

SOCIAL MEDIA ANALYSIS

An NLP Study on a Fintech Company

FTW's

TEAM

UNICORN



**CHERRY JEAN
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Industrial
Engineering
Graduate



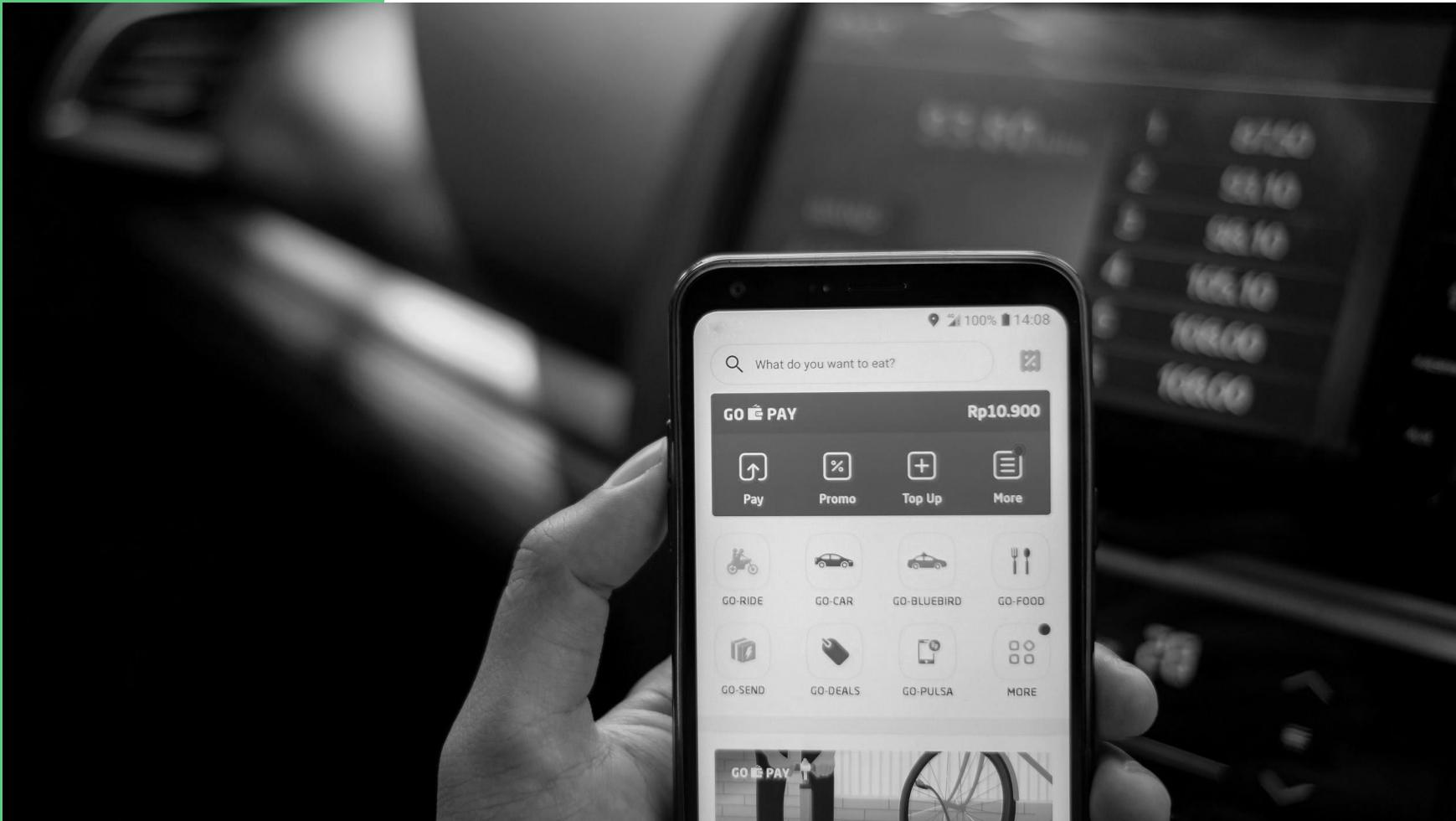
**JENNELYN
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Computer
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Graduate



**LEA
RONQUILLO**

Doctor of
Veterinary
Medicine Graduate



A CLOSER LOOK AT THE MARKET

\$561B

2019

\$897B

2023



ECOMMERCE GROWTH RATE

The US ecommerce market drives FinTech industry growth

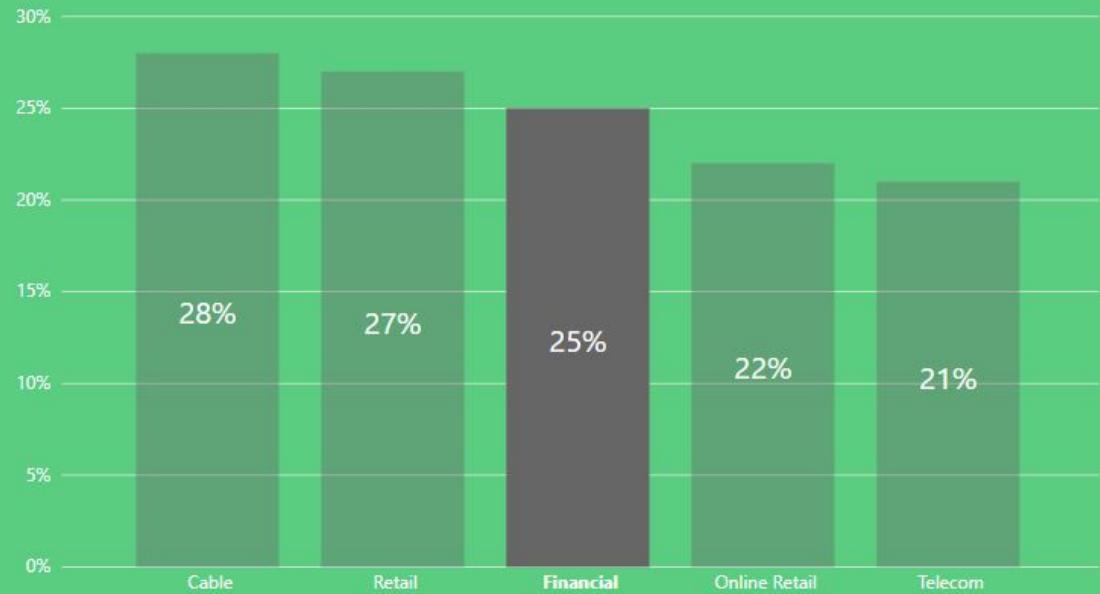
Country	2018	2023	5-year growth
China	\$636.1B	\$1,086.1B	70.7%
United States	\$504.6B	\$735.4B	45.7%
France	\$49.4B	\$71.9B	45.6%
Australia	\$18.6B	\$26.9B	44.6%
Russia	\$17.2B	24.8B	44.2%

United States is among the top with the highest five-year growth rate

CUSTOMER CHURN RATE

1 out of 4 FinTech customers are at risk of going over to rival companies

Financial Industry is among the top 5 with the highest churn rate



WHAT MAKES A BUSINESS SUCCESSFUL?



WHAT DO THE CUSTOMERS SAY?



I Is this different than the card that charges you \$9.95 after you activate it? Got one as a gift. Not happy.



Yea I was wondering the 3rd checks coming in today or tomorrow



I But why 3% back only on online or app purchases? Some things like groceries and dining out you have to pay in person.



I just received our replacement cards that look like a cheap plastic temporary cards that will snap in half. We have been customer for over 10 years and never had one like this. What happen to our regular credit cards?



Yea I was wondering the 3rd checks coming in today or it turn in tomorrow

www.yourmoneyisgarbage.com is garbage. They are just stealing your money!!!! Don't do it!!!!



I love [REDACTED], too bad it doesn't work with Stockpile and other investment services so I could transfer my ir

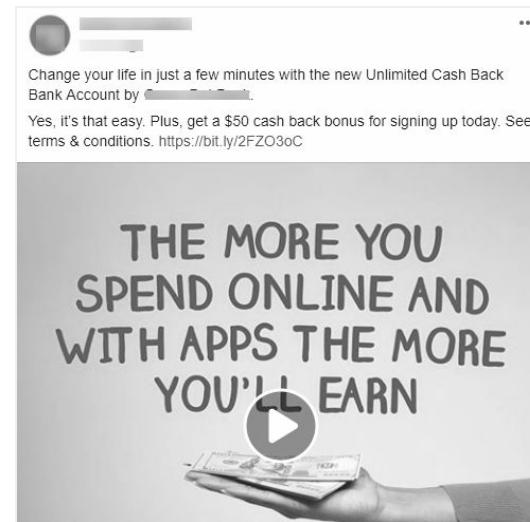


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... AND HOW DOES THE COMPANY ENGAGE WITH CUSTOMERS?



WHAT WE WANT TO KNOW:



How can we improve customer experience?



What drives negative sentiments?



What type of activities and content promote positive engagement?

PROJECT OVERVIEW



Prepare the Data

Data Cleaning
Feature Engineering
Exploring Data

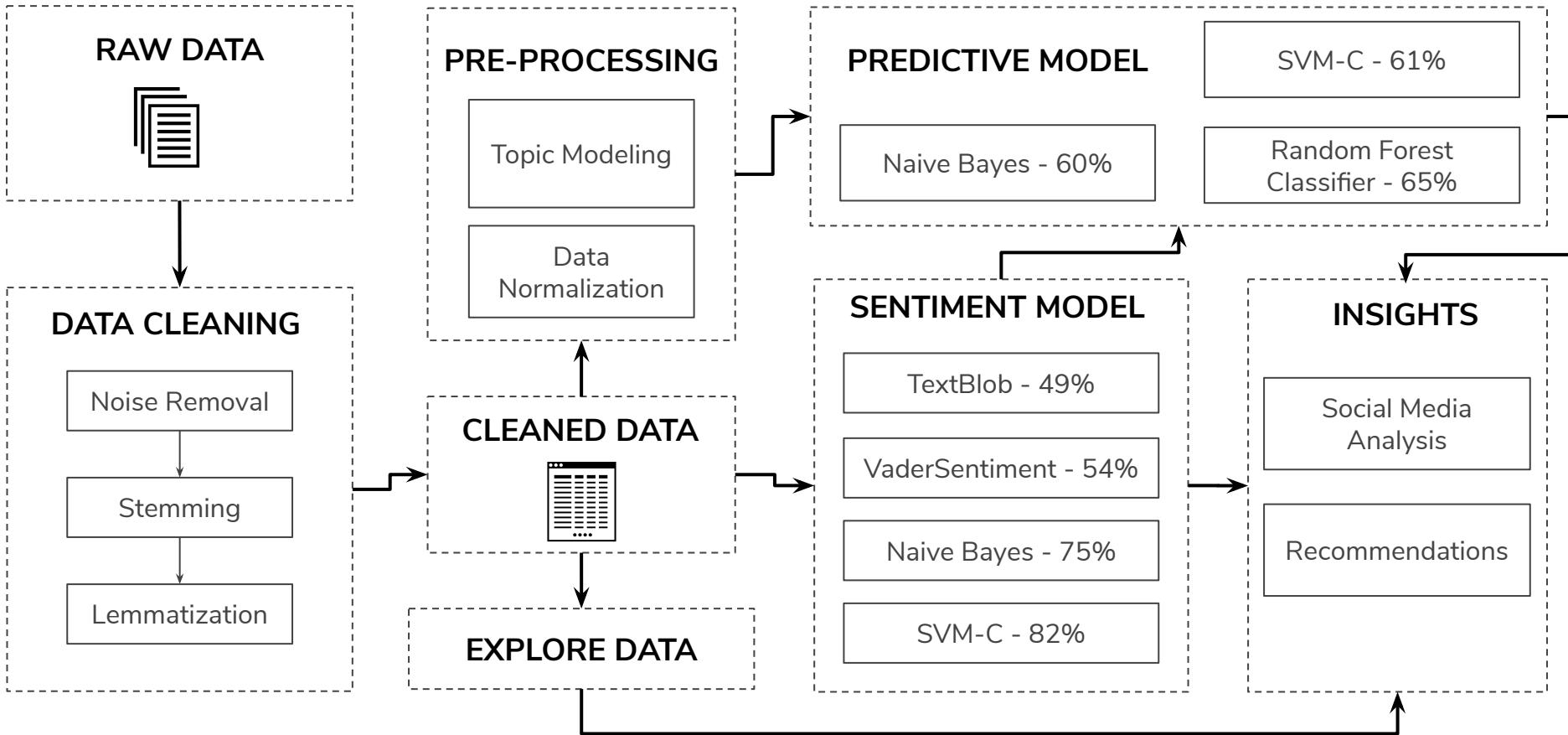
Build the Model

Predicting Sentiment
Predicting Post Reactions

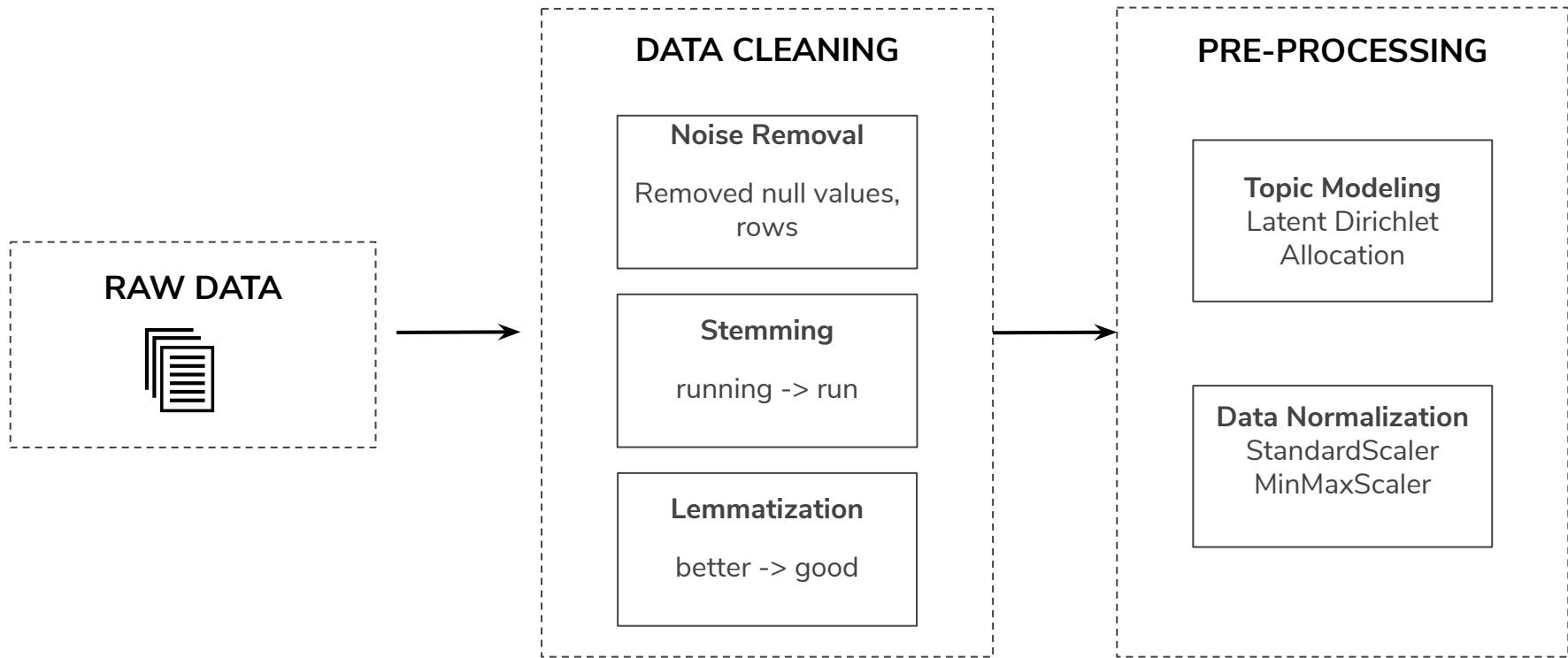
Derive Insights

Social Media Analysis
Recommendations

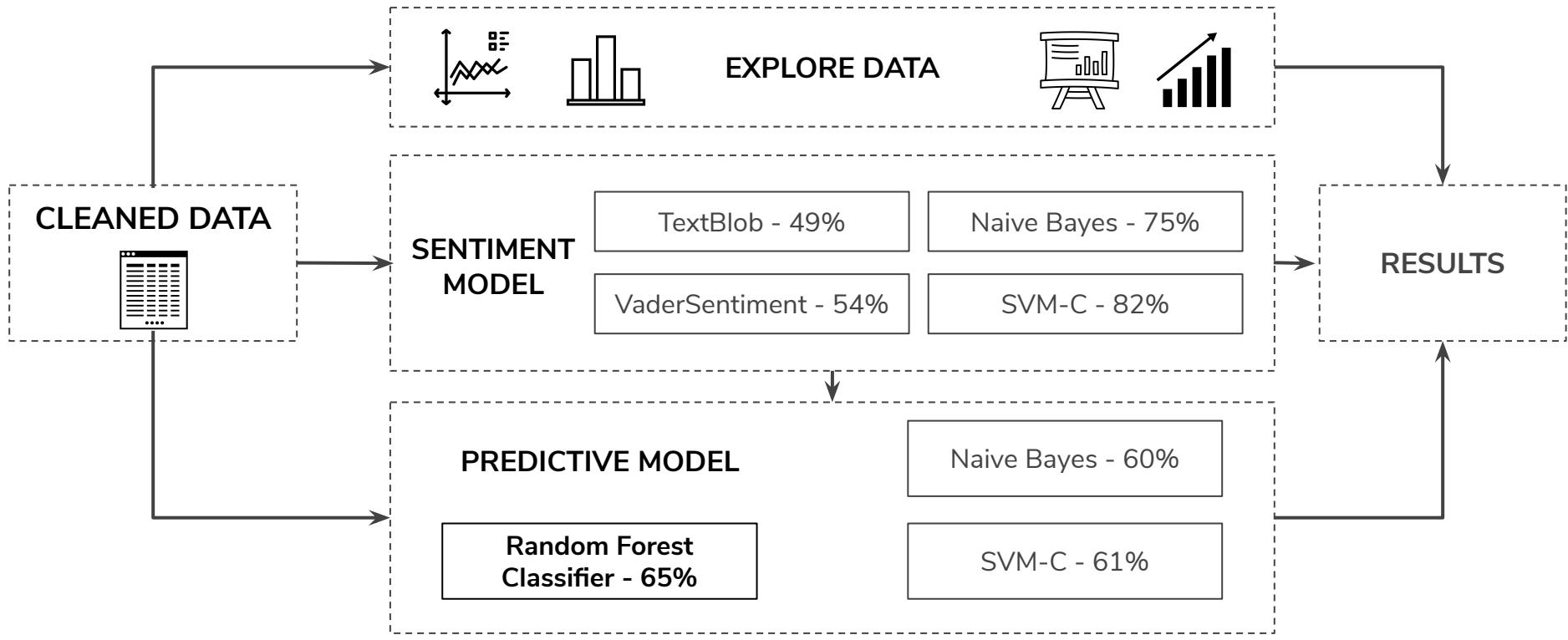
HOW DID WE DO IT?



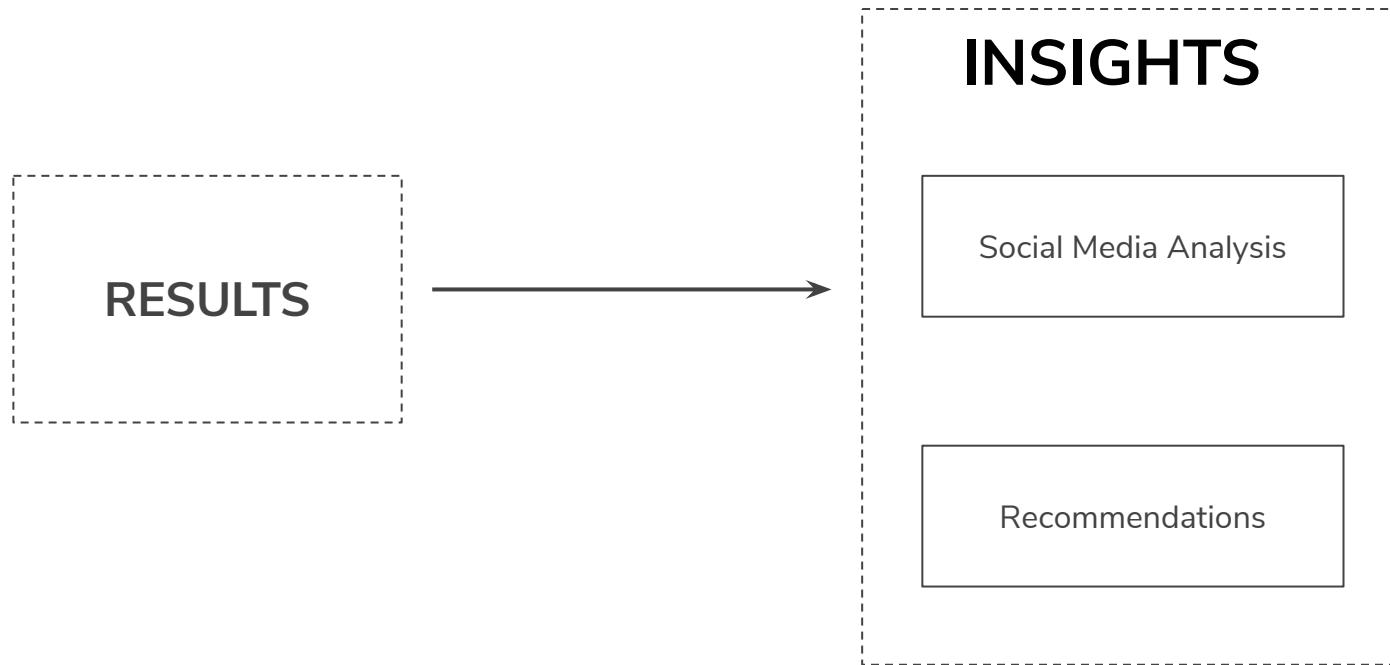
PREPARE DATA



BUILD MODEL

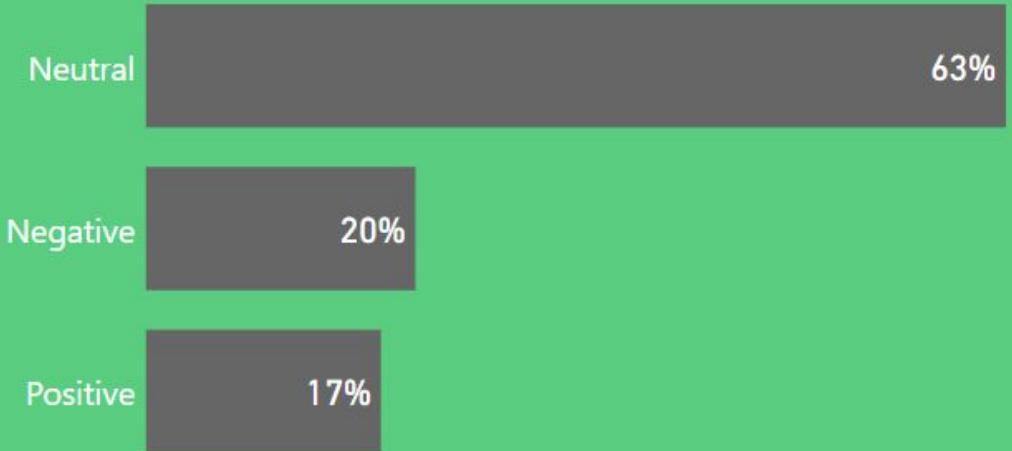


DERIVE INSIGHTS



HOW DO OUR CUSTOMERS FEEL?

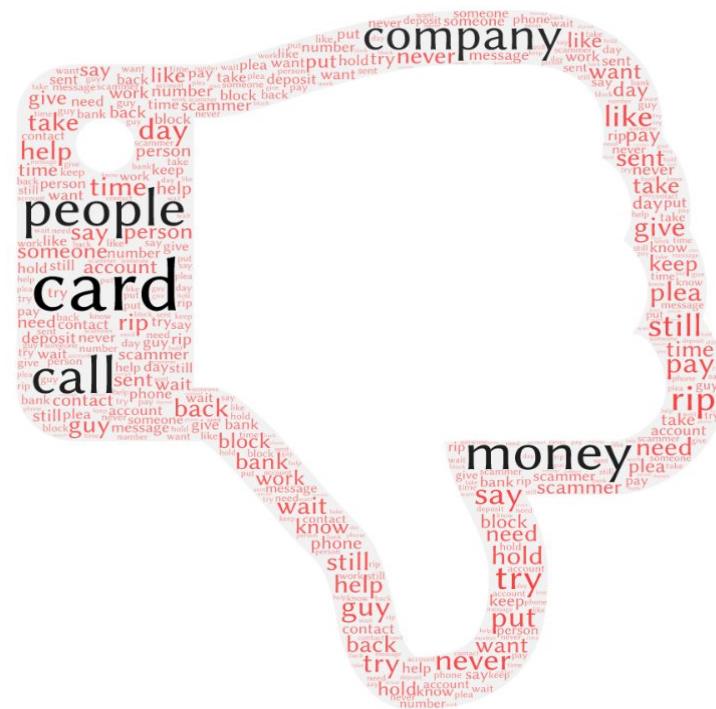
There is only 17% positive sentiments.



MOST FREQUENTLY USED WORDS WITH POSITIVE SENTIMENT



MOST FREQUENTLY USED WORDS WITH NEGATIVE SENTIMENT

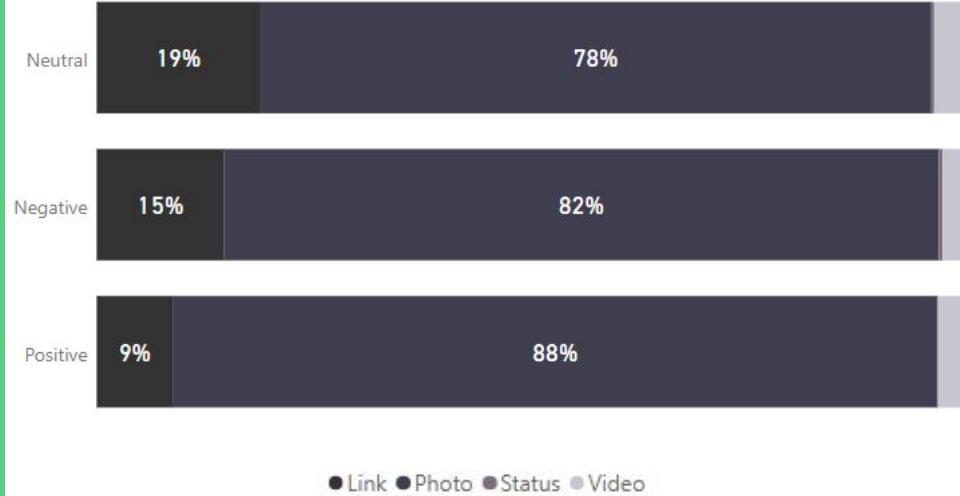


MOST FREQUENTLY USED WORDS WITH NEUTRAL SENTIMENT



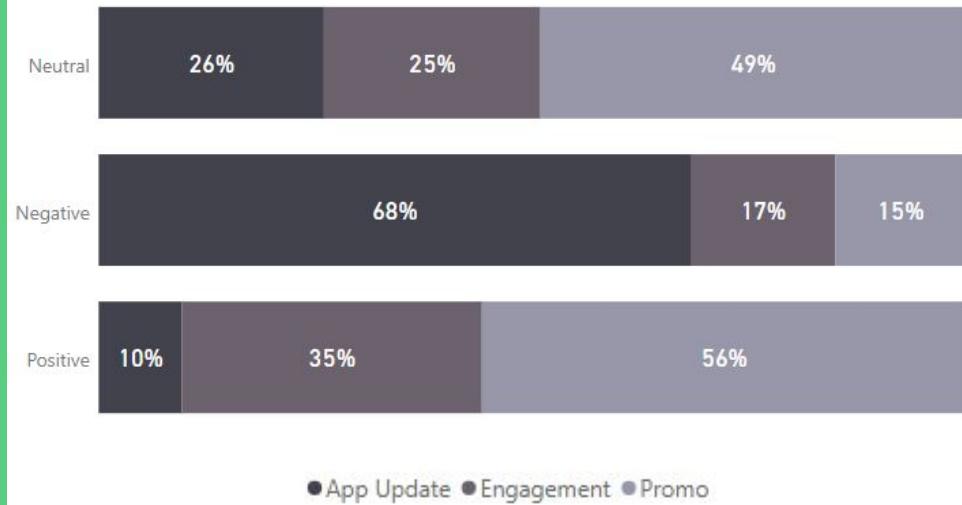


SENTIMENTS BY TYPE OF POST

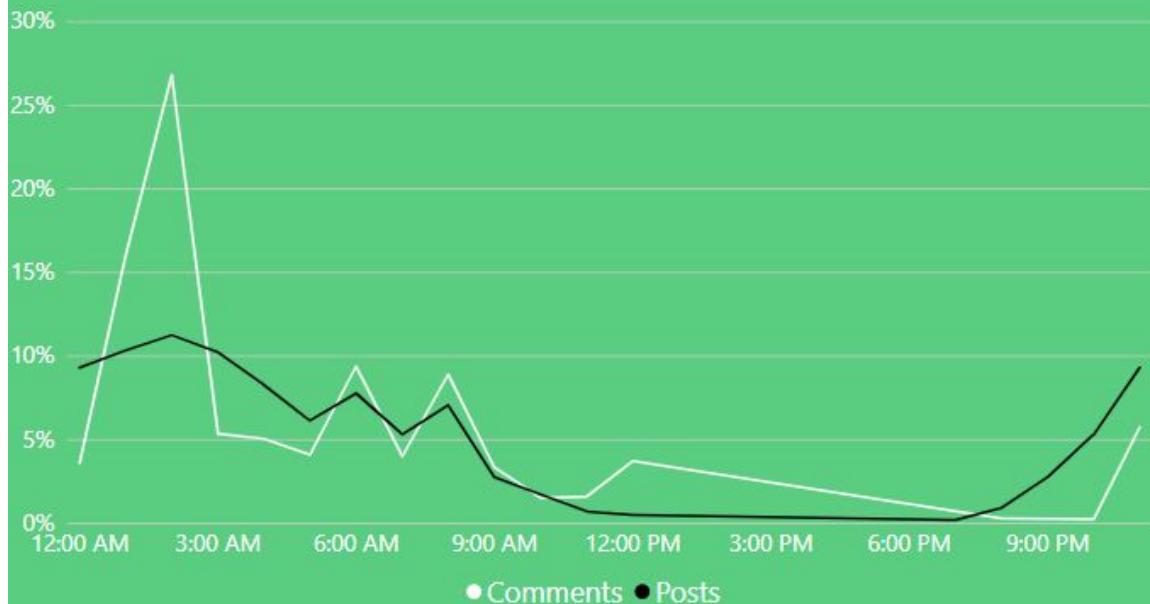




SENTIMENTS BY POST CATEGORY

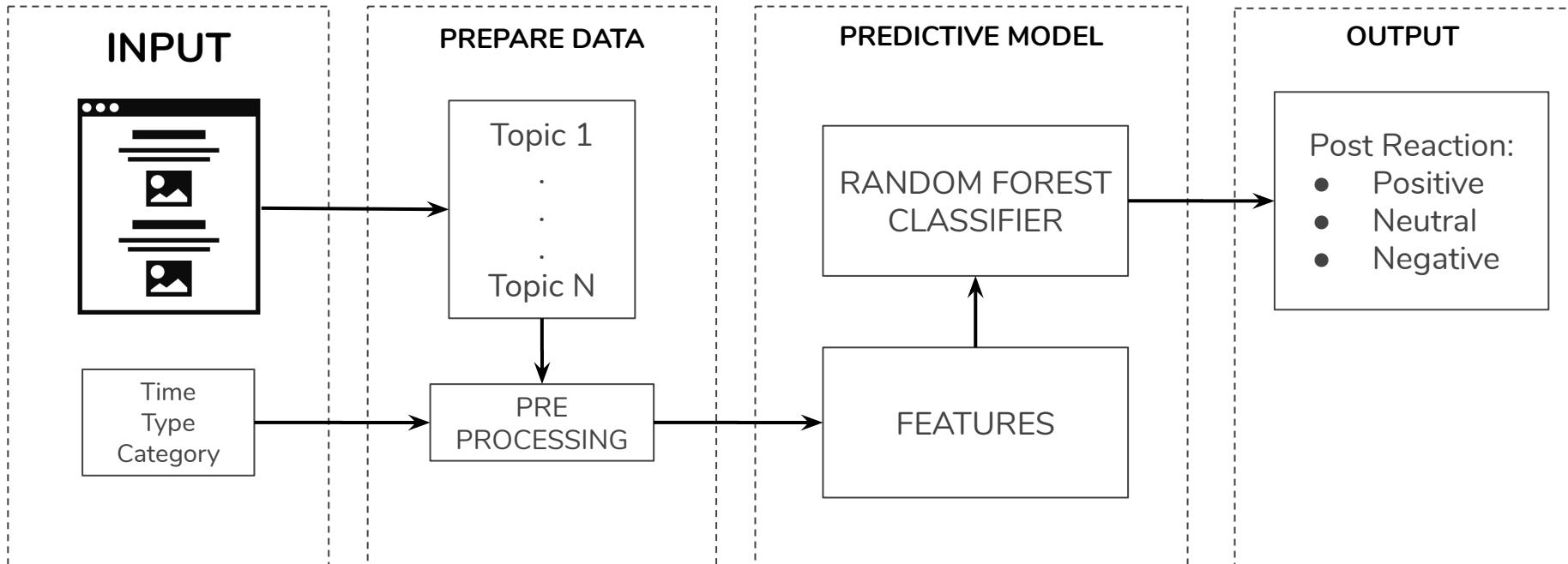


HOURLY POSTS AND COMMENTS TREND



POST REACTION PREDICTIVE MODEL

Predicts the post reaction it will gain based on the content, time, type of post, and category



CREATE A SUPERVISED COMMUNITY HELP CENTER

Customers can interact and help each other.

CONVEY THROUGH PHOTOS

Customers are more likely to react or respond to posts with photos.

COMMUNICATE STRATEGICALLY

Customers are more likely to participate in the conversation outside of their office hours.

RECOMMENDATIONS

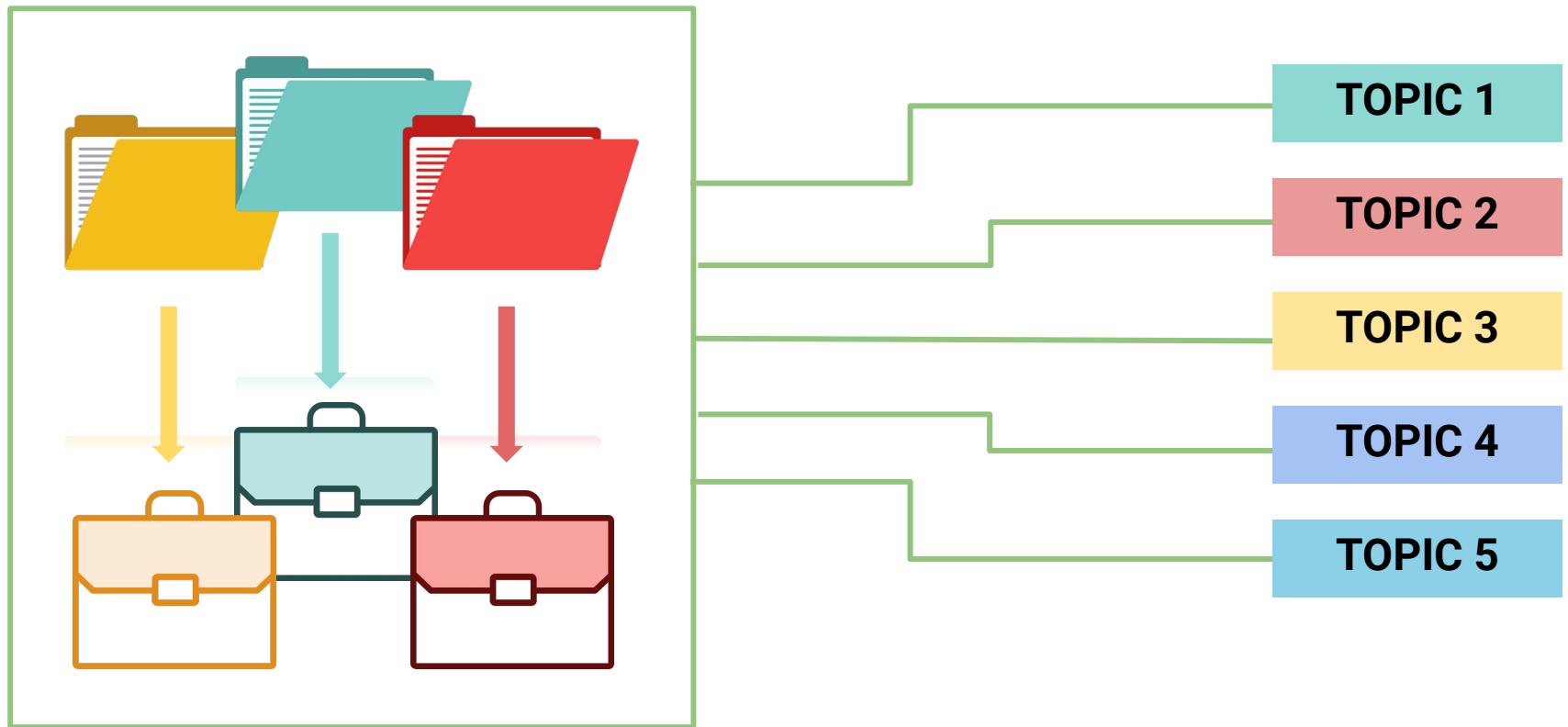
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KEY TAKEAWAY:

LISTEN.
LEARN.
LEVEL UP.

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Topic Modeling



Our Customers

5% increase
repeat customer sales

5X
25 - 95%
new customer sales



Let's take a closer look at FinTech

US \$561.3B

2019

US \$897B

2023

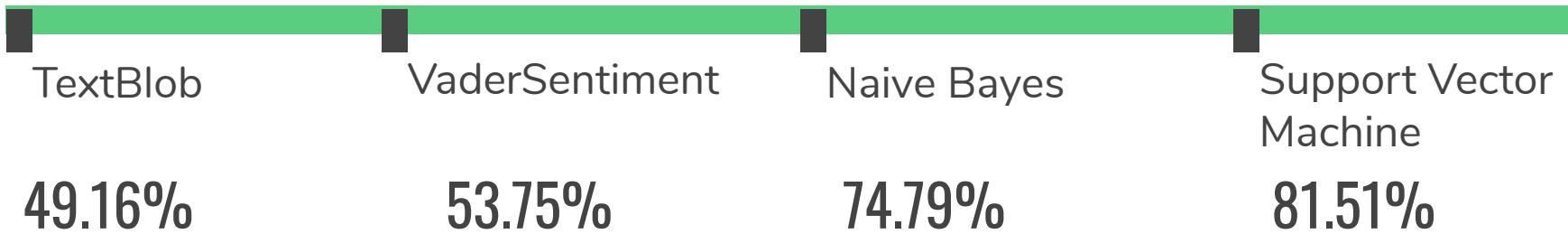
10% of retail sales
are done online

Forecasted 15% growth
per year



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Russia	\$17.2B	\$24.8B	44.2%
Canada	\$39.9B	\$55.4B	38.8%
Germany	\$70.3B	\$95.38B	35.6%
United Kingdom	\$86.6B	\$113.6B	31.3%
Japan	\$81.7B	\$103.6B	26.8%
South Korea	\$63.7B	\$80.2B	25.9%

SENTIMENT ANALYSIS JOURNEY



5%

increase in retention

25 - 95%

increase in profit

existing customers are

60 - 70%

more likely to avail a product or service

new customers

5 - 20 %

BASED ON A STUDY

It costs

5X

more to acquire new customers than
retain customers

