

Data Analysis

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Agenda

01 Case Definition and Project Goal

02 Dataset Overview

03 Exploratory Data Analysis (EDA)

04 Data Preprocessing

05 KPIS and FinancialAnalysis

06 Risk Segmentation

07 Recommendations and Conclusion

Project Overview

The Sales order analysis involve a lot of category like :
Purchasing Price,Planned price, Quantity, Order Date,Product Name
Region, etc... .

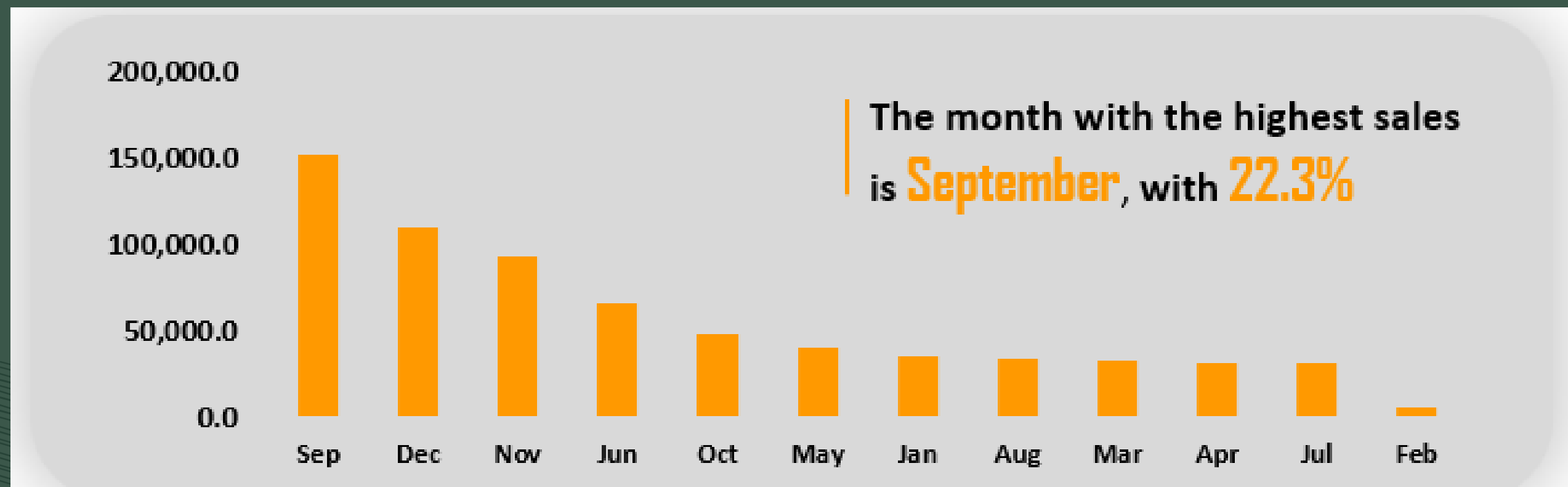
which customer take discount on his order , that make gap between
purchasing price and planned purchasing price that make necessary
to analysis the data to detect the gap.

Project Goals

- 1 Build a risk-based segmentation for increase sales by analyzing the given historical data of customer (what are the most correlated variables that have a major impact on customer's profile?)
- 2 Identify any risk concentration (in different variables: Sales, Customer Retention Rate, Rate of Adoption, Total Orders ... etc.)
- 3 Try to minimize the risk of our data and maximize our sales.
- 4 Give recommendations of how we can better counter that Risk to enhance company level.

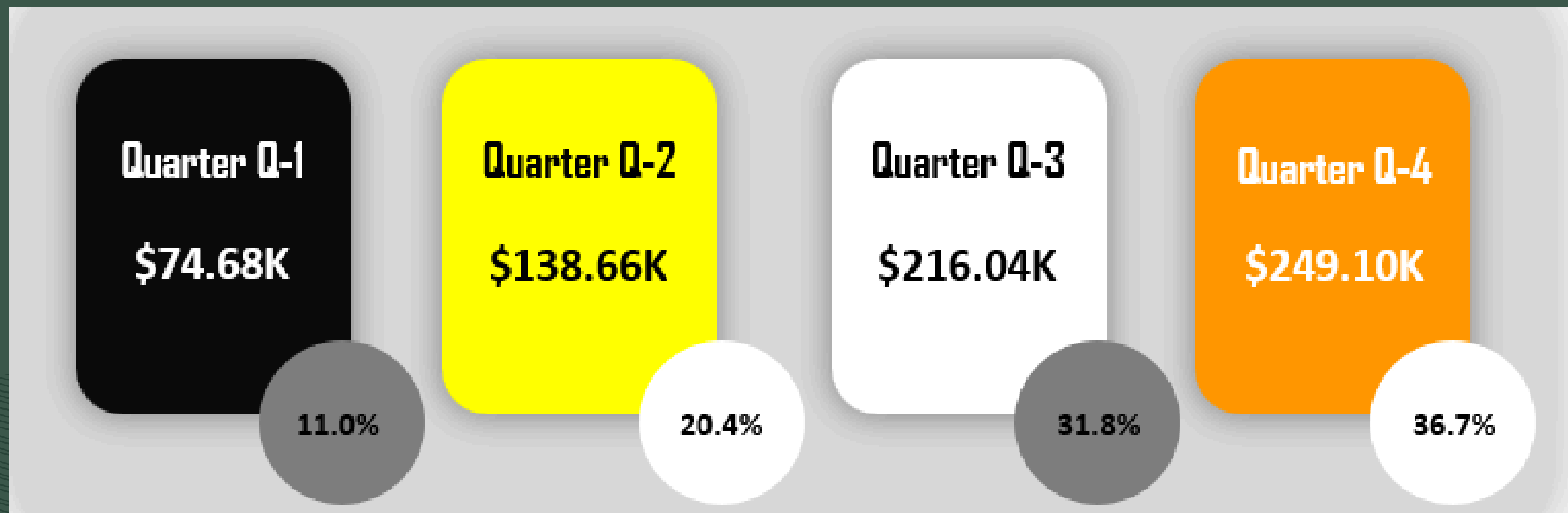
Month by Sales

Top 3 months they made sales are September
December, October.

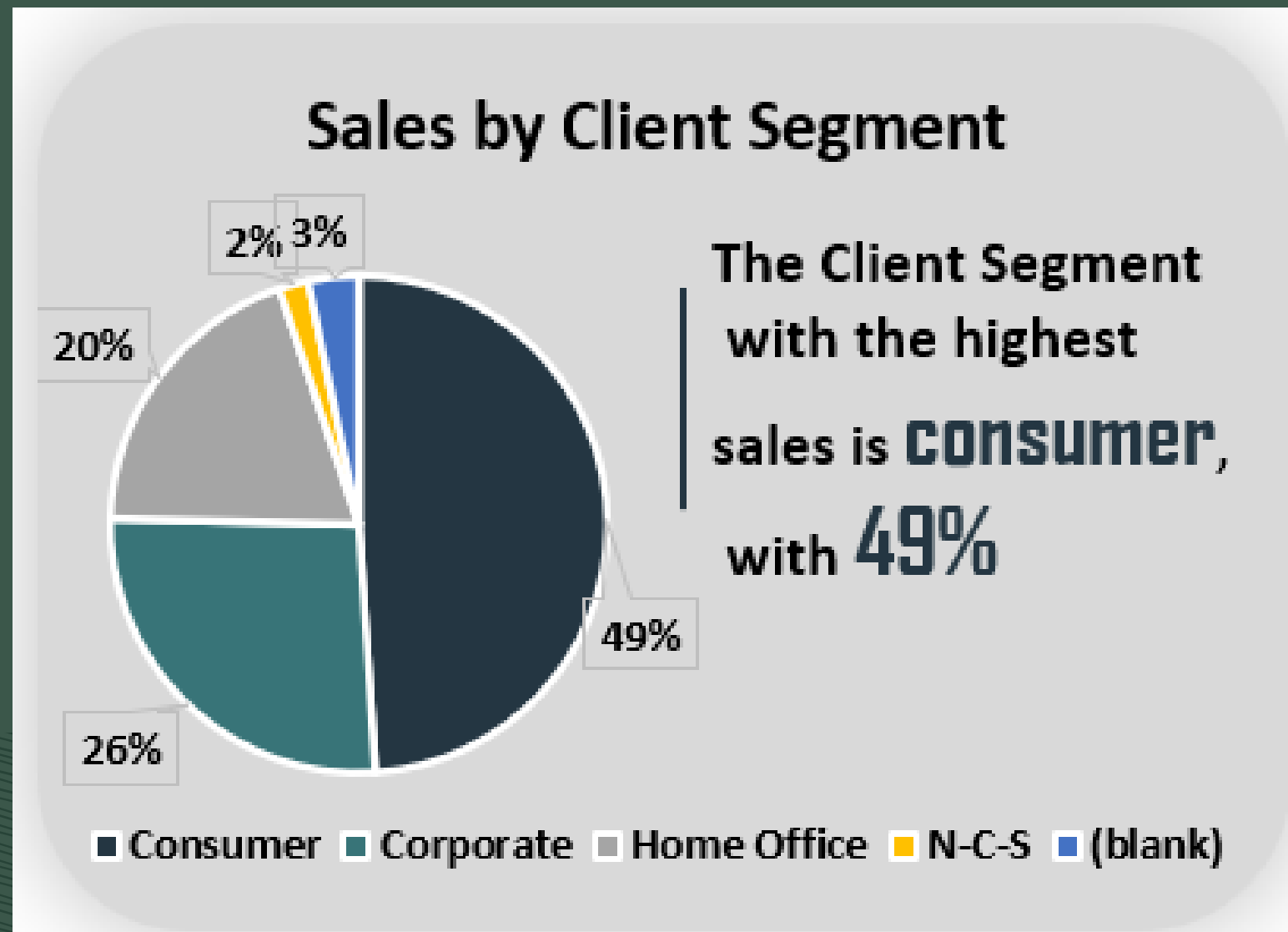


Quarter by Sales

Top one Quarter is made sales is Quarter Q-4



Client Segment by Sales



Top one Client segment is made sales is **Consumer** with **49%**

Customer Name by Sales

Top-5 Customer Name

Becky Martin

37,432.8

Ross Baird

23,816.3

Kelly Collister

22,944.7

(blank)

22,223.5

Christopher Martinez

19,732.4

Sales share of the

Top-5 Customer Name vs Others



Top-5

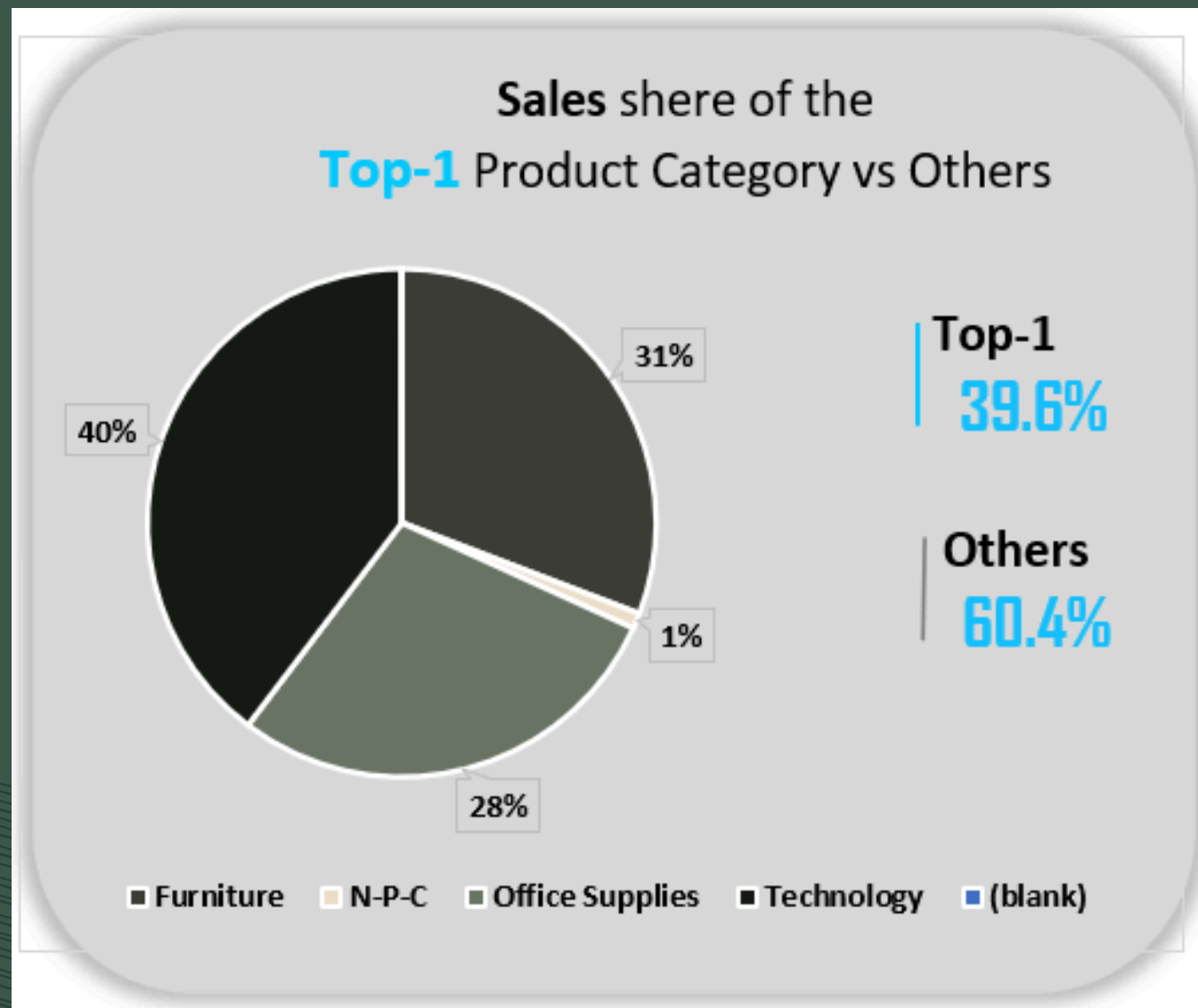
18.6%

Others

81.4%

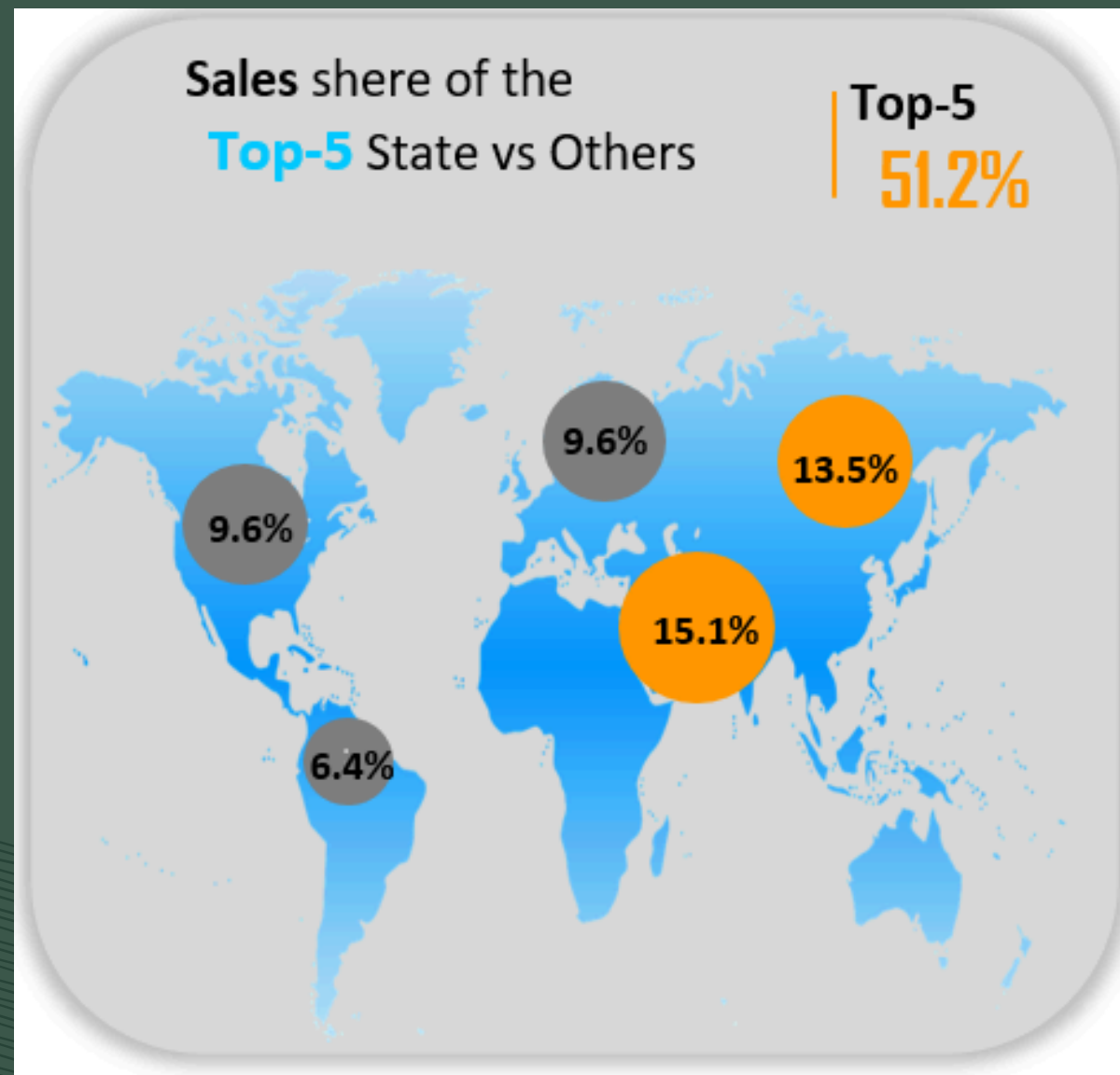
Top-5 Customer Name is made sales are Beck Martin Ross Baird Kelly,...etc, with **18.6%**

Product Category by Sales



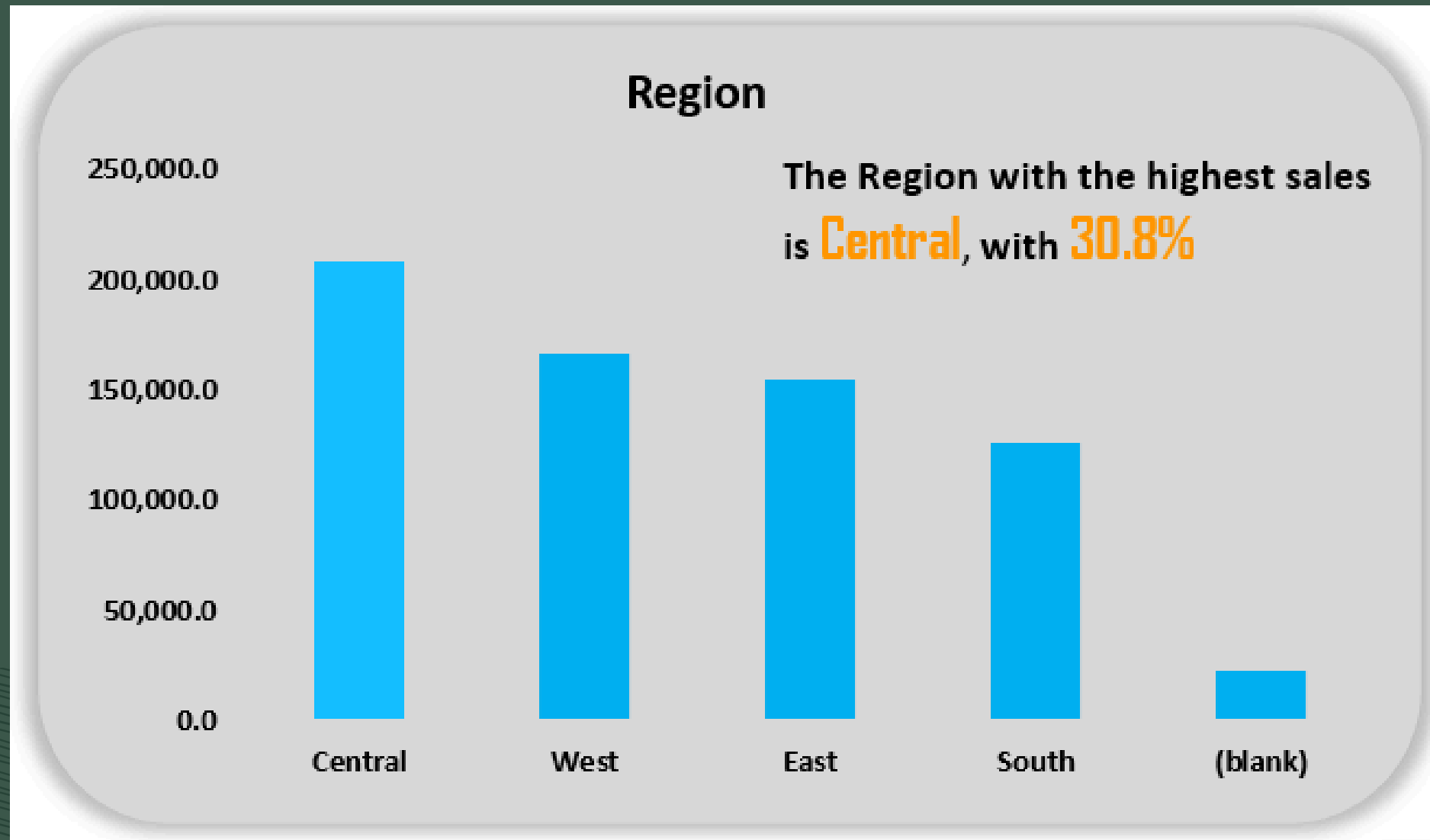
Top-1 Product Category
is made sales is
Furniture
with **39.6%**

State by Sales



Top-5 **State**
is made sales are
California
Texas
New York
North Carolina
Pennsylvania
with **52.1%**

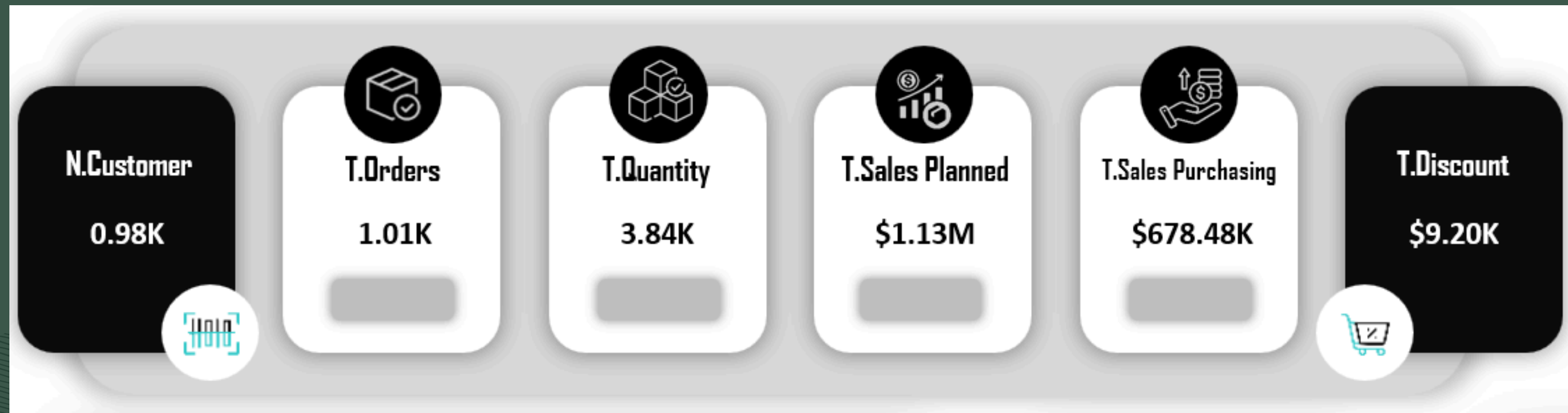
Region by Sales



Top-1 Region
is made sales is
Central
with **30.8%**

Same KPIS

6 Key Measures



Financial Analysis

Income State

- Sales Planned

\$1.13M

- Sales Purchasing

\$678.48K

- Total Quantity

3.84K

- Total Orders

1.01K

Financial Analysis

Sales by Years	T.Orders	T.Quantity	T.Sales
- Sales(2014)	0.21K	0.85K	\$196.38K
- Sales(2015)	0.21K	0.86K	\$157.60K
- Sales(2016)	0.29K	1.07K	\$173.04K
- Sales(2017)	0.29K	1.06K	\$151.46K

Customer Retention Rate

% CRR By **Year**

- CRR (2014)	200.0%
- CRR (2015)	325.0%
- CRR (2016)	322.2%
- CRR (2017)	360.0%

% CRR By **Years**

- CRR (2014)	0.0%
- CRR (2015)	104.5%
- CRR (2016)	133.3%
- CRR (2017)	103.2%

Customer Retention Rate was increasing throughout one year, but over the years it was decreasing.

Same Period Last Year

Some Period Last Year(SPLY) →

- SPLY(2014)

0.0%

- SPLY(2015)

28.9%

- SPLY(2016)

23.2%

- SPLY(2017)

25.5%

- SPLY(2018)

22.3%

The two highest years(**2015,2017**) achieved sales compared to the previous year.

Rate of Adoption

Rate of Adoption Years

Rate of Adoption (2014)

0.0%

Rate of Adoption (2015)

4.3%

Rate of Adoption (2016)

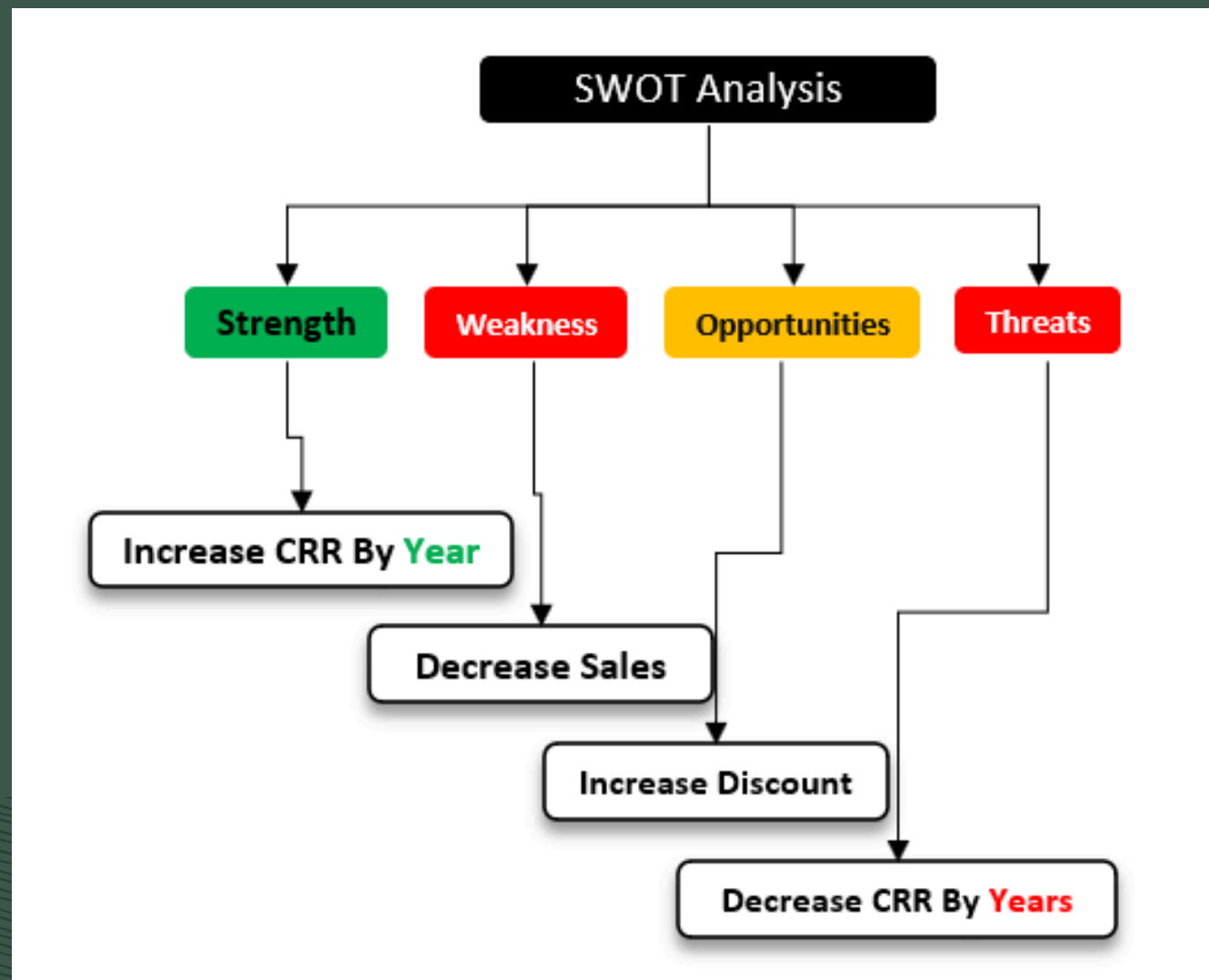
25.0%

Rate of Adoption (2017)

3.1%

The year 2016 witnessed the largest increase in product or service adoption compared to other years.

SWOT Analysis



Strength:

Increase CRR by Year

Weakness:

Decrease Sales

Opportunities:

Increase Sales

Threats:

Decrease CRR by Years



Does Anyone Have Questions?

Thank You

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