



Building Data Products with Machine Learning @ Zendesk

Data Product >> Building Models

What is a zen desk?

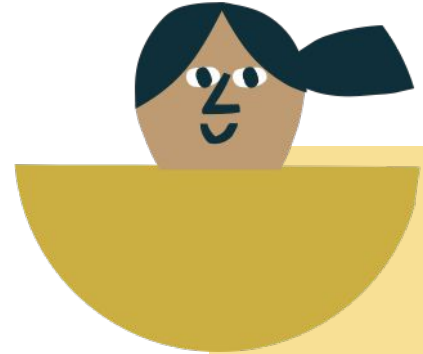
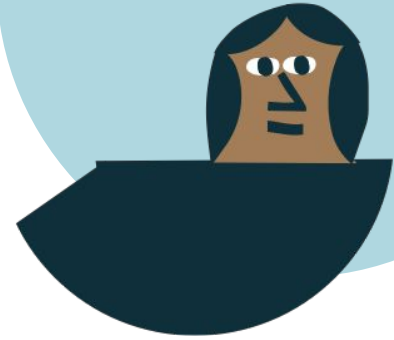


Some Context

Hi, I'm Chris



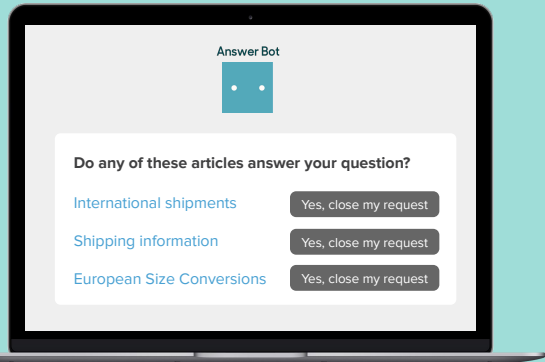
Be the company
your customers
want you to be



Automation

Remove
repetitive work

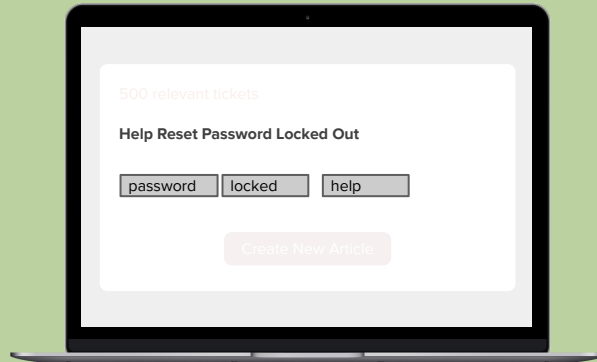
Answer Bot



Recommendation

Inform decisions
humans make

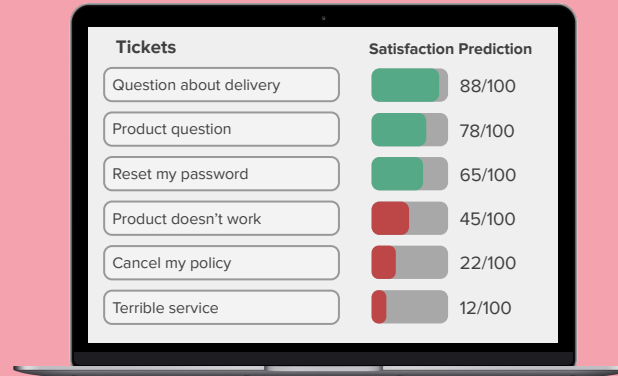
Content Cues



Prediction

Spot trends
humans can't see

Satisfaction Prediction



1

DATA PRODUCT IS STILL PRODUCT

2

INVEST IN DATA INFRASTRUCTURE

3

LEARN TO LEARN

4

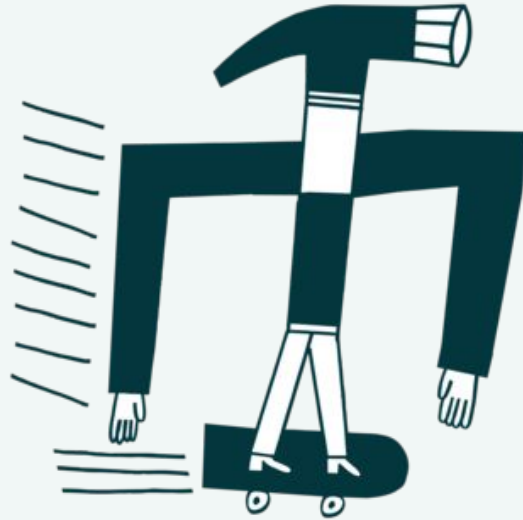
SCALING IS HARD

5

UX FTW

Data Product
is still Product

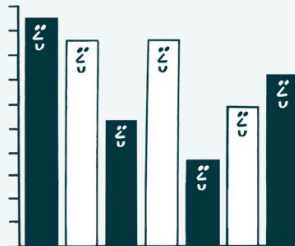
ML is a hammer, not everything is a nail



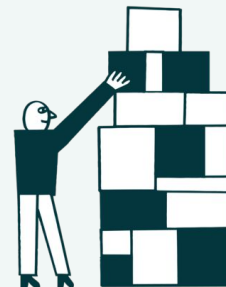
Extreme customer-centricity for better experiences



Start with the customer



Embrace your data



Be agile and iterative



**Be clear how to
measure success**



**Work with your Product
Manager**



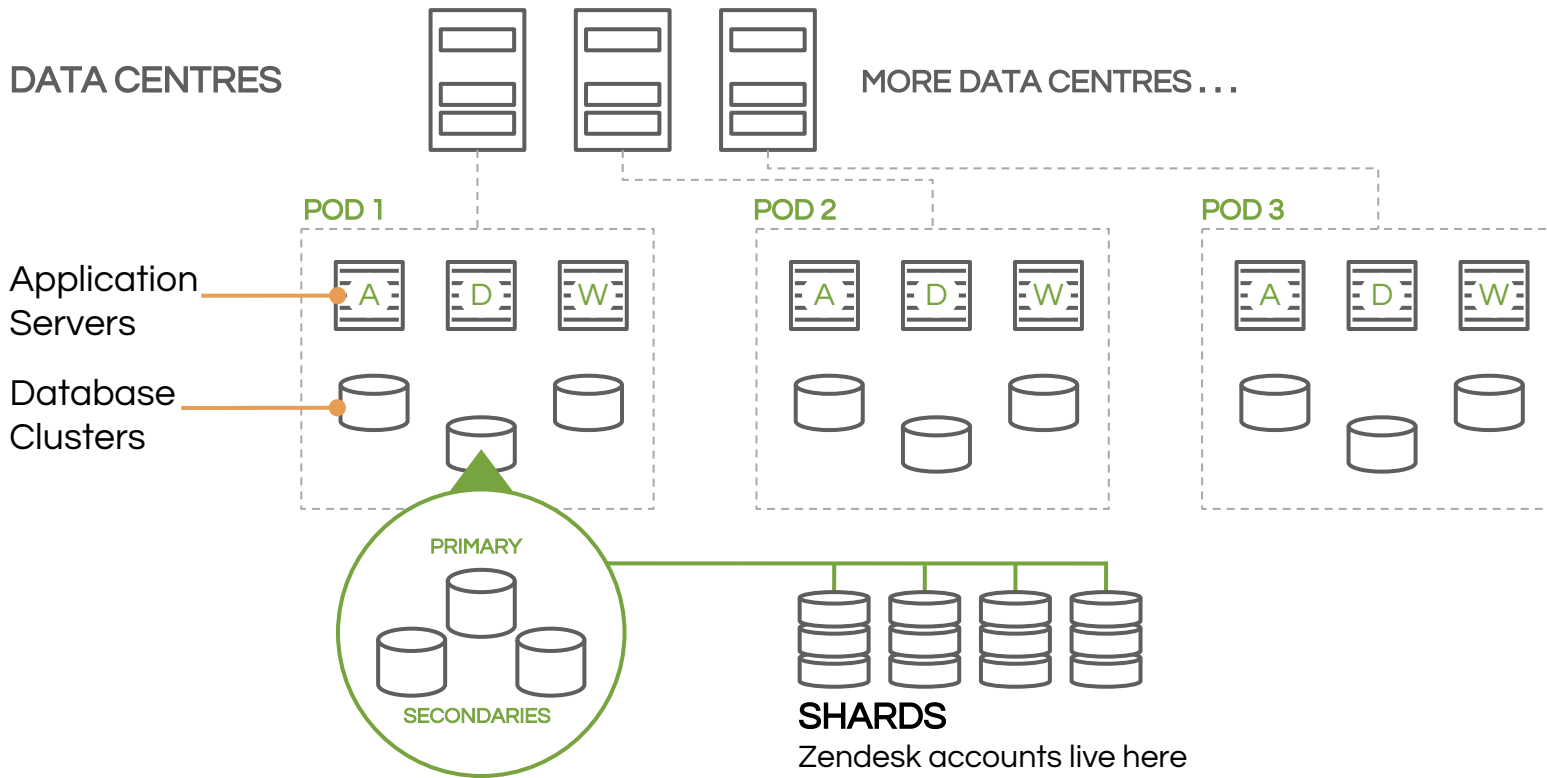
**Always come back to
the customer value**



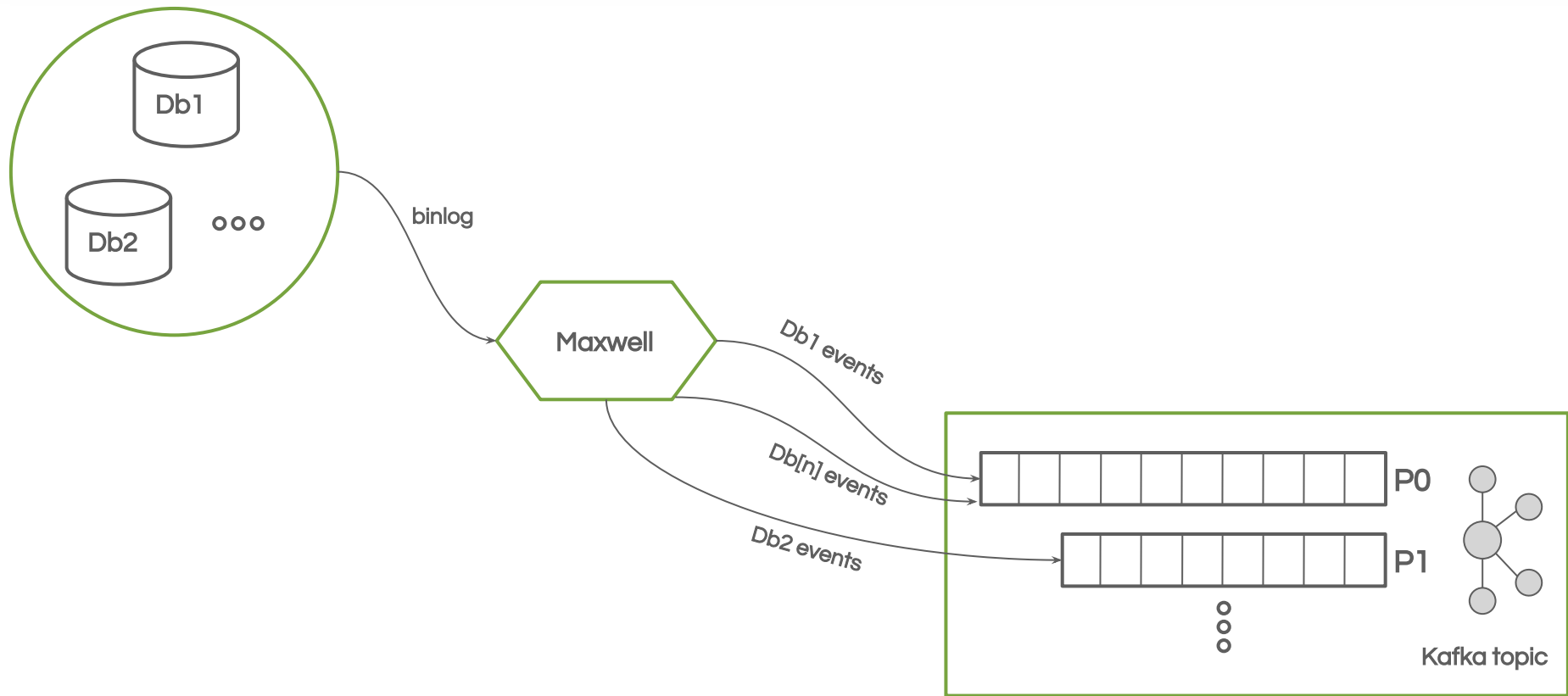
Of course!

Invest in data infrastructure

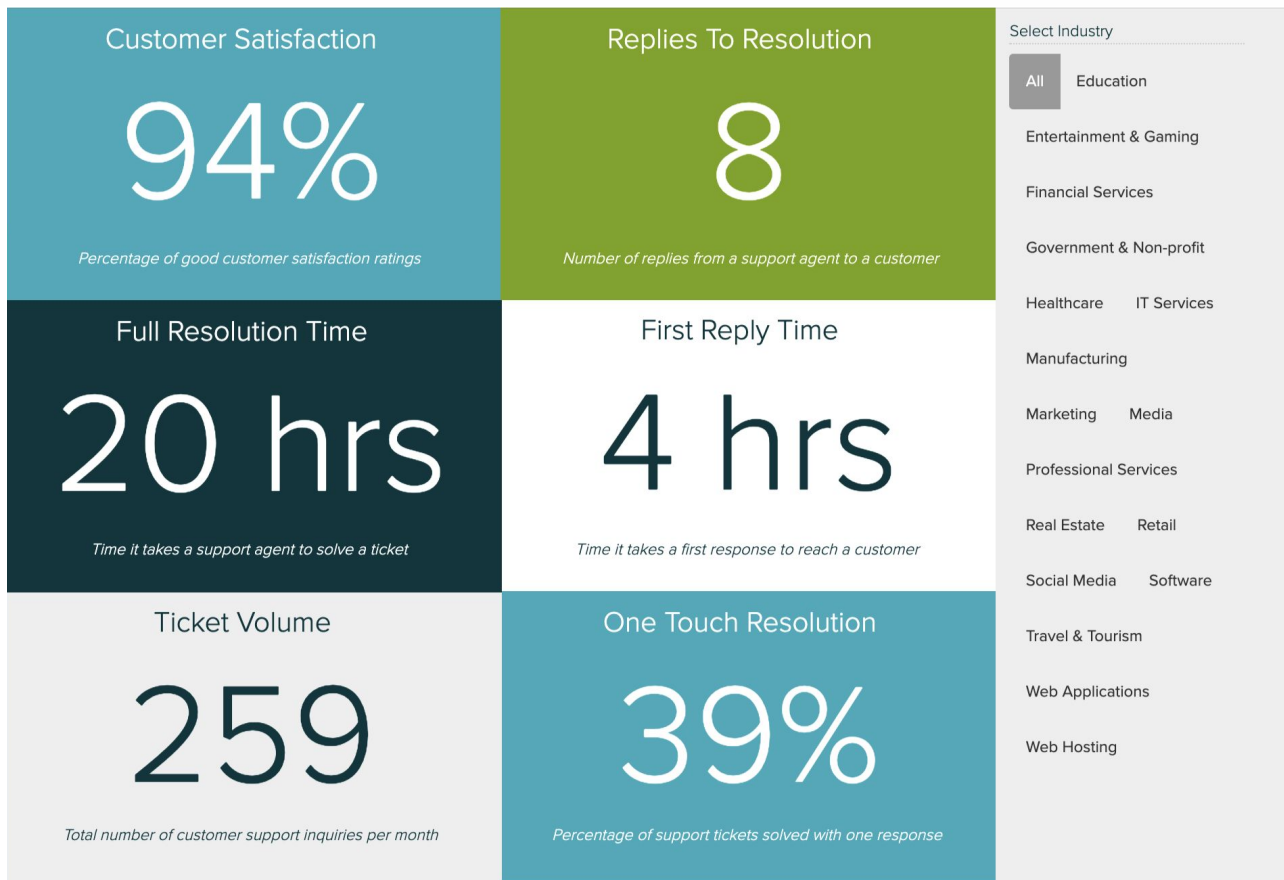
WE HAD NO CENTRAL DATA STORE



WE MADE A DATALAKE



AND WE BUILT A THING



**Tie infrastructure investment to
customer value**



Learn to Learn



and don't be afraid to pivot!

Subject

Re: Get my ticket data out of Zendesk

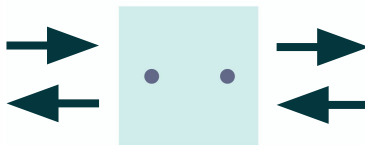
Body

Hi!

We'd really like to **dump our ticket data out** of Zendesk so we can import it into an external reporting product and identify high risk customers. Can you help us out?

Thanks a bunch
George

Support & Analytics Manager
AwesomeCorp Pty Ltd
Melbourne



Exporting data to a JSON, CSV, or XML file (Professional and Enterprise)



Anton de Young
Updated 3 days ago

Follow

Plan Availability Essential Team ✓ Professional ✓ Enterprise

Quick Look: Admin > Manage > Reports

Important: Data export must be enabled by Zendesk for your account. If you are on Professional or Enterprise and want to enable this option, your account owner can email support@zendesk.com.

When data export is enabled, you can export data as an activity report to a JSON, CSV, or XML file. Export generates fresh data each time you export. You cannot run multiple exports for the same type of data (tickets, organizations, users) at the same time.

Data export is available on Professional and Enterprise plans. You must be an administrator or an Enterprise agent with permission to view and edit reports to export data.

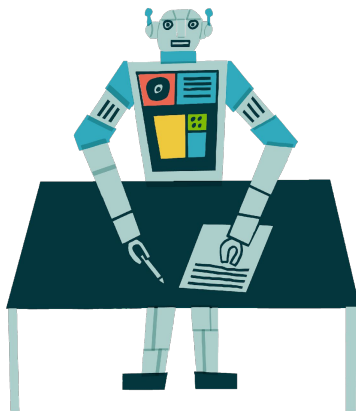
This article contains the following sections:

- [Understanding the data export options](#)
- [Enabling and disabling data export](#)
- [Exporting your data to a downloadable file](#)

Related article:

- [Exporting a view to a CSV file](#)

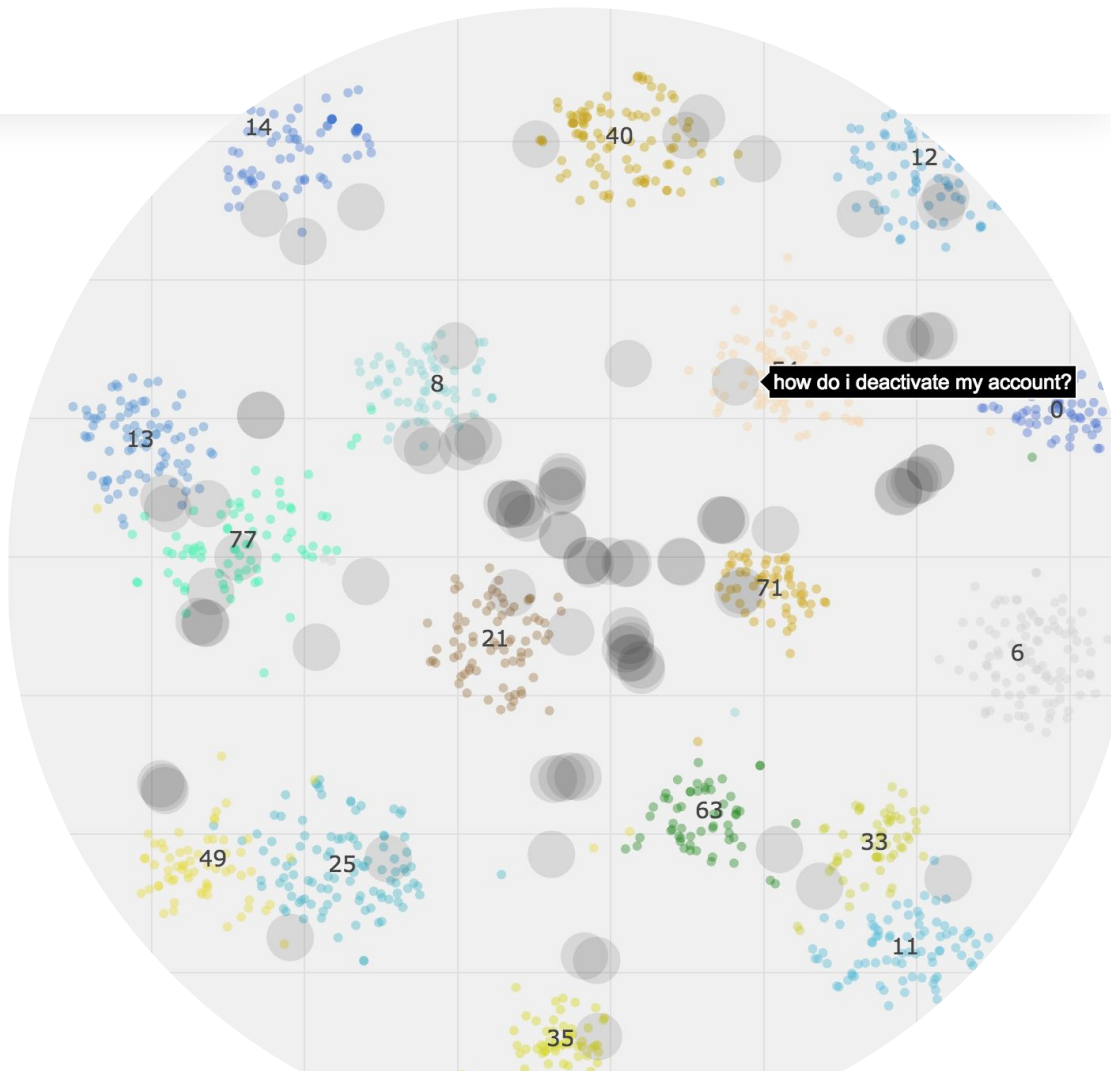
WE STARTED WITH CLASSIC ML



BUT WE NEEDED MORE

Global Deep Learning Model

Solves the “cold start” problem and enables anyone to leverage AI immediately and respond quickly to new problems





Create a safe space

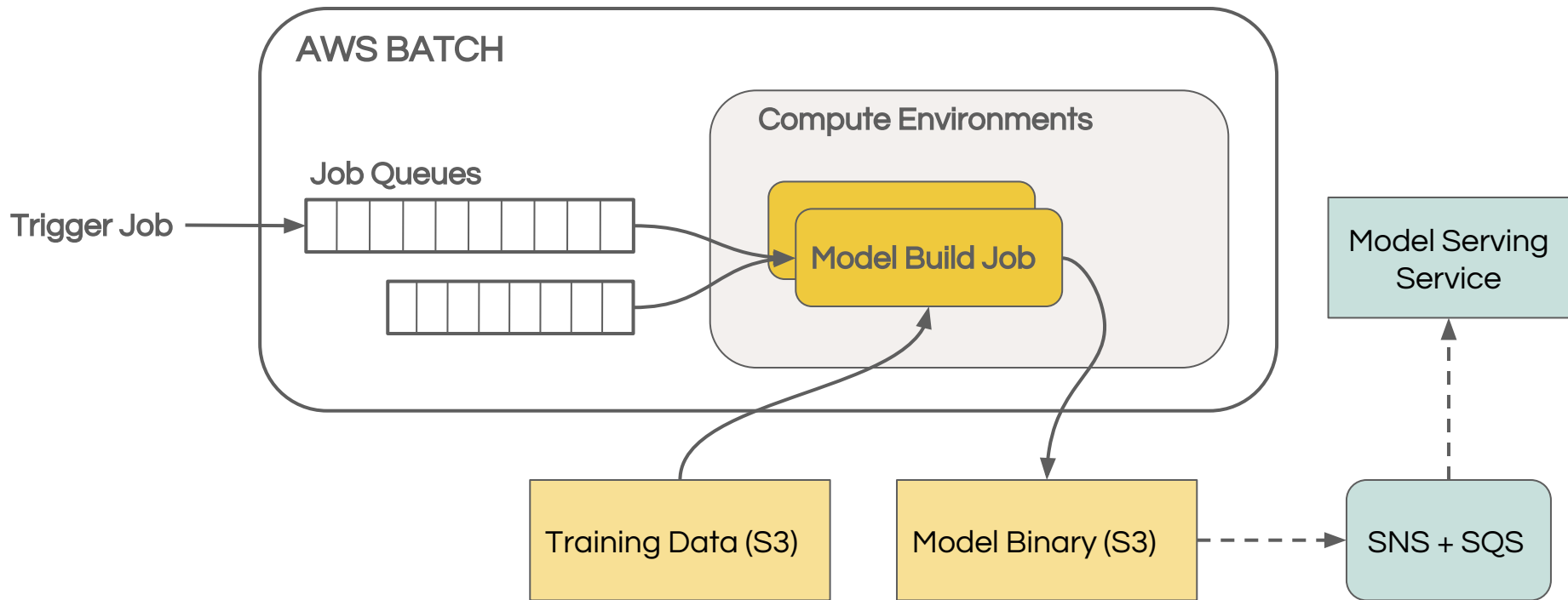


Run a Journal Club



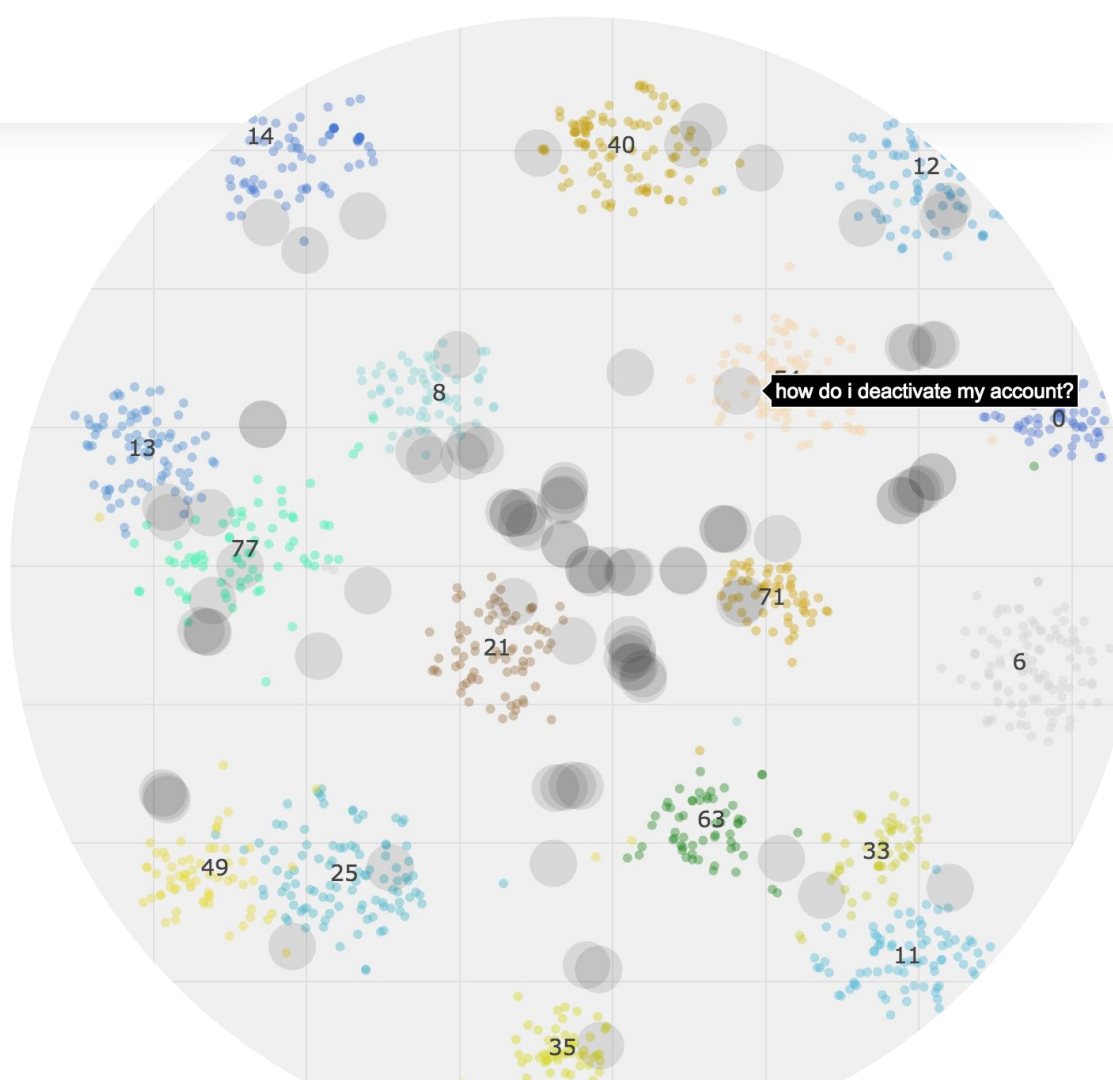
Get research as far ahead of engineering as far as possible

Scaling is hard

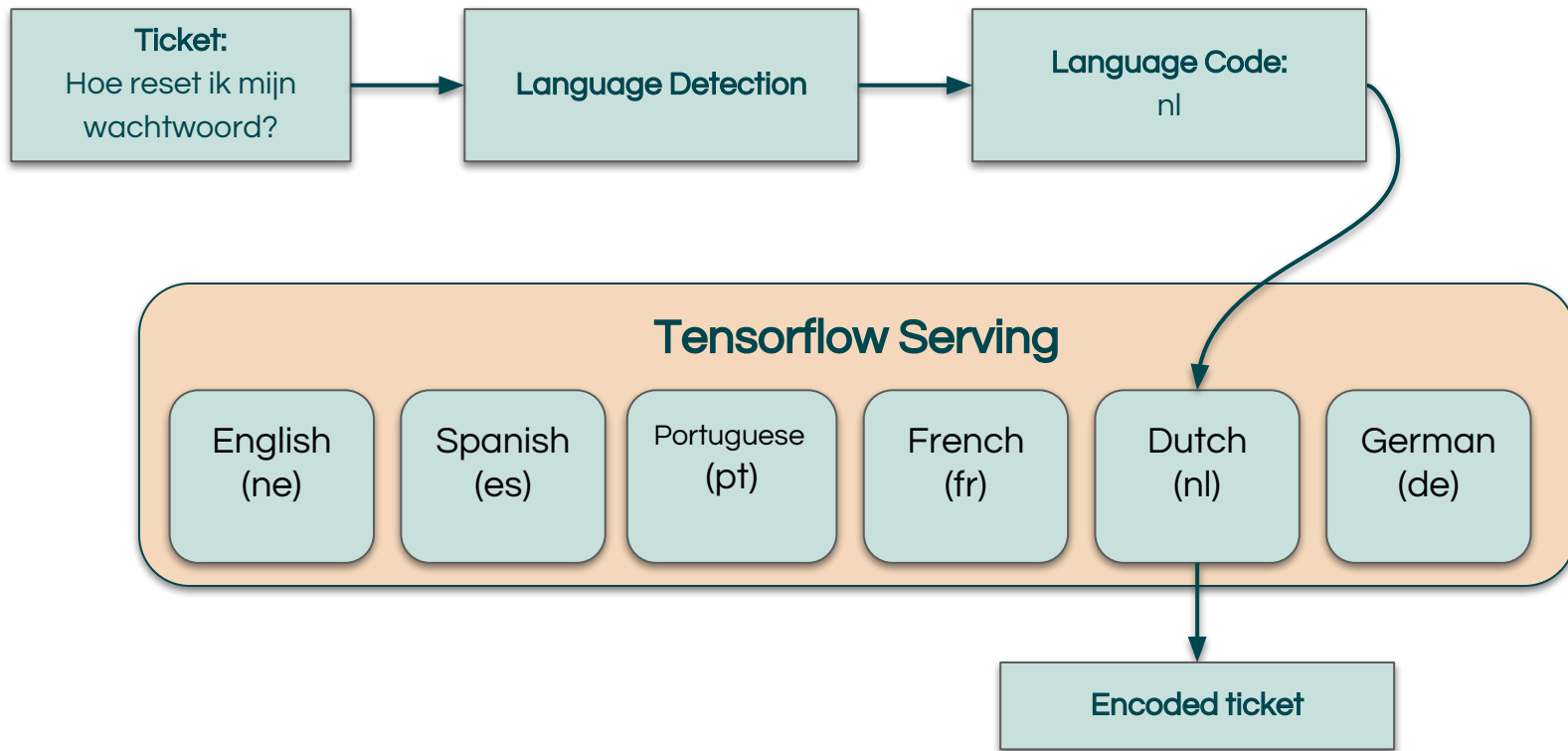


MAKE ONE MODEL DO MORE

One Global Deep Learning Model



SO MANY MODELS



**Getting from one
customer to many is hard**



Scaling needs Tooling



Global models are great



UX FTW

My printer is stuck! #1024 + Add

Organization (create) Damen agent **OPEN** Ticket #1024 User Apps

Brand: z3ndamen

Requester: Damen agent

Select assignee: take it

Followers: follow
Damen agent

Sharing: -

Form: Default Ticket Form

Tags:

Custom text field:

Custom credit card:

Skills: German

My printer is stuck! Yesterday 11:21

Damen Turnbull Admin (assign)

I've read the manual but I can't seem to fix my printer. It says "press any key", but I can't find the "Any" key.

Answer Suggestion - Predicted Articles

Click on a link to add it to your comment

- How to troubleshoot a paper jam
- Why is my printer not working
- Setting up a new printer

None of these articles seem relevant.

Public reply Internal note

To: Damen agent

CC: Damen end user

T

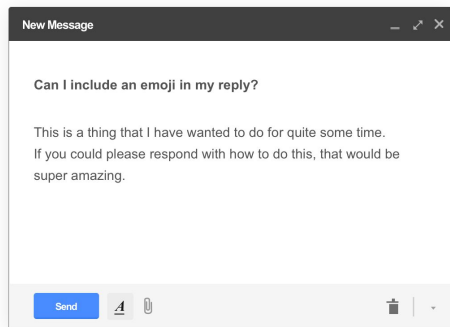
Apply macro

Stay on ticket Submit as Open

AUTOMATICALLY RESOLVE CUSTOMER ISSUES WITH ANSWER BOT

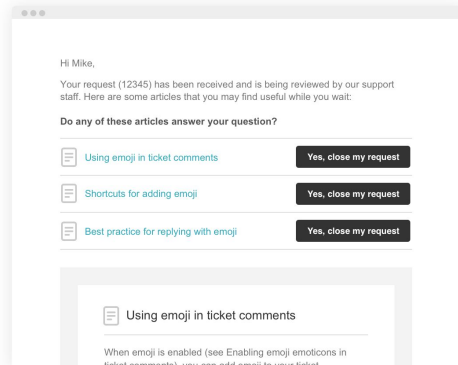
1

A customer has a question



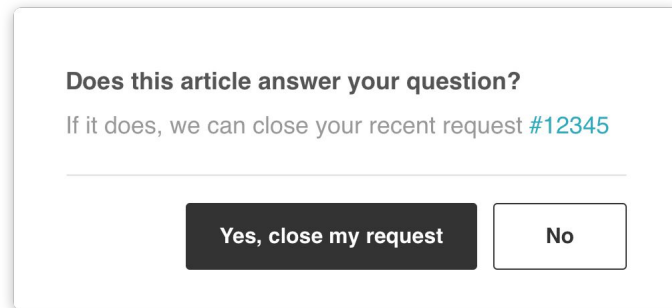
2

Answers are suggested



3

The ticket is solved or passed to an agent



“Solve my request”
VS
“Yes, close my request”



It doesn't matter how good your model is if no one engages with it



Make interactions clear so you can trust the feedback



ML should never get in the way

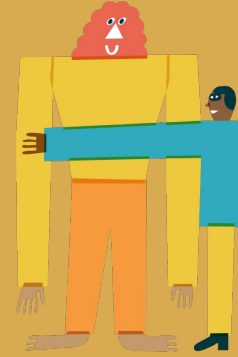
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We're Hiring!



Thank you

zendesk



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