

The background features a complex network graph on the left side, composed of numerous small, dark gray dots connected by thin gray lines. To the right of the graph, several large, light gray triangles of varying sizes are scattered across the white space. Some triangles overlap or point towards the center of the slide.

DATA MINING

WHAT WE ACHIEVED
AND WHY IT'S
IMPORTANT



DATA MINING

WHAT IS IT?

BLACKWELL ELECTRONICS

DATA ANALYSIS AND
PREDICTION

01

02



03

WHAT ELSE WE CAN DO

POSSIBLE APPLICATION
FOR DATA MINING

04

Q&A

FALSE FRIENDS

EMBARASSED

BIZARRE

EMBARAZADA

BIZARRO

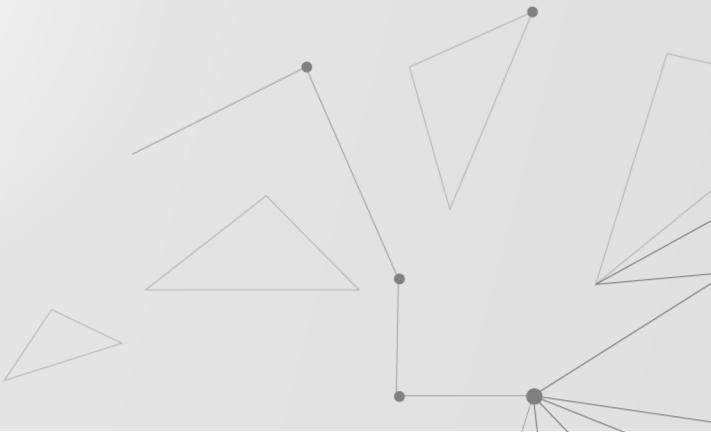
PREGNANT

BRAVE





DATA MINING



is the process of discovering truth and patterns in data, involving methods at the intersection of machine learning, statistics, and database systems



BLACKWELL ELECTRONICS

WHAT WE KNOW

DATA ANALYSIS

INVESTIGATING
CUSTOMER BUYING
PATTERNS

WHAT WE WANT TO KNOW

PREDICTION

PREDICTING
PROFITABILITY

INVESTIGATING CUSTOMER BUYING PATTERNS

AVERAGE TRANSACTION
BY REGION

TOTAL REVENUE BY
REGION

AGE OF CUSTOMERS
BETWEEN REGION

R
E
G
I
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N

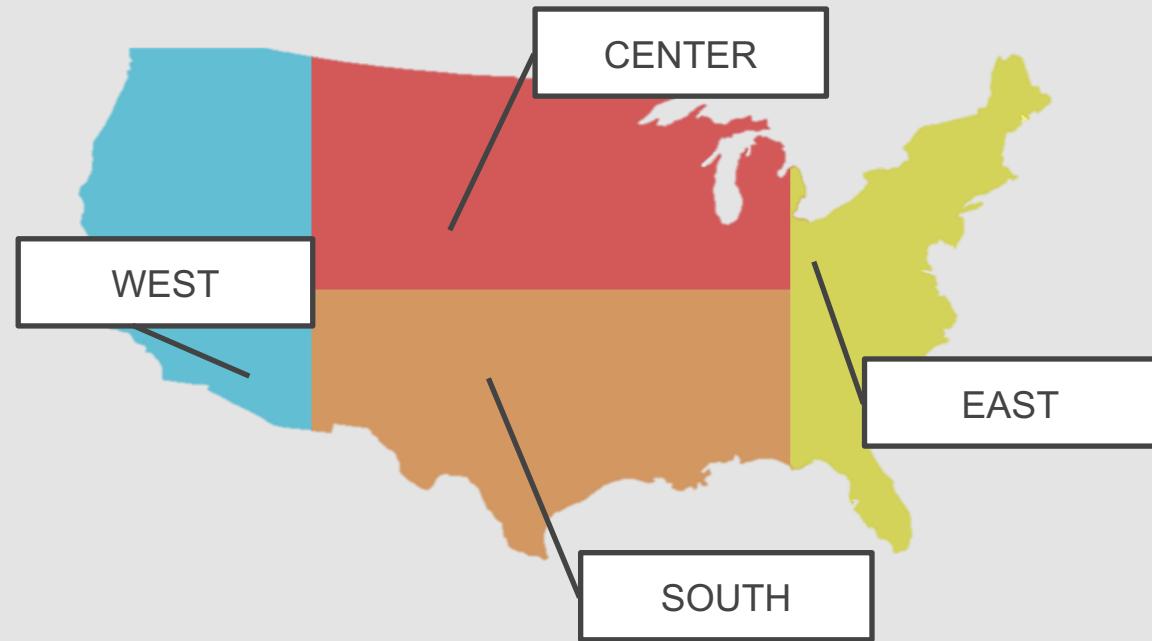
RELATIONSHIP BETWEEN
CUSTOMER'S AGE AND AMOUNT

PATTERNS AND BEHAVIOUR OF
CUSTOMER'S AGE BASED ON
OTHER DEMOGRAPHIC DATA

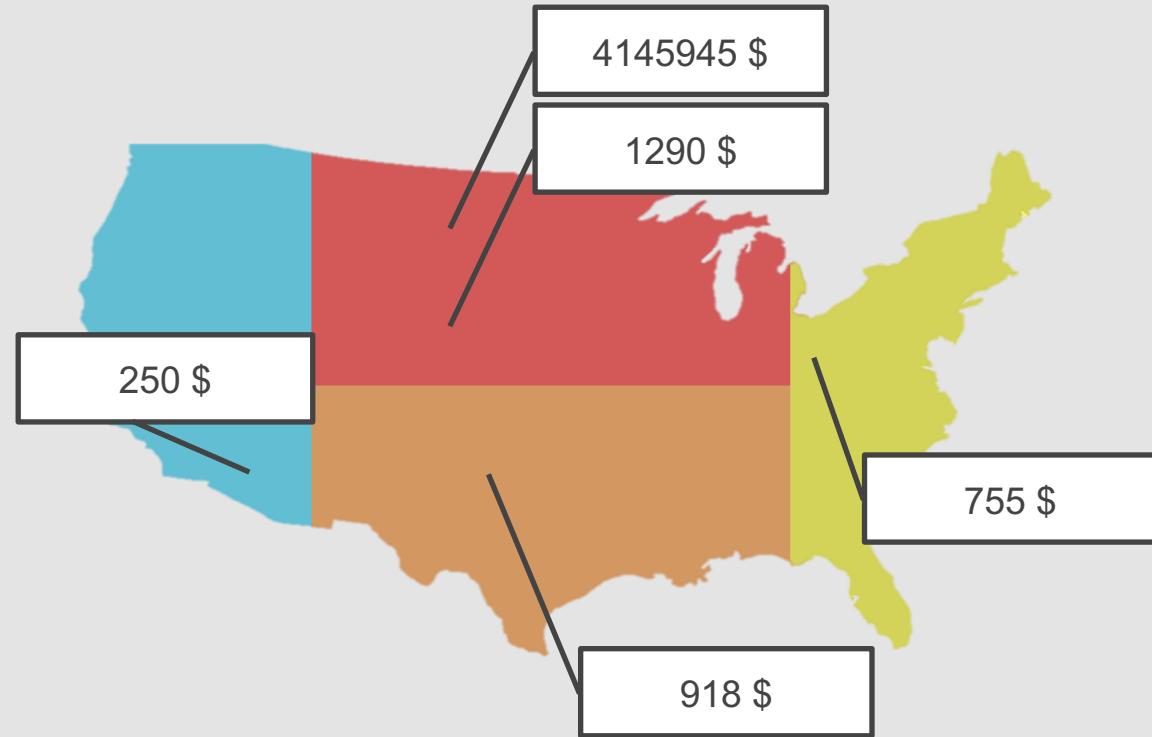
A
G
E

OTHER FACTORS THAT RELATE TO AN
ON-LINE OR IN-STORE TRANSACTION

O
T
H
E
R



AVERAGE TRANSACTION BY REGION



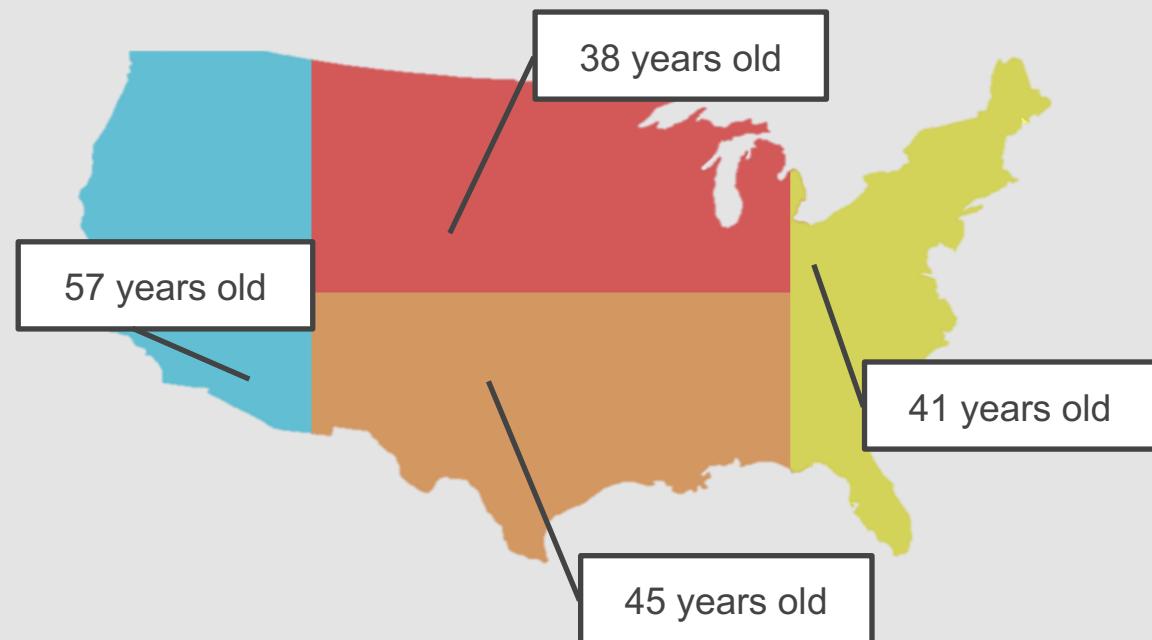
1290\$

Average Transaction in Central Region

50%

Total Revenue made in Central Region

AVERAGE CUSTOMER'S AGE



1290\$

Average Transaction in Central Region

50%

Total Revenue made in Central Region

46 years

Average Customer Age

INVESTIGATING CUSTOMER BUYING PATTERNS

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Total Revenue made in Central Region

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Average Customer Age

R
E
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A
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E

RELATIONSHIP BETWEEN CUSTOMER'S AGE AND AMOUNT

PATTERNS AND BEHAVIOUR OF CUSTOMER'S AGE BASED ON OTHER DEMOGRAPHIC DATA

OTHER FACTORS THAT RELATE TO AN ON-LINE OR IN-STORE TRANSACTION

O
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PATTERN IN CUSTOMER'S AGE

Average amount spent in \$

18 - 34 Young Adults

1012

34 - 51 Middle Aged Adults

903

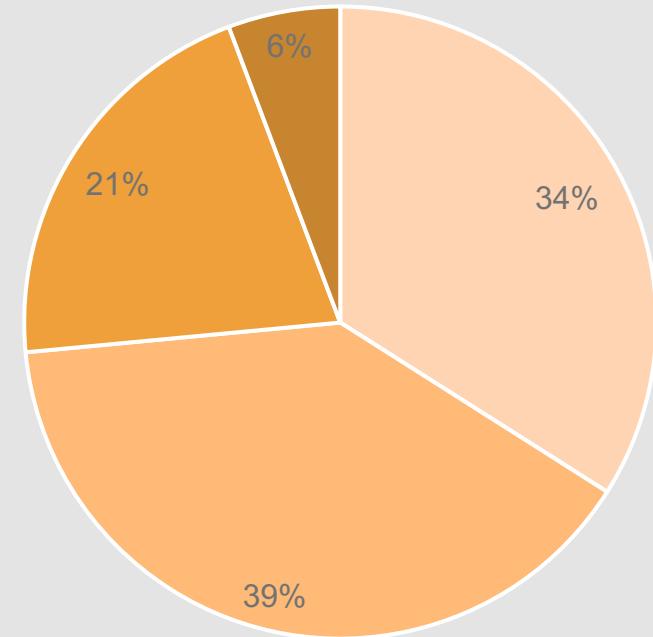
52 - 64 Mature Aged Adults

814

64 - 85 Older

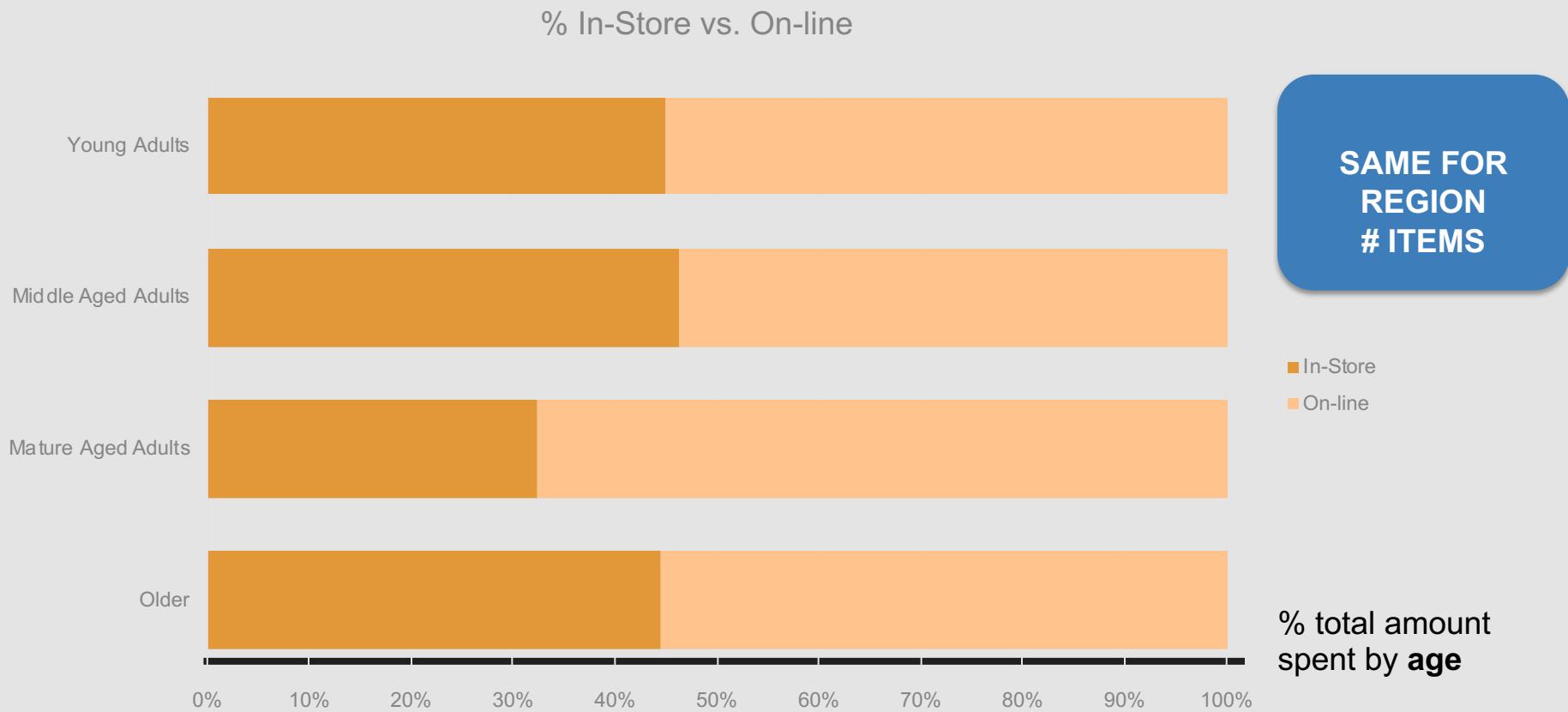
338

Total Amount



- 18 - 34 Young Adults
- 34 - 51 Middle Aged Adults
- 52 - 64 Mature Aged Adults

INVESTIGATING CUSTOMER BUYING PATTERNS



INVESTIGATING CUSTOMER BUYING PATTERNS

1290\$

Average Transaction in Central Region

50%

Total Revenue made in Central Region

46 years

Average Customer Age

R
E
G
I
O
N

1012 \$

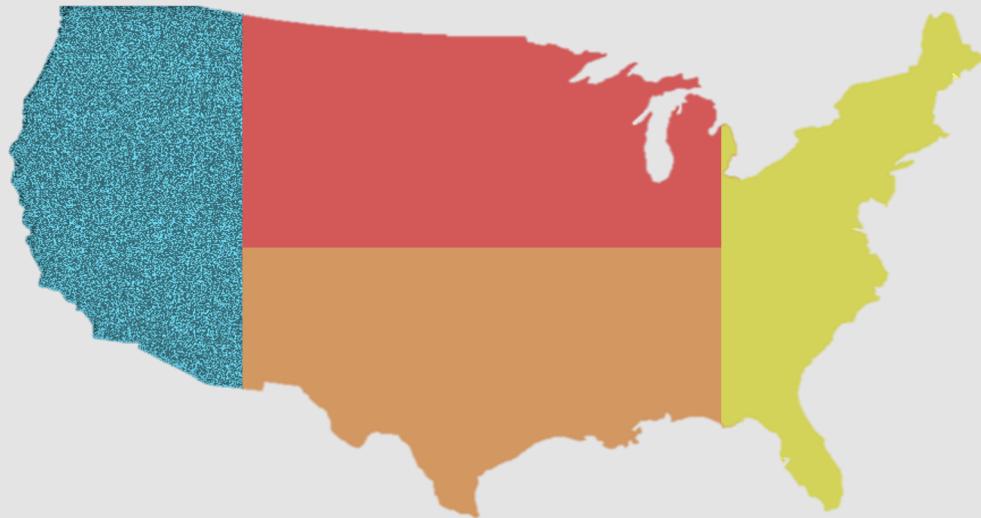
BIGGEST SPENDER YOUNG ADULTS

NO STATISTICAL RELEVANCE
-
NOT ENOUGH INFORMATION

A
G
E

OTHER FACTORS THAT RELATE TO AN ON-LINE OR IN-STORE TRANSACTION

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T
H
E
R



\$ < 2000 → **IN-STORE**

\$ > 2000 → **ON-LINE**



BLACKWELL ELECTRONICS

WHAT WE KNOW

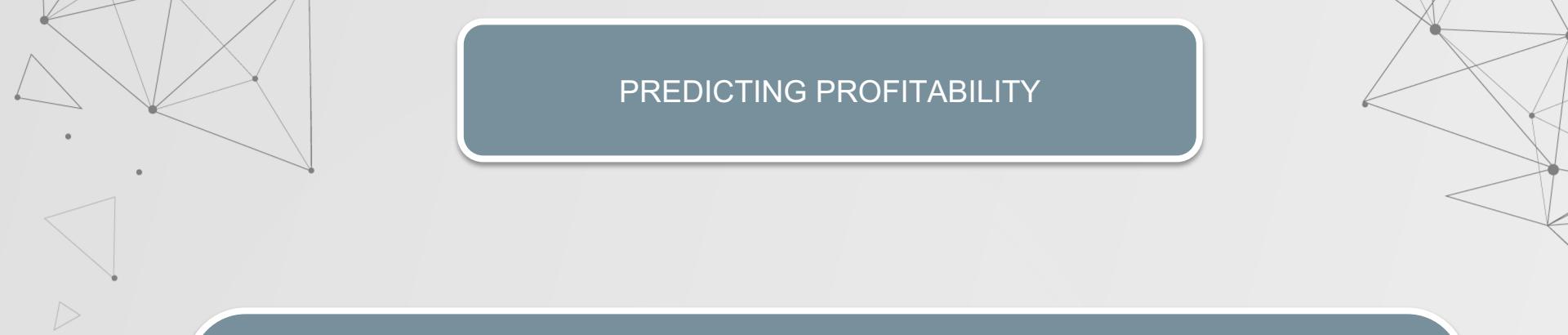
DATA ANALYSIS

INVESTIGATING
CUSTOMER BUYING
PATTERNS

WHAT WE WANT TO KNOW

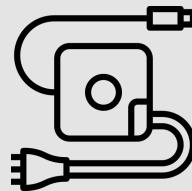
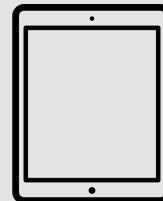
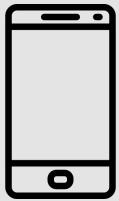
PREDICTION

PREDICTING
PROFITABILITY



PREDICTING PROFITABILITY

**PREDICT THE TOP 5 NEW PRODUCTS BY PROFITABILITY
AMONGST 20 NEW PRODUCTS**



REVIEWS

TYPE

PHISICAL
INFORMATION

HISTORICAL
SALES DATA

SUPPLIER
INFORMATION

VOLUME

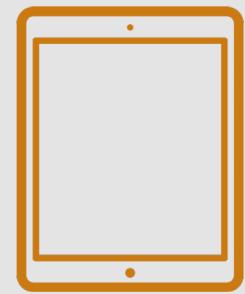
REVIEWS

TYPE

PHISICAL INFORMATION

HISTORICAL SALES DATA

SUPPLIER INFORMATION

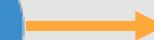
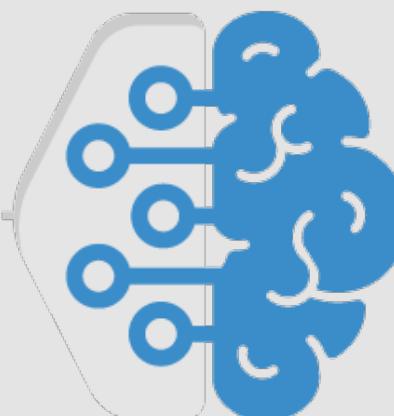


REVIEWS

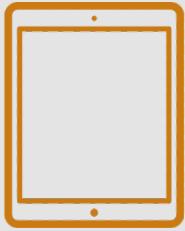
GOOD!

TYPE

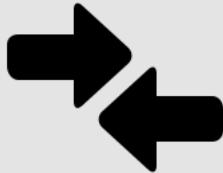
TABLET



PREDICTED
VOLUME



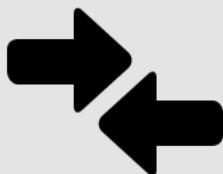
PREDICTED
VOLUME



VOLUME



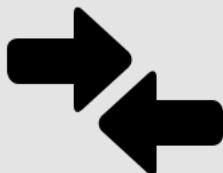
PREDICTED
VOLUME



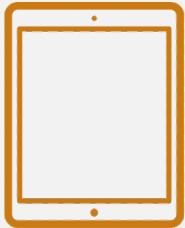
VOLUME



PREDICTED
VOLUME



VOLUME



PREDICTED
VOLUME



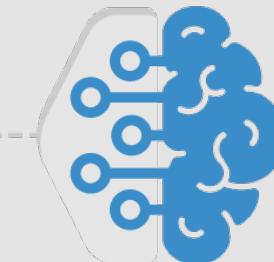
VOLUME



PREDICTED
VOLUME



VOLUME



**NEW
PRODUCTS**



PREDICTED
VOLUME



VOLUME

Type	Product#	Price	Profit margin	Volume predicted	Profitability	Ranking
Laptop	176	\$1.999,00	0,23	373	171558,2	1
Tablet	186	\$629,00	0,1	1493,4	93934,67	2
Tablet	187	\$199,00	0,2	1410,7	56147,28	3
PC	171	\$699,00	0,25	307,2	53691,13	4
Netbook	180	\$329,00	0,09	1333,5	39484,62	5

THE FUTURE



CUSTOMER PROFILE

COLLECTION OF ADDITIONAL CUSTOMER INFORMATION IN ORDER TO PREDICT BETTER THEIR BEHAVIOUR AND START TARGETED OFFERS

MARKET ANALYSIS

DATA

PURCHASE OF MARKET DATA TO ANALYSE TREND AND COMPARE WITH PATTERNS IN OUR DATA

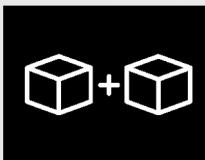
TRENDS AND SEASONALITY

ANALYSE TREND FROM A TIME PROSPECTIVE



INVENTORY OPTIMIZATION

AVOID OBSOLESCENCE OF THE PRODUCTS



BUNDLE ANALYSIS

UNDERSTAND WHICH PRODUCTS ARE SOLD TOGETHER AND CREATE COMPETITIVE PROMOTIONS



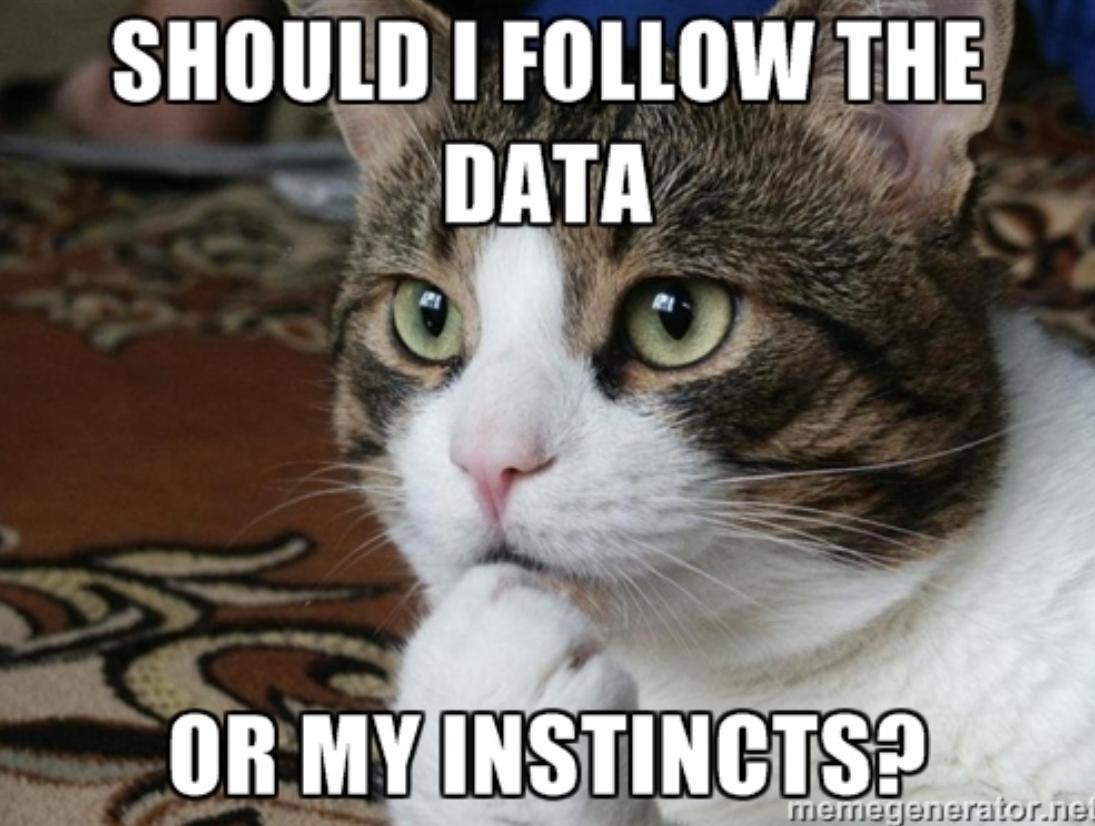
SUPPLIER OPTIMIZATION

SELECTION OF THE BEST SUPPLIERS ACCORDING SPECIFIC CRITERIA



Q&A





**SHOULD I FOLLOW THE
DATA**

OR MY INSTINCTS?

memegenerator.net