

Building a Data-Powered Sales Intelligence Platform



Durgam Vahia

Data Products, LinkedIn

Overview

Data Products At LinkedIn

Sales 101 - Challenges and Opportunities

Data to the Rescue

Product Perspectives

Q&A

Data Products @ LinkedIn

Data Products @ LinkedIn



Mission

Deliver world class Data Platform that enables employees to make better decisions faster and deliver maximum value to members

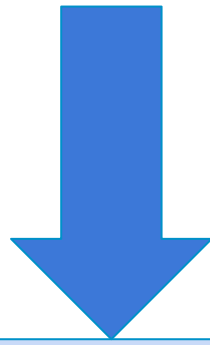
Areas of focus

Standardization and Knowledge Graph
Targeting, Ramping and Experimentation
Reporting
Search and Discovery
Sales Productivity
Developer Productivity

Sales Intelligence: Challenges and Opportunities

(B2B) Sales 101

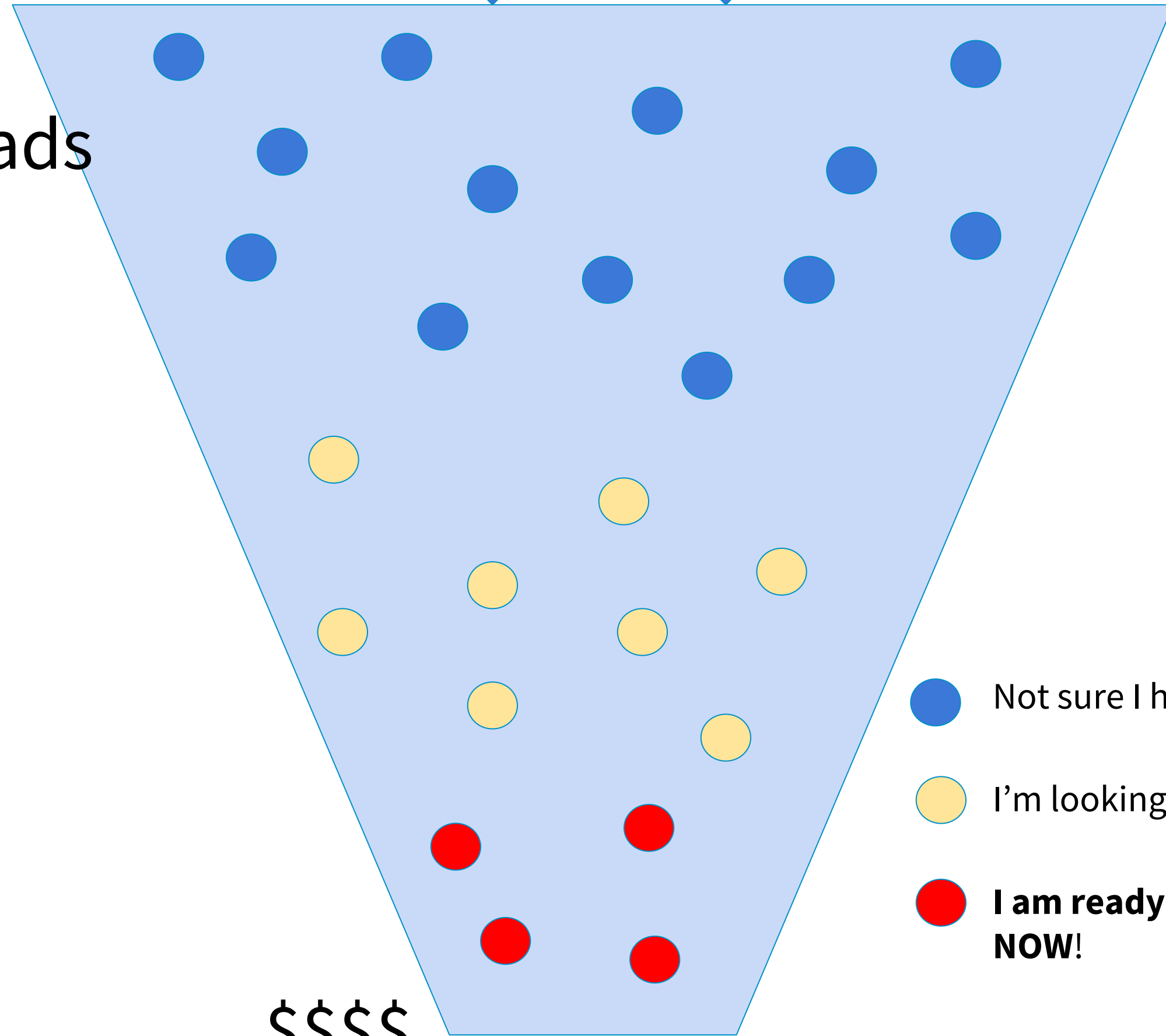
Web forms
Email campaigns
Social campaigns






Territory planning
Lead lists



Leads

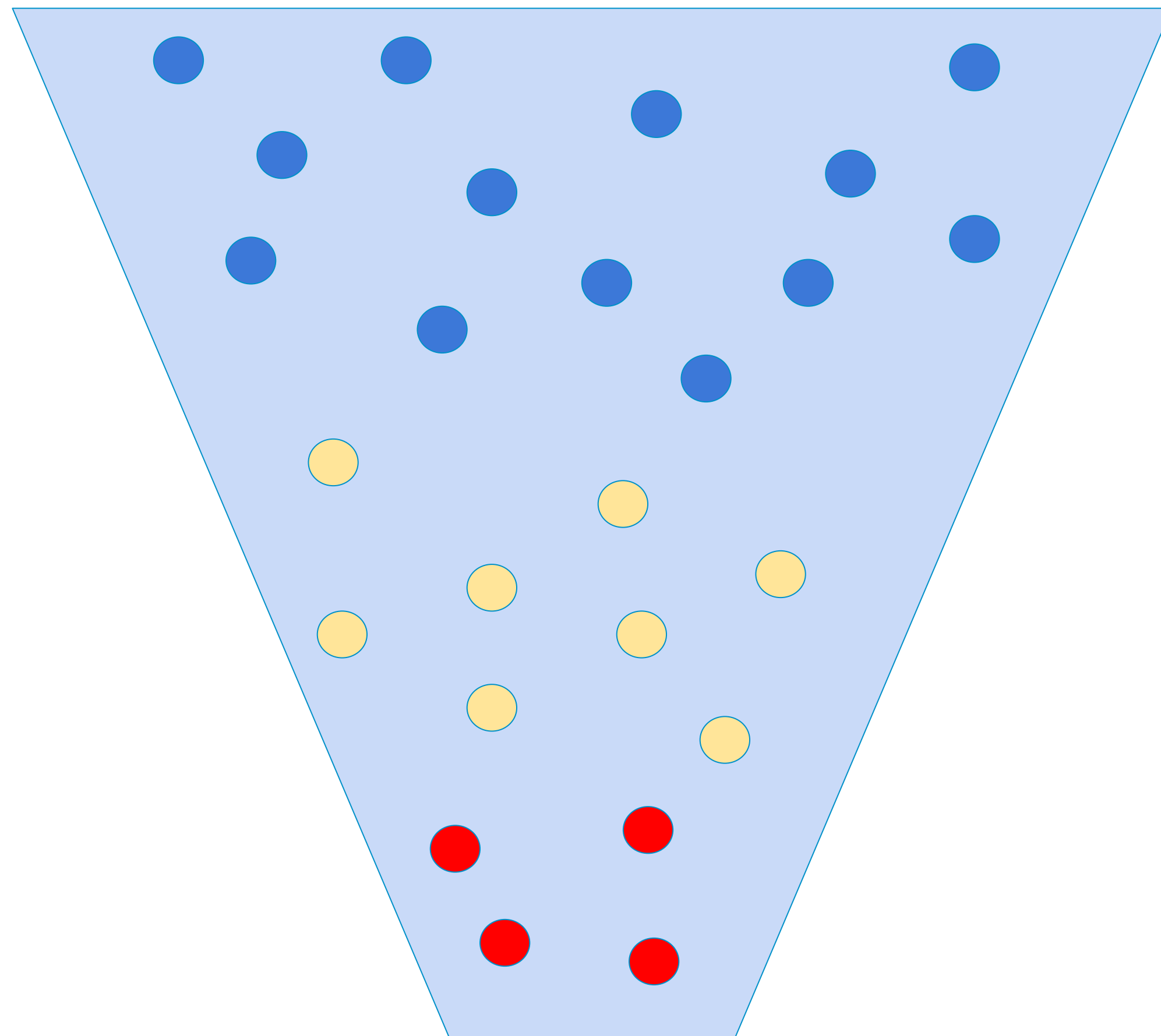


\$\$\$

-  Not sure I have a problem
-  I'm looking for a solution
-  I am ready to purchase, NOW!

Job of the Sales rep is to ***convert as many leads as possible into customers, as fast as possible***

Key Challenges in B2B Sales



5-10% of the leads convert to sales

B2B deal takes 2-3 months to complete

2/3rd of all reps miss quota

$$\text{Sales Velocity} = \frac{(\# \text{ of Leads} * \% \text{ conversion} * \$/\text{deal})}{\text{Avg. Length of the Sales Cycle}}$$

Opportunity

Can a data product help
increase sales velocity?

Sales Intelligence: Product Perspectives

Journey of a (Data) Product ..

**Start with Empathy
(Strategy)**

Who is my user?

What's the problem?

Does this problem matter?

What's better when I'm done?

**Build for Usability
(Product-Market Fit)**

Does the product speak to my users?

Do the workflows and interactions make sense?

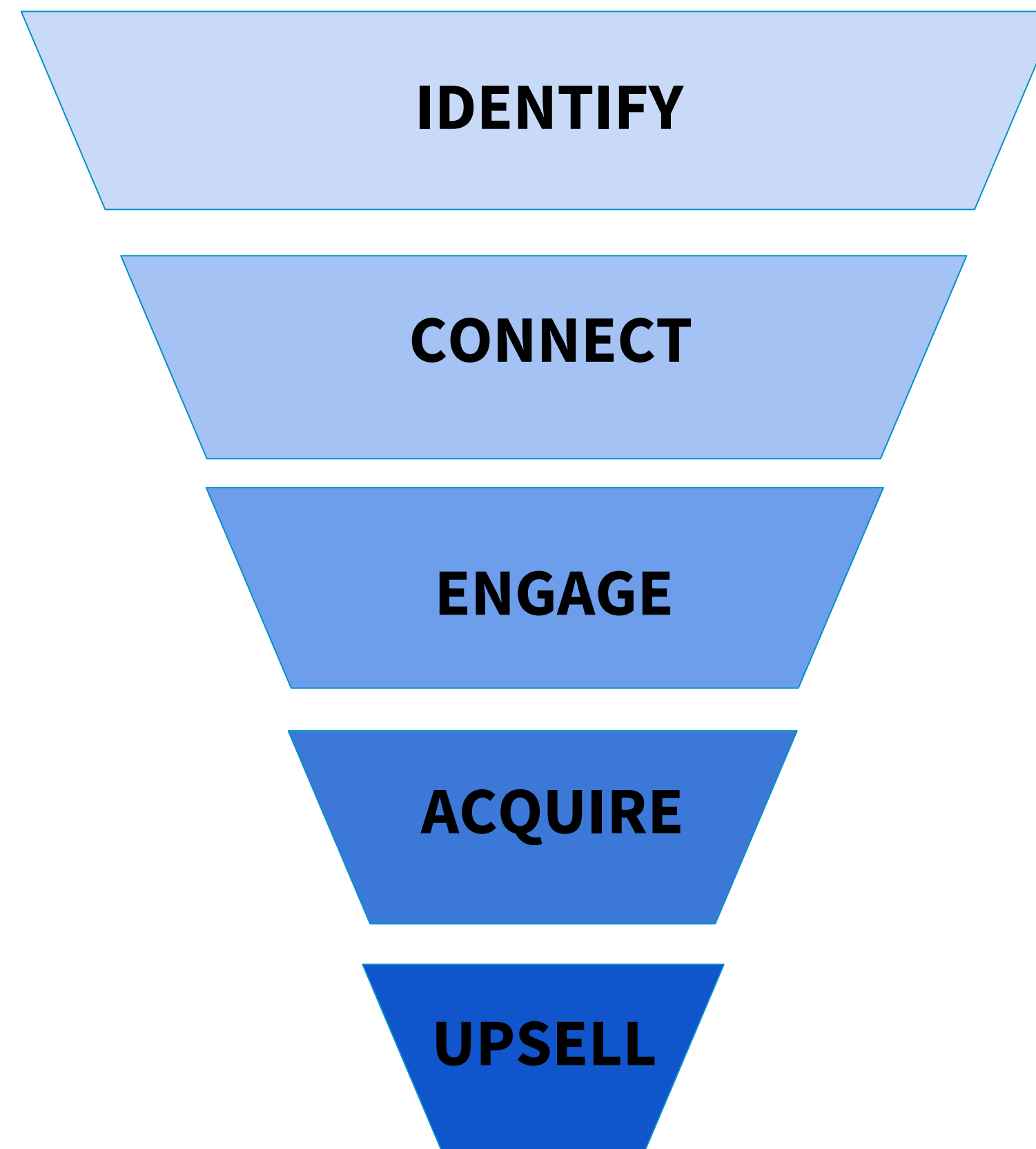
Are the feedback loops defined?

**Optimize for Trust
(Scale)**

Does the broad user base trust the data and recommendations?

Does the product reliably and measurably deliver value?

Start with Empathy



*“I have hundreds of accounts in my book.
Which account is most likely to close?”*



*“There are hundreds of employees I could target, **who is a decision maker?**”*



*“I have tons of collateral I could use, **which data-story is the most meaningful?**”*



*“I have number of contractual options,
which pricing option is the most appropriate?”*



*“I have dozens of accounts in my book.
Which account is most likely to Upsell?”*

Identify “Your” Problem Statement

UPSELL



*“I have dozens of accounts in my book. **Which account is most likely to Upsell?**”*

Relationship Managers manage 10-500 accounts consisting of thousands of users and

1. Spend 5 hours/week context switching between different systems, and are
2. **Unable to construct narratives to engage customers resulting in missed upsell opportunities**

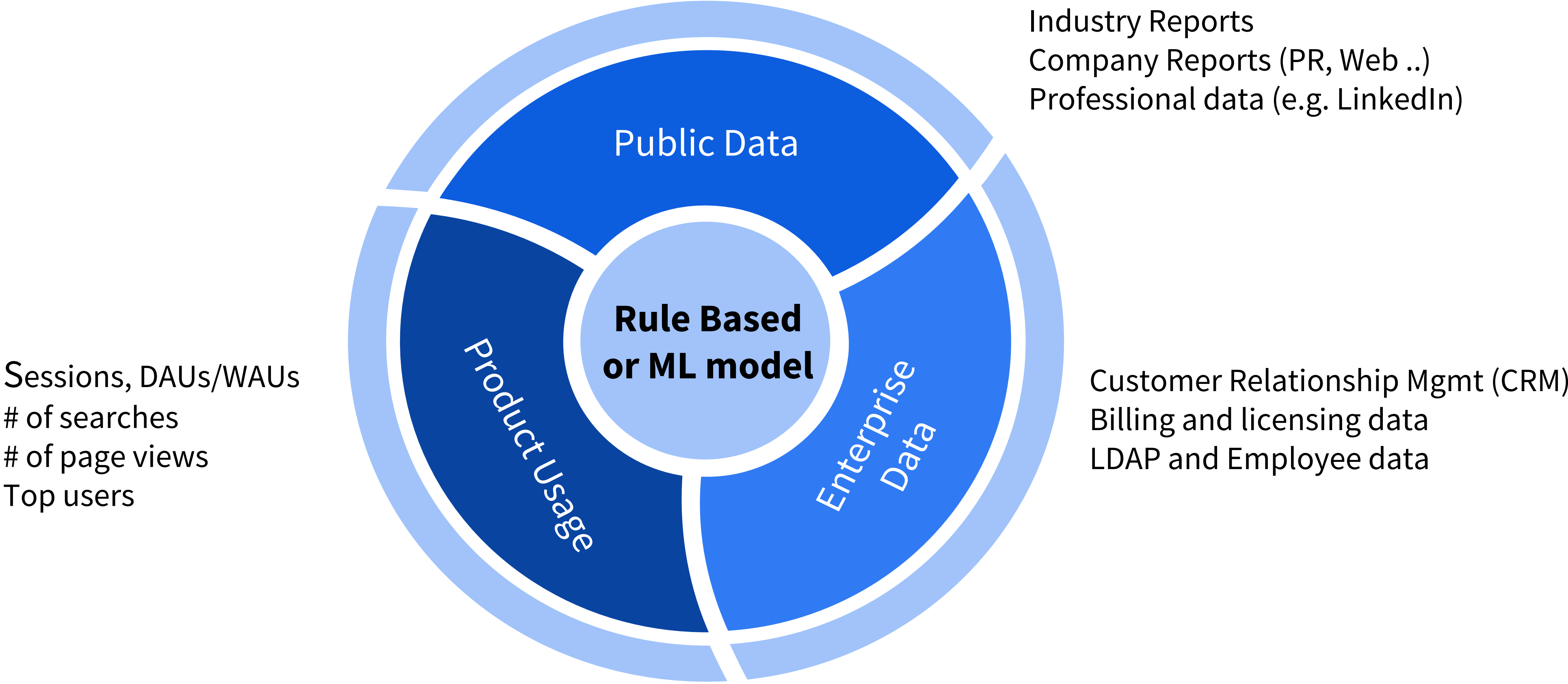
Build the Hypothesis

Opportunity to Upsell if ..






1. The account is in a growing industry
2. The account is growing in revenue/headcount
3. My product has opportunity to grow at the account
4. Current licenses are well utilized
5. Users are leveraging key product features
6.

Identify the Data Sources and build the Modal



Output of the model = Score between 0 (Not likely to Upsell) and 1 (Extremely likely to Upsell)

Select all Save Tag View current employees Sort by: Relevance

	IBM Score 0.8 At IBM, work is more than a job - it's a calling: To build. To design. To code. To consult. To think along with clients and sell. To make ...see all Information Technology and Services · 10,001+ employees · Greater New York City Area 4 connections 64 senior management hires	Save ... × Add tag
	Hewlett Packard Enterprise Score 0.5 In 1939, Bill Hewlett and Dave Packard, college friends turned business partners, started the original Silicon Valley startup in ...see all Information Technology and Services · 10,001+ employees · San Francisco Bay Area 3 connections 2 senior management hires	Save ... × Add tag
	HP Score 0.2 Engineering experiences that amaze. We create technology with a purpose: to make life better for everyone, everywhere. Keep R...see all Information Technology and Services · 10,001+ employees · San Francisco Bay Area 1 senior management hire	Save ... × Add tag

Hello World!

MVP of the prioritization system

Ranking based on Upsell score

Likely User Reaction



“Okay, I kinda get it. How can I use this”

- What is this score?
- How is this score calculated?
- What does this score mean to me?
- What do I do with this recommendation?

Net Result: Low adoption and engagement

Build for Usability

1. Here is the opportunity

2. Here are the signals

Upsell • New Sales Navigator Purchase
Microsoft

5 people have purchased an online Sales Navigator license at Microsoft.

[Contact Decision Maker](#)

Churn • Low Pro
Microsoft

Microsoft has only pr licenses.

[View usage detail in](#)

Based on our past data, when multiple people are buying online Sales Navigator licenses at one company there is an opportunity to connect.

4. Here is what you do next

3. Here is why these signals matter

Speak the language of the users

Models must provide narratives - scores are not enough

Sometimes the highest scores are not the most relevant

Can you bring Serendipity?



“Okay! This makes sense. Can I trust this?”

- What are the data sources?
- How do I know the data is correct?
- Can I provide feedback?

Scale with Trust



Welcome Back, Durgam!

Here is a summary of your book of business

Recognized revenue quarter to date | Includes data through Sunday, Apr 14, 2019, 11:59:00 PM

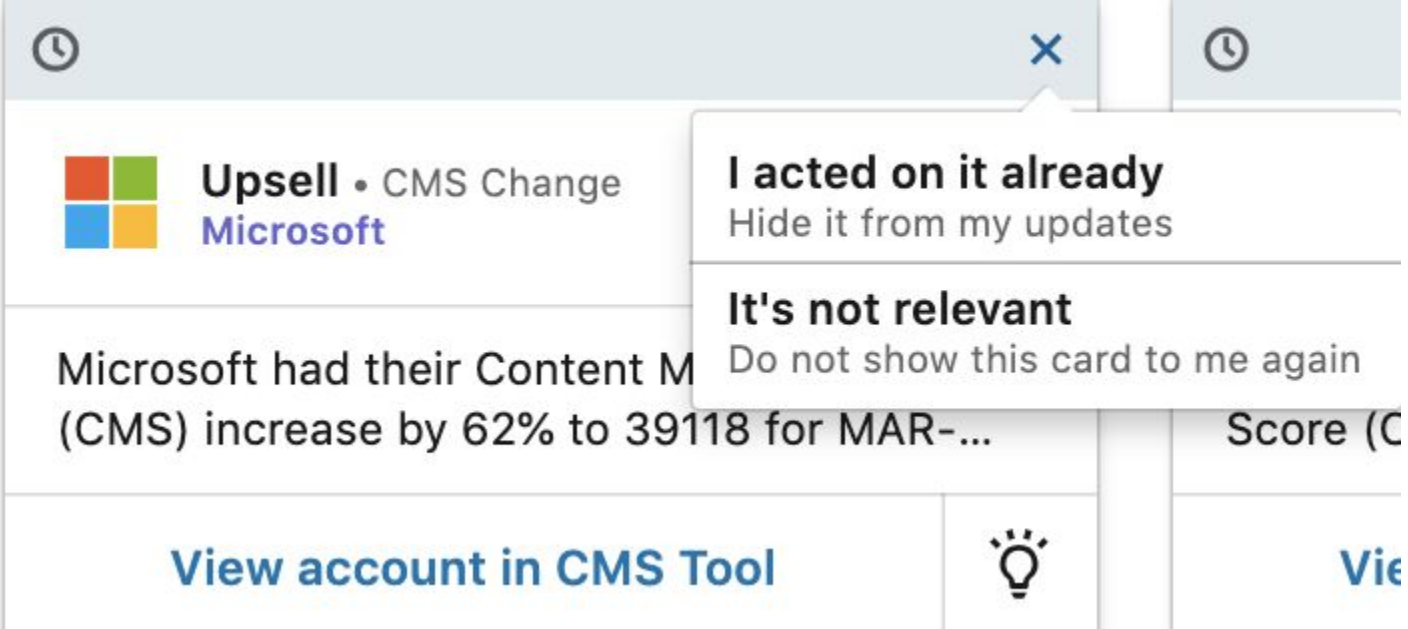
\$ delivered quarter to date ⓘ

1,873.41 ^

of Accounts spending ⓘ


2 v

 Microsoft
Spend QTD: \$1,873.41



Upsell • CMS Change
Microsoft

Microsoft had their Content M...
(CMS) increase by 62% to 39118 for MAR-... Score (C

[View account in CMS Tool](#)  [View](#)

I acted on it already
Hide it from my updates

It's not relevant
Do not show this card to me again

Personalization: Understand the individual - LOB, Role, Book ..

Transparency: Highlight data sources, refreshes, compliance (GDPR, member-first)

Metrics that Matter: Book level, Quota attainment

Drill downs: Book -> Account -> Subsidiaries

Trust is a key to sustained value

Sales Intelligence @ LinkedIn



Next Best Action: *Deliver personalized and actionable sales intelligence to reps throughout the customer life cycle*

Sales Intelligence @ LinkedIn

Welcome Back, Bin!
Here is a summary of your book of business

\$ delivered quarter to date ⓘ 7,405.03 ▾	# of Accounts spending ⓘ 2 ▾	# of Accounts not spending ⓘ 0
---	--	--

What's happening today on your accounts ⓘ
The alerts below are quick win opportunities for engaging with your accounts, prioritized by importance.

Reminder from 6 days ✕

Major Change • Content Paused
Microsoft

Creative from 4 campaigns in the Li_Brad MTC FY19 Account have had content paused in th...

[Explore Campaigns](#) 💡

Strategic Account Recommendations ⓘ
The alerts below are opportunities to open strategic conversations with your accounts, prioritized by importance.

<p>Microsoft</p> <p>Account Status: Your account performance is falling behind competitors</p> <p>LMS Account Performance Trails 💡</p>	<p>Microsoft</p> <p>Account Status: Your account performance is falling behind competitors</p> <p>LMS Account Performance Trails 💡</p>	<p>Microsoft</p> <p>Strong performance: Campaign AUS_BTL_BTLCOM_EduAlwaysOn_FY19_Link...</p> <p>Highlight Success 💡</p>
<p>Microsoft</p> <p>Account Status: Your account performance is falling behind competitors</p> <p>LMS Account Performance Trails 💡</p>	<p>Microsoft</p> <p>Account Status: Your account performance is falling behind competitors</p> <p>LMS Account Performance Trails 💡</p>	<p>Microsoft</p> <p>Account Status: Your account performance is falling behind competitors</p> <p>LMS Account Performance Trails 💡</p>

Serves all rep personas, all stages of the pipeline

Personalized to an individual

GDPR compliant

Success measured by \$ impact, customer experience

Tracking includes DAU/WAU, Impressions, CTRs, Likes

Takeaways





Basic product principles still hold

- Build the right stuff (User Empathy)
- Build the right way (Usability)
- Measure and refine

Perfectly OK to begin with a Rule based model

- De-risk the product by solving for value and usability first
- Will enable tons of learning and user insights, will help ML feature engineering

Trust is really hard to build

- Provide as much data transparency as possible
- Provide feedback mechanism for data/model quality issues

Life can only be understood backwards; but must be lived forwards

- Soren Kierkegaard

Linked 