Fighting Churn With Data

by Carl Gold, PhD

About Me

- PhD California Institute of Technology
  - Machine Learning & Neuroscience

- Previously: Chief Data Scientist at Zuora

- Currently: Director of Machine Learning Implementation at OfferFit.ai
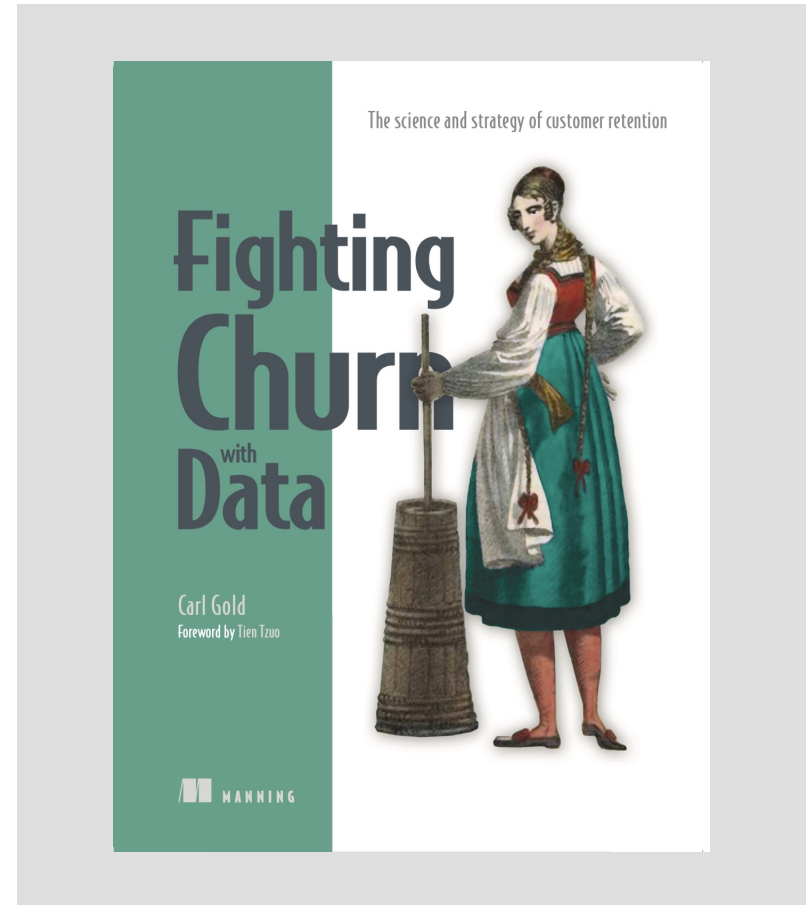
Outline

1. Churn & How to Fight It

2. Churn Rates

3. Customer Data & Metrics For Fighting Churn

4. AI For Churn & OfferFit

What is churn?

- Churn = customers quitting, cancelling, unsubscribing, unfollowing or just not coming back (retail)
  - Origin of the term is from the "Churn Rate"
  - Percent of customers dropping out
- Churn is now also a noun and a verb…
  - "The customer churned"
  - "Make a report of this quarter's churns"
- ***CHURN CANCELS YOUR GROWTH!***
  - *Did I have to tell you?*

What is Fighting Churn With Data, Really?

Marketing
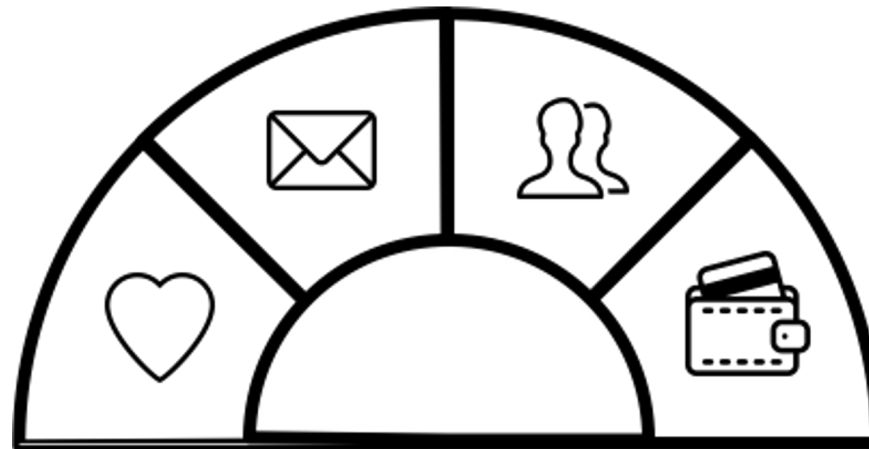Targeted engagement customers actually value

Customer Success
Train & onboard the right customers at the right time

Pricing
Give customers value, not discounts

Product
Make it great, without biased surveys

Acquisition Targeting
Identify best channels and focus on them.

Why is churn hard to fight?

Hard to Predict
- Rarity
- Subjectivity
- Limited Information
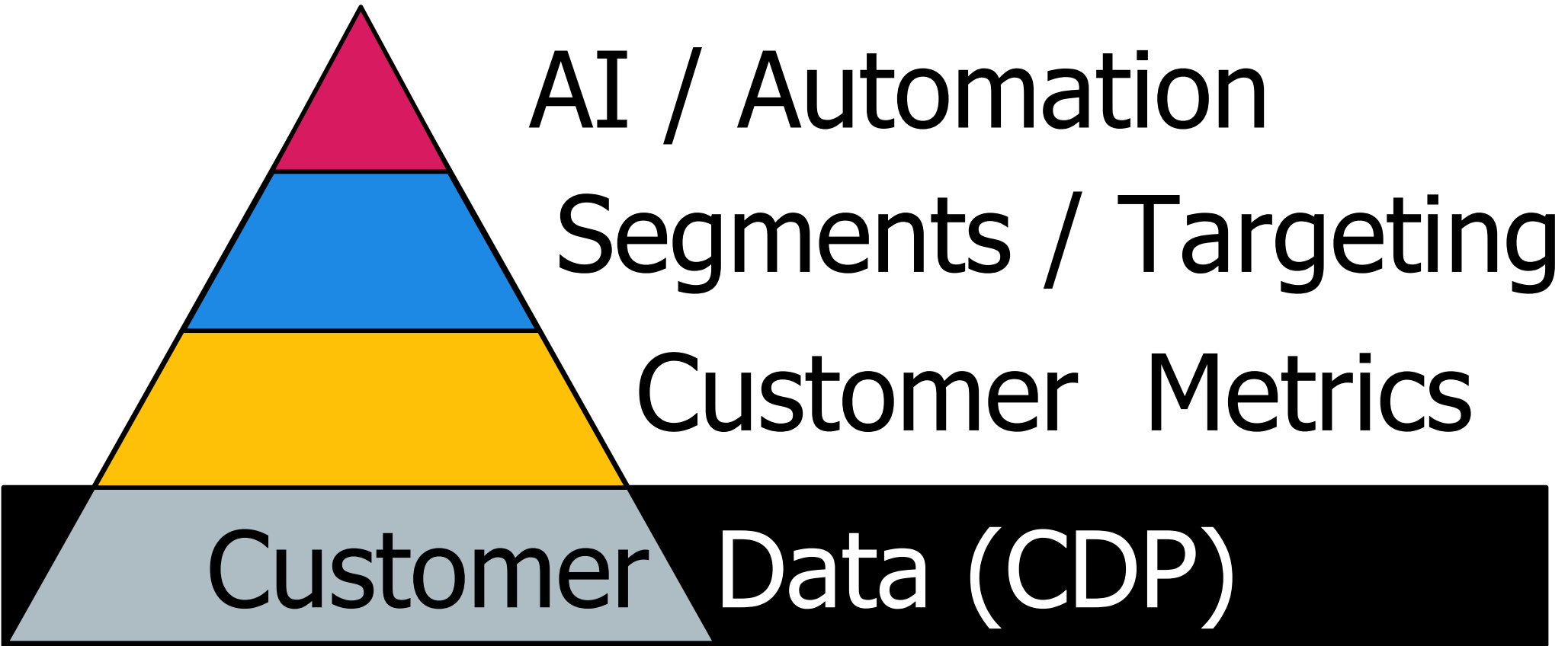- Random timing

Harder to Prevent
- Customers know the product
- **Must deliver value, not promises**
- No silver bullets
- Diamond bullet: Price reduction

Multi-team Effort
- Communication & alignment are a challenge
- Different tools & methods

Churn Fighting Pyramid

AI / Automation

Segments / Targeting

Customer Metrics

Customer Data (CDP)

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The Good News

- You will never eliminate churn, but you can improve significantly
- Modest churn reduction has dramatic impact on other business metrics
- A weak form of the "Pareto rule" applies...
  - You can get 50% of possible churn reduction with 25% of the effort
    - Calculate churn and customer metrics from data and look at them
  - You can get 75% of possible churn reduction with 50% of the effort
    - Interventions targeted by simple metrics
    - Low complexity A/B testing
- Moral: Doing something is much better than doing nothing

Churn Rates

- Churn Rate = % that quit in some time period (month/year)
- Acquisition is not part of the churn rate
  - New customers does cancel churn in your growth (and visa-versa)
  - But you measure churn and acquisition separately
- $Churn + Retention = 100\%$
  - $Retention = 100\% - Churn$
  - $Churn = 100\% - Retention$
  - Churn and retention are "two sides of the same coin"
- **Use retention with investors : *Focus on the positive!***

Post-Pandemic Churn has gone "Back to Normal"

Average Annual Churn
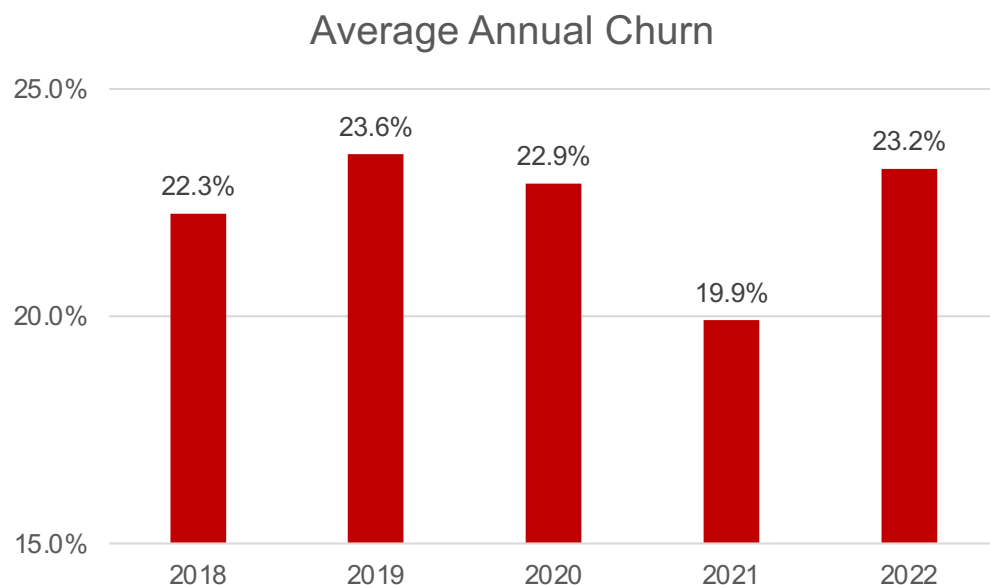
- According to Zuora, average churn peaked in 2019 and declined significantly in 2021.
- In contrast to early fears, the pandemic was a boon for to subscription services like Streaming, SaaS, Zoom etc.
- 2022 was "back to normal"

Source: Zuora Subscription Economy Index, March 2023
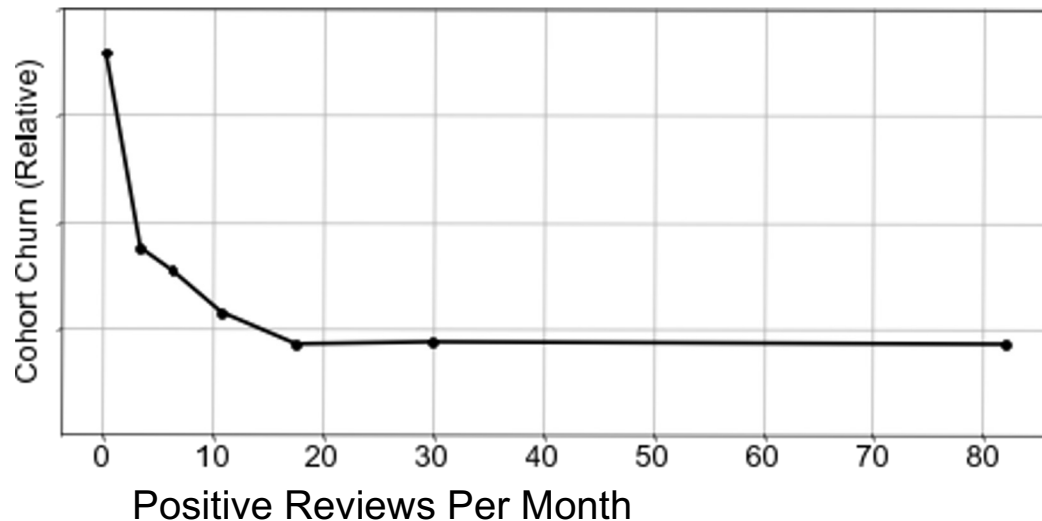
Case Study: **BROADLY** BROADLY.COM

Broadly manages your
business' reviews in
online platforms like
Yelp, Google, etc.

Types of Events:
1. Review Ask Presentation
2. Review Ask Decision
3. Review Ask Fulfilled
4. Positive Review
5. Negative Review
6. Thank You Email Open
7. etc.

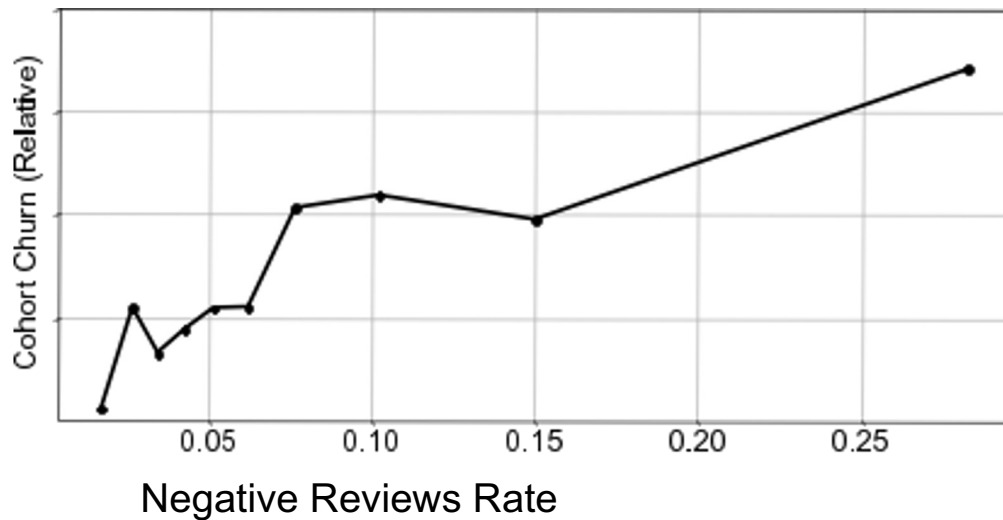# Customer Metrics Predict Churn

BROADLY
BROADLY.COM

# of Positive Reviews
Received by Business
Customer by using Broadly

Metric Cohort Analysis:

1. Group customers by a metric
2. Calculate Churn Rate in each cohort

Ratio Metric Clarifies Disengagement:

- Advanced metric: Negative Review Rate (%)
- Too many negative reviews really is a churn risk *for Broadly*!
- But you must look at disengagement on a relative basis...

AI for Churn?

- AI can achieve the maximum possible churn reduction
  - If you taken care of the foundations: adopted a CDP, calculated churn and customer metrics, customer success, A/B testing etc.
- CAUTION: There is no "*one-size-fits-all*" churn intervention
  - Churn reducing messages & offers need to be targeted
  - Using behavior, demographics, churn risk, cost, etc.
- Simple churn risk models should not be used for targeting
  - Interventions will confound a standard propensity model
  - AI must *predict the impact of interventions*
- Reinforcement learning is a powerful approach taken by OfferFit

Top Takeaways

- **Churn is hard to fight, but there is a lot you can do!**

1. Main churn reducing strategies:
    a. Product Improvement: Find what works without surveys
    b. Engagement marketing: Communication customers find valuable
    c. Customer success: Onboarding & Training
    d. Pricing to deliver value: Tiered plans, only *targeted* discounts
    e. Acquisition: Get better potential customers into your funnel
2. Customer metrics provide actionable insight & alignment
    a. Enable smart segmentation
    b. Predict churn without AI and is useful input to AI
    c. Pro Tip: Many of the most powerful metrics are ratios/rates
3. AI / Automated Experimentation achieves the maximum churn reduction
    a. Many pitfalls in reducing churn with AI
    b. Consider using OfferFit rather than building your own