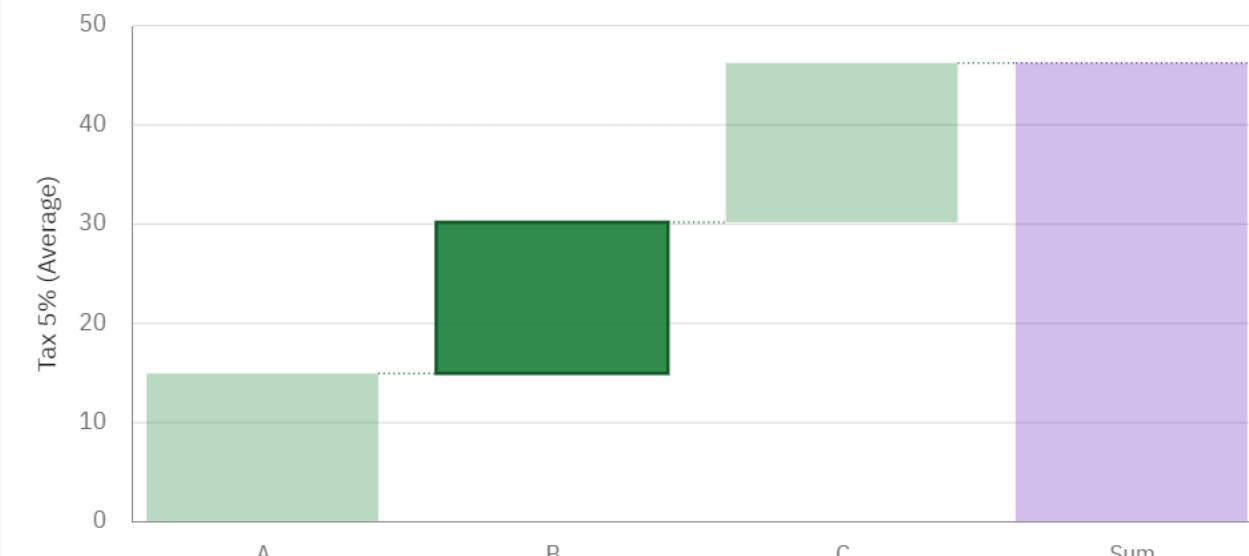
Advanced



Tax for Branches

- Branch C has the highest values of both Tax 5% and Total.
- A is the most frequently occurring category of Branch with a count of 340 items with Tax 5% values (34 % of the total).
- Over all branches, the average of Tax 5% is 15.38.
- The average values of Tax 5% range from 14.87, occurring when Branch is A, to 16.05, when Branch is C.

Tax 5% for Branch
Column values
● Increase ● Decrease ● Sum



Prev scene



Next scene

Scene 4 of 7

0:00:0

0:05:0





Tax for Branches

- Branch C has the highest values of both Tax 5% and Total.
- A is the most frequently occurring category of Branch with a count of 340 items with Tax 5% values (34 % of the total).
- Over all branches, the average of Tax 5% is 15.38.
- The average values of Tax 5% range from 14.87, occurring when Branch is A, to 16.05, when Branch is C.

Tax 5% for Branch
Column values
● Increase ● Decrease ● Sum



353 Search content

Analytics Filters Fields Properties

Story properties

Scenes

Story type Slide show

Scene transition Animated path

Canvas

Color and theme

Advanced

Prev scene



Next scene

Scene 4 of 7

0:00:0

0:05:0



Customer type and Gender

- Customer type Member has the highest values of both Quantity and cogs.
- Gender Female has the highest values of both Quantity and cogs.
- Time 14:42:00 has the highest values of both Quantity and cogs.
- Date 3/9/2019 has the highest Total cogs but is ranked #5 in Total Quantity.]
- Date 2/7/2019 has the highest Total Quantity but is ranked #2 in Total cogs.
- Across all customer type - genders and date - times, the sum of Quantity is over 5500
- The summed values of Quantity

Customer type and Gender colored by Date and Time sized by Quantity

Quantity (Sum) Date - Time

Date - Time
1/1/2019 10:39 AM
1/1/2019 1:55 PM
1/1/2019 7:07 PM
1/10/2019 10:31 AM
1/10/2019 2:16 PM
1/1/2019 11:36 AM
1/1/2019 2:42 PM
1/1/2019 7:31 PM
1/10/2019 10:33 AM
1/10/2019 2:49 PM
1/1/2019 11:40 AM
1/1/2019 2:47 PM
1/1/2019 7:48 PM
1/10/2019 11:10 AM
1/10/2019 4:42 PM
1/1/2019 11:43 AM
1/1/2019 3:51 PM
1/1/2019 8:26 PM
1/10/2019 11:34 AM
1/10/2019 5:15 PM

Story properties

Scenes

Story type: Slide show

Scene transition: Animated path

Canvas

Color and theme

Advanced



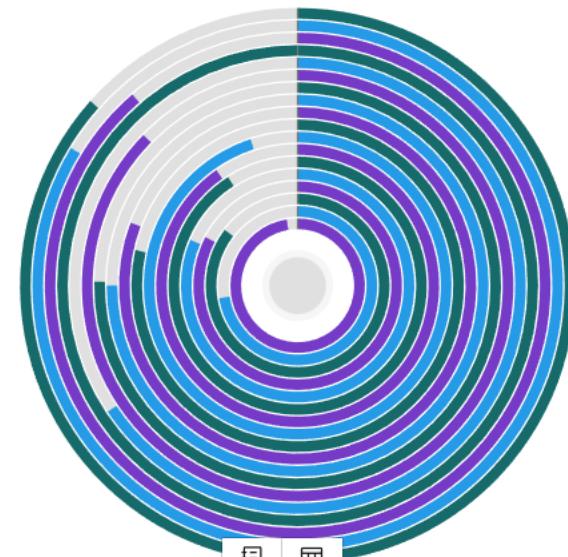
Total by product analysis

- Payment Cash has the highest values of both Total and cogs.
- Product line Food and beverages has the highest values of both Total and cogs.
- Over all product lines and payments, the sum of Total is nearly 323 thousand.
- The summed values of Total range from nearly fourteen thousand to over 21 thousand.
- For Total, the most significant values of Payment are Cash and Ewallet, whose respective Total values add up to over 222 thousand, or 68.8 % of the total.
- For Total, the most significant values of Product line are Food and beverages, Sports and travel, Electronic accessories, Fashion accessories, and Home and lifestyle, whose respective Total values add up to almost 274 thousand, or 84.8 % of the total.

Total by Product line colored by Payment

Payment

Cash Credit card Ewallet



Story properties

Scenes

Story type

Slide show

Scene transition

Animated path

Canvas

Color and theme

Advanced

Prev scene



Next scene

Scene 6 of 7

0:00.0

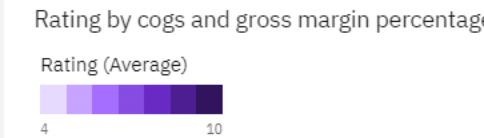
0:05.0





Rating by cogs

- cogs 74.22 has the highest Average Rating but is ranked #854 in Total Total.
- cogs 789.6 has the highest Total Total but is ranked #307 in Average Rating.
- cogs moderately affects Rating (64%).
- 180.09 (0.2 %), 167.54 (0.2 %), 207.27 (0.2 %), 89.28 (0.2 %), and 448.56 (0.2 %) are the most frequently occurring categories of cogs with a combined count of 10 items with Rating values (1 % of the total).
- Over all values of cogs and gross margin percentage, the average of Rating is 6.973.
- The average values of Rating range from 4 to 10.



cogs

Story properties

Scenes

Story type Slide show

Scene transition Animated path

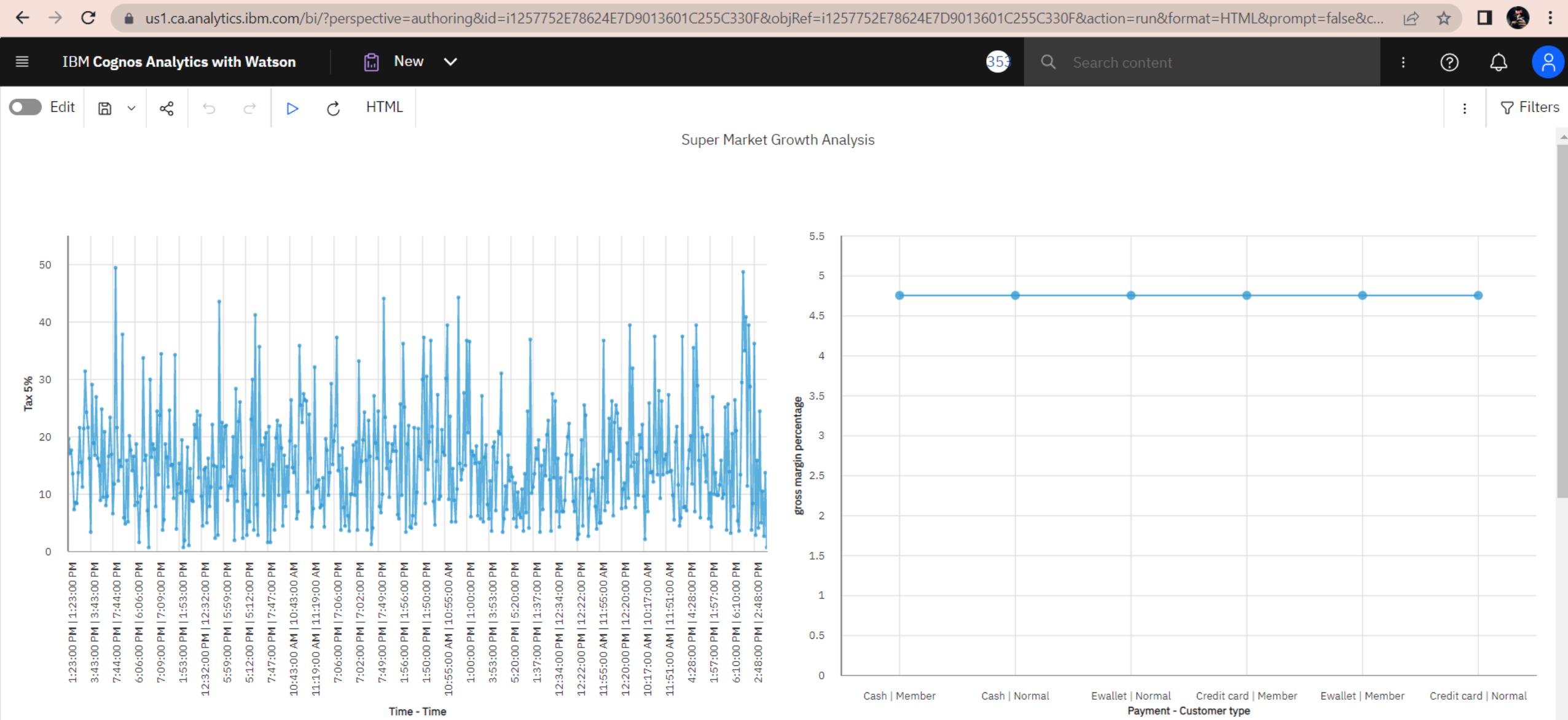
Canvas

Color and theme

Advanced

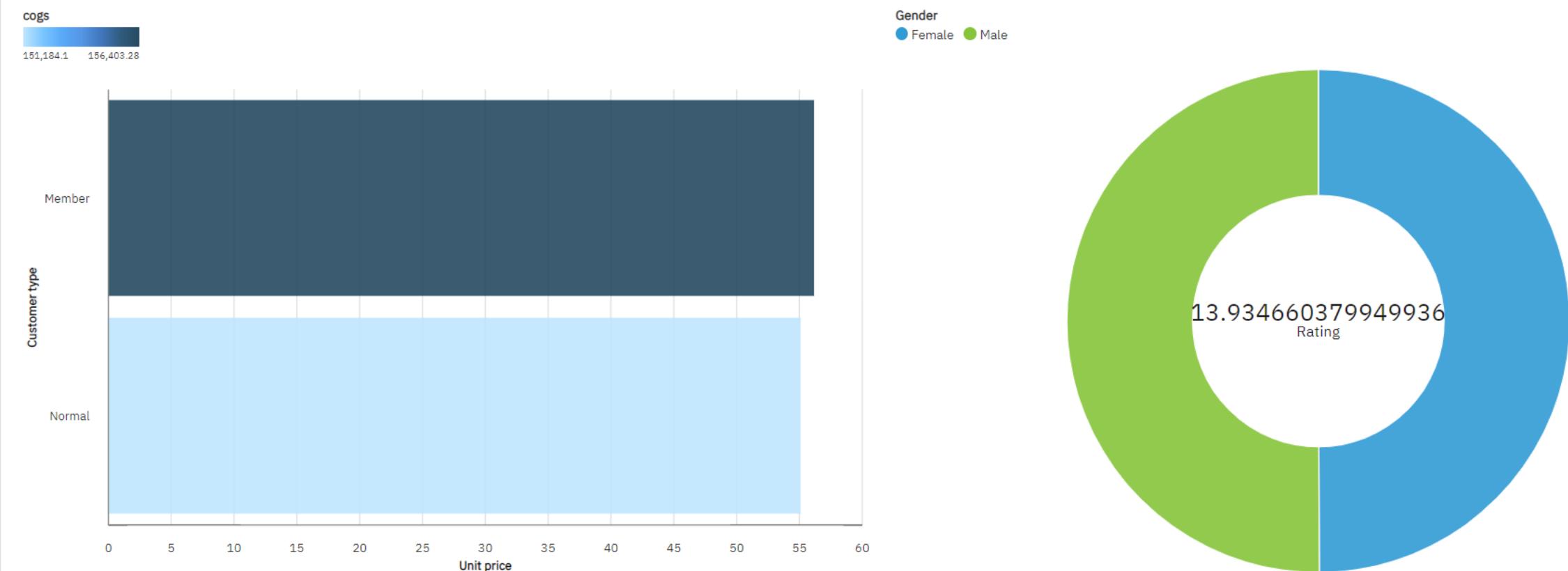


REPORT





Cash | Member Cash | Normal Ewallet | Normal Credit card | Member
Payment - Customer type



THANK YOU