Customer Support @twitter

Jaime Garvey

The Tradeoff

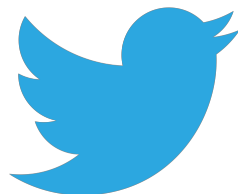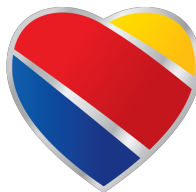CHURN

SUPPORT

Motivation

What are important...

Trends

by

Customer Sentiment
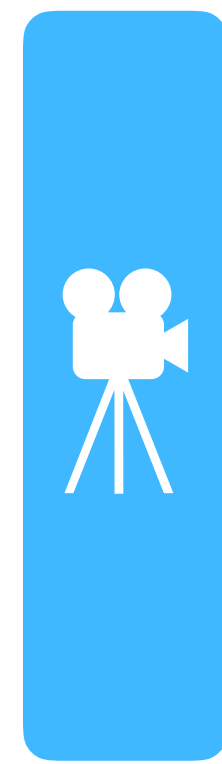
so we can

Mitigate Risk?

Data
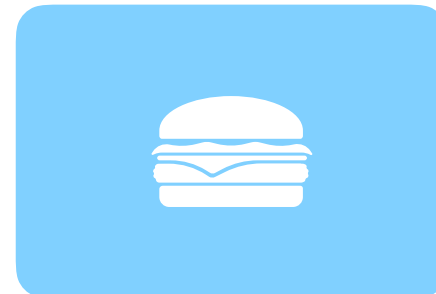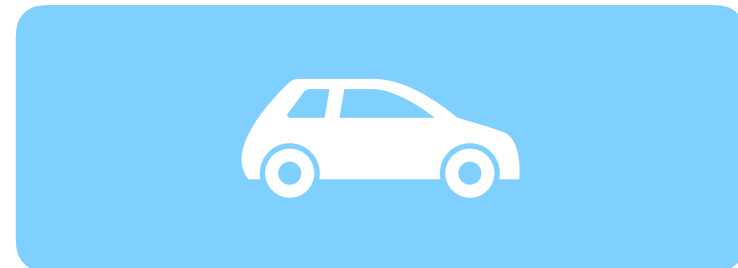
Data

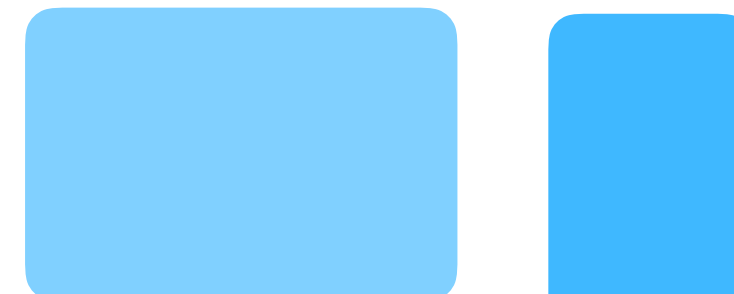| Consumer	E-comerce	Tech	Telecom	Airlines	Finance
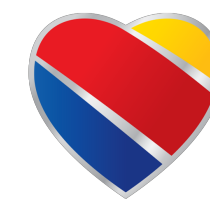
Methodology
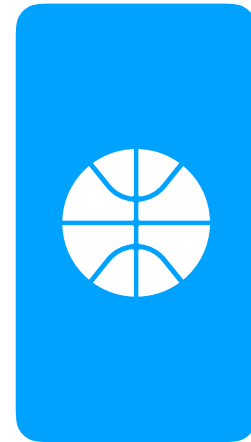
Methodology

Sentiment
Analysis
Vader Sentiment

Methodology

Sentiment Analysis
Vader Sentiment

Topic Modeling
NLTK
Gensim
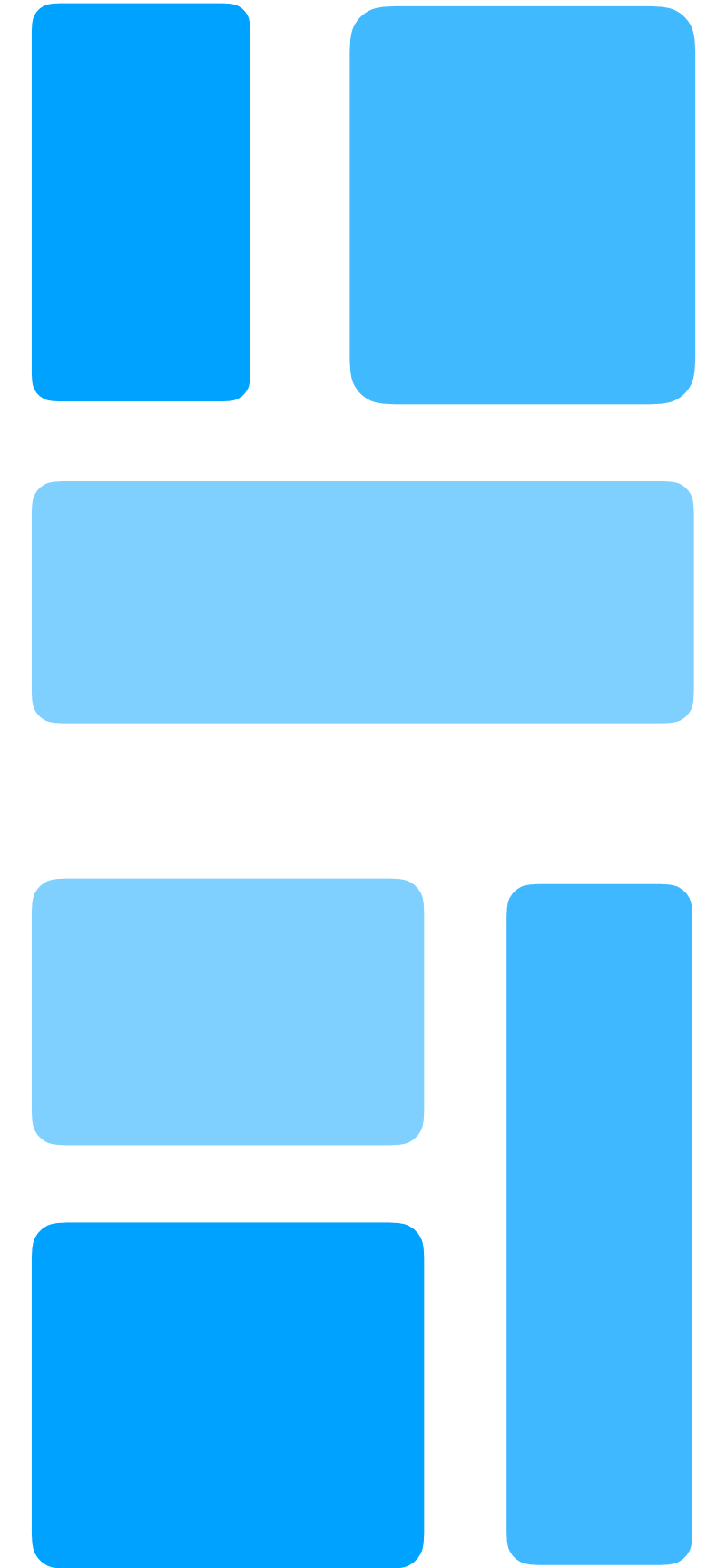
Airlines | Positive Sentiment

Airlines | Positive Topics

Home
Awesome
Time
Great
Best
Crew

Seat
Plane
Flying
Booked
Agent
Gate

Free
Ticket
Seat
Upgrade
Service
First

Airlines | Positive Topics

Home
Awesome
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Seat
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Flying
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Gate

Free
Ticket
Seat
Upgrade
Service
First

Airlines | Positive Topics

Reflective Experience

In-Flight Experience

Perks

Airlines | Negative Sentiment

Airlines | Negative Topics

Lost
Bag
Miss
Connection
Pay
Seat

Service
Delay
Tomorrow
Today
Worst
Time

Cancel
Service
Today
Waiting
Airport

Airlines | Negative Topics

Lost
Bag
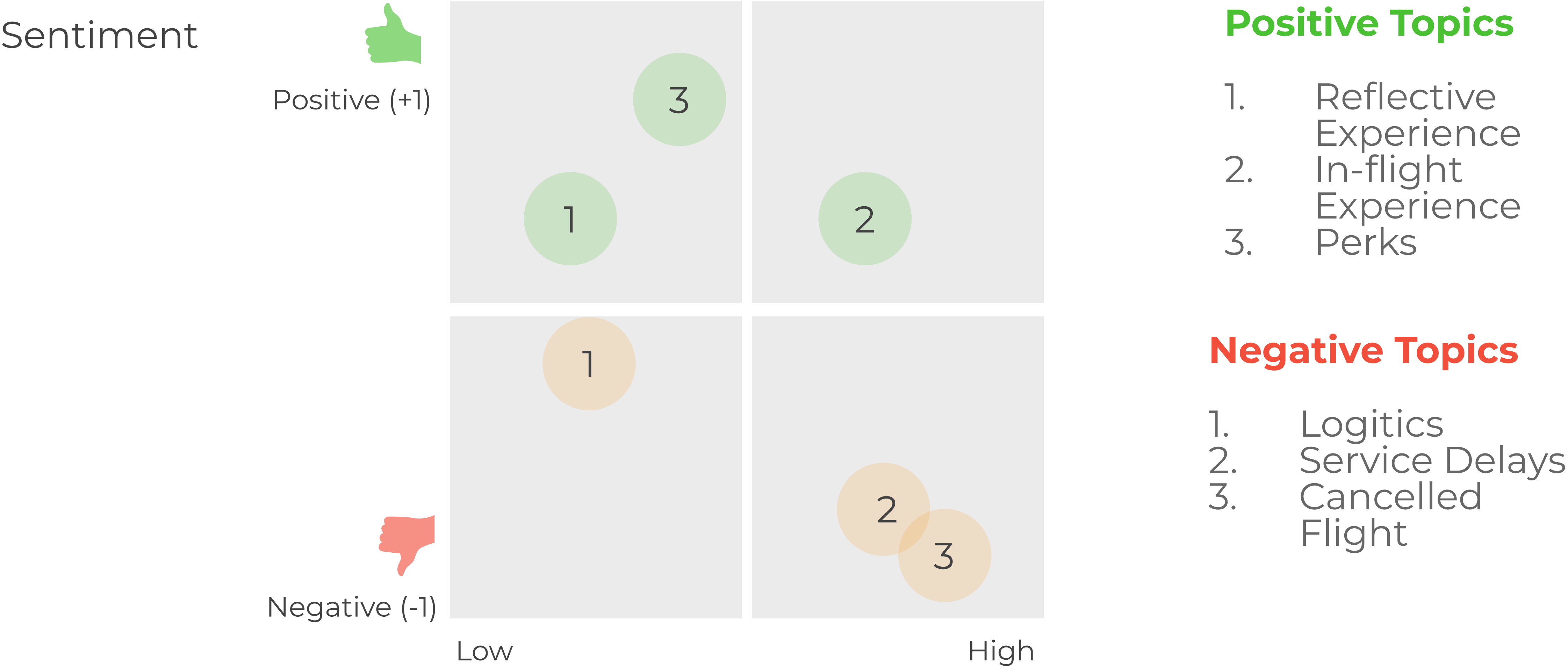Miss
Connection
Pay
Seat

Service
Delay
Customer
Today
Worst
Time

Cancel
Service
Today
Waiting
Airport
Hours

Airlines | Negative Topics

Logistics

Service Delays

Cancelled Flight

Application?

Airlines | Relative Topics

Sentiment 👍

Positive (+1)

Positive Topics

1. Reflective Experience
2. In-flight Experience
3. Perks

Negative Topics

1. Logitics
2. Service Delays
3. Cancelled Flight

Negative (-1)

Low   High

Complexity (Average # Tweets Conversation, Response TIme)

Airlines | Relative Topics

Sentiment

Positive (+1)

Negative (-1)

Low   High

Complexity (Average # Tweets Conversation) Response TIme)
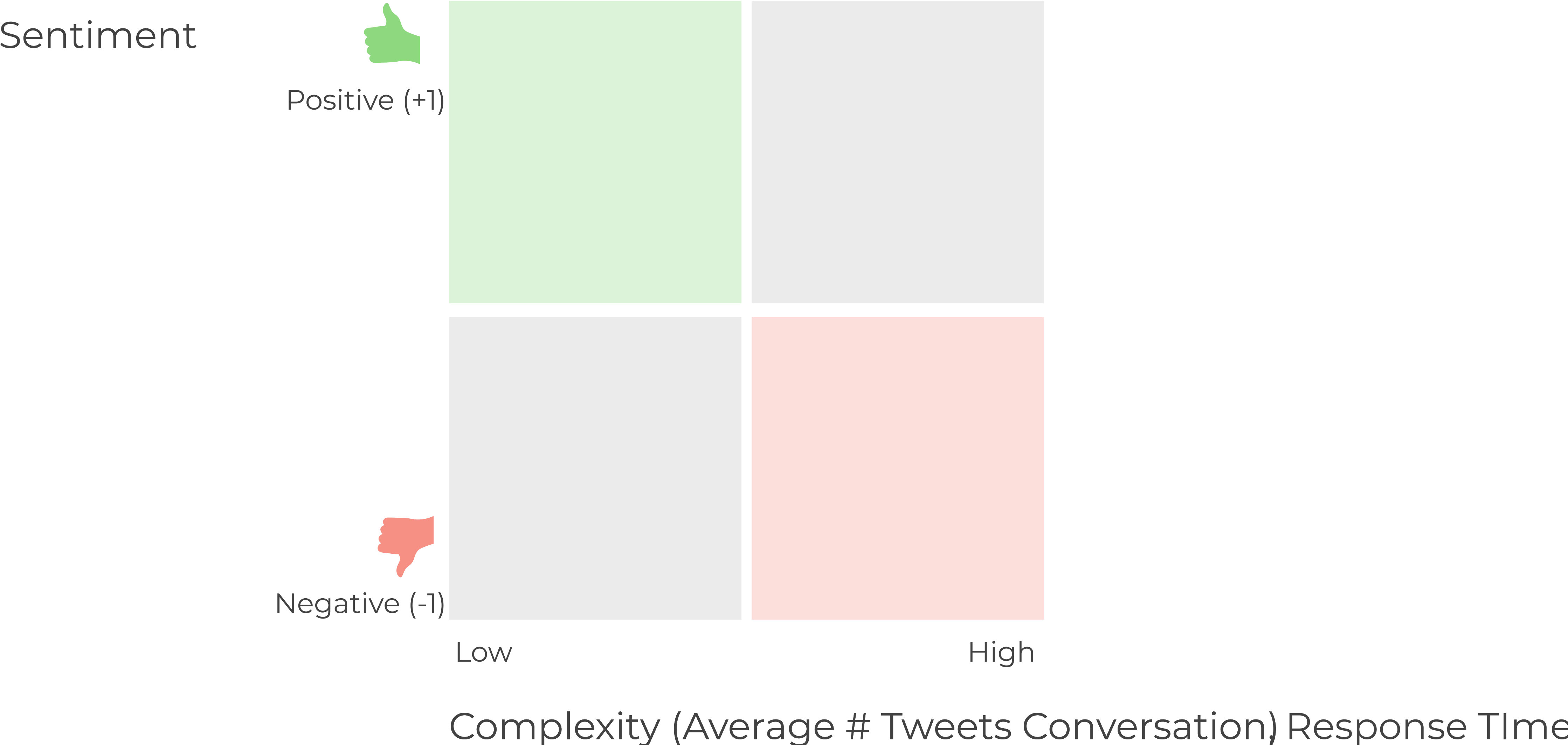
So What?

6X ⬆
Increase in
engagement
With speedy reply

82% ⬇
Churn from bad
Customers
Service Experience

60% ⬆
Increase Revenue
From Retention

Strategy

Thank you

Strategy