

How 200+ Leaders Made Business Data Work Harder

Jesika Haria, LogicLoop

What you'll get out of this talk

How to get more operational use out of your data



You = Dani, the Data Engineer

5-10 years in industry

Build reports and pipelines for
business users

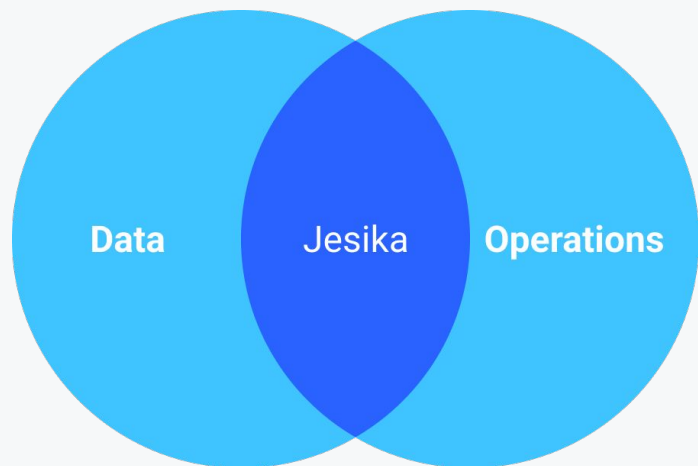
Want to do more high-leverage work

We'll cover

- 200+ leaders' operations data needs
- A system for business alerting & automation
- How to get the most out of it
- References & success stories

Make data work harder than people!

Know Thy Speaker



Jesika Haria

CEO, LogicLoop

@jesikaharia



Founder and CEO

Operations automation for high-growth companies to move faster without engineers



Founding Team #5

Built 1st remote eng team, customer success for top 10 banks, founded Product org



Sr Software Engineer

Built 1st cloud product used by 100,000+ analysts as Google Cloud Dataprep



Graph Search Engineer

Ranking algorithms for Groups



EECS | Advanced Researcher

1 of 3 from all over India selected

**200+ leaders share their
operations data needs**

Operational data is an under-utilized lever in business growth



Analytical



Operational

200+ leaders use operational data across verticals

Compliance & Fraud



"...flag risky transactions"

Trust & Safety



"...remove spam and abuse"

Business Operations



"...remediate fulfillment issues"

Logistics



"...adjust demand and supply live"

Healthcare



"...allocate COVID vaccine tiers to patients"

Customer & Growth



"...automate account summary emails"

“We ingest operational data...”

Expectation



Data
Warehouses

Reality



Databases



Data
Warehouses



Google
Sheets



SaaS Apps



Product
Analytics



Data APIs

“...to trigger actions”



Google
Sheets



Slack



Emails



Customer
Comms



Tickets



Internal
Services



Databases

Fast-growing companies are bottlenecked



Can you update this fraud policy urgently?



Errr.. next sprint?



Ollie, the Ops

- Frustrated by slowness
- Cannot experiment
- No visibility or governance

Dani, the Data Eng

- Overwhelmed fighting fires
- High-leverage work suffers

Growth = new business apps & workflows
Creates demand for new data pipelines

Only ~20% requests get fulfilled by data engineers

Self-serve is the key

$$\text{Work} = \frac{\text{Data} \times \text{Growth Pressure}}{\text{Engineers} \times \text{Self-Serve}}$$





Operations data maturity checklist

Clean operational data exists

Business knows where to find it

Business can self-serve insights

“read”

Business can proactively identify issues

Business can debug and rectify exceptions

“write”

Business can automate handling exceptions

Business can improve operational processes over time

“leverage”



Introducing a system for business alerting and automation

Motivating use cases

Trigger a Slack alert for large transactions

```
SELECT * from transactions  
where amount > $100,000
```



Send users a text reminder to pay

```
SELECT * from users where  
payment_due < now() + '24  
hours'
```

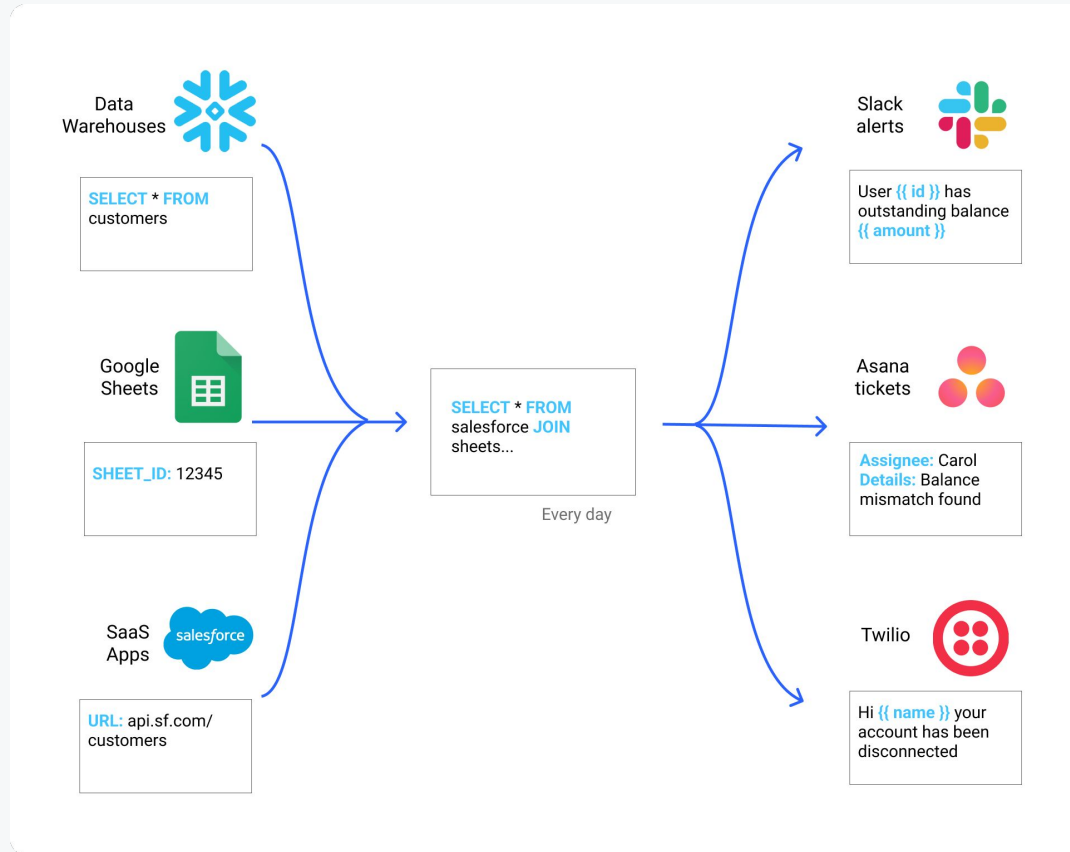


Automate weekly account summary emails

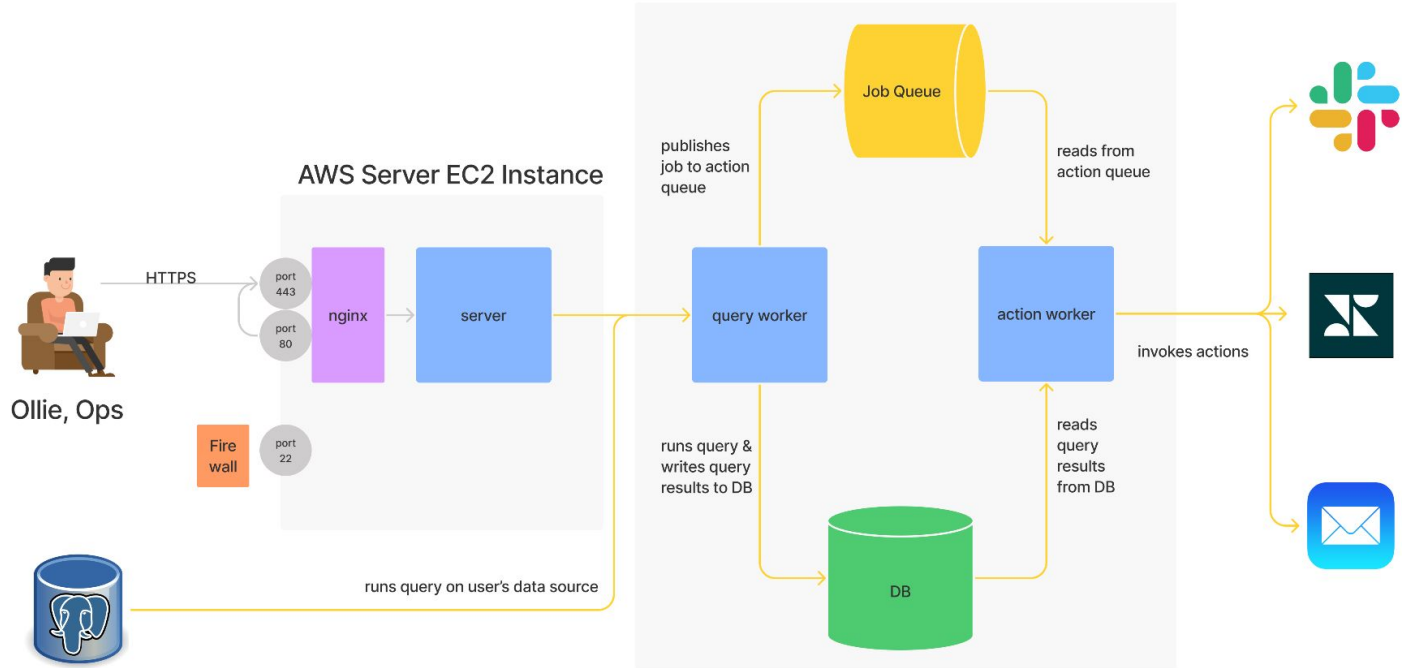
```
SELECT stats FROM accounts
```



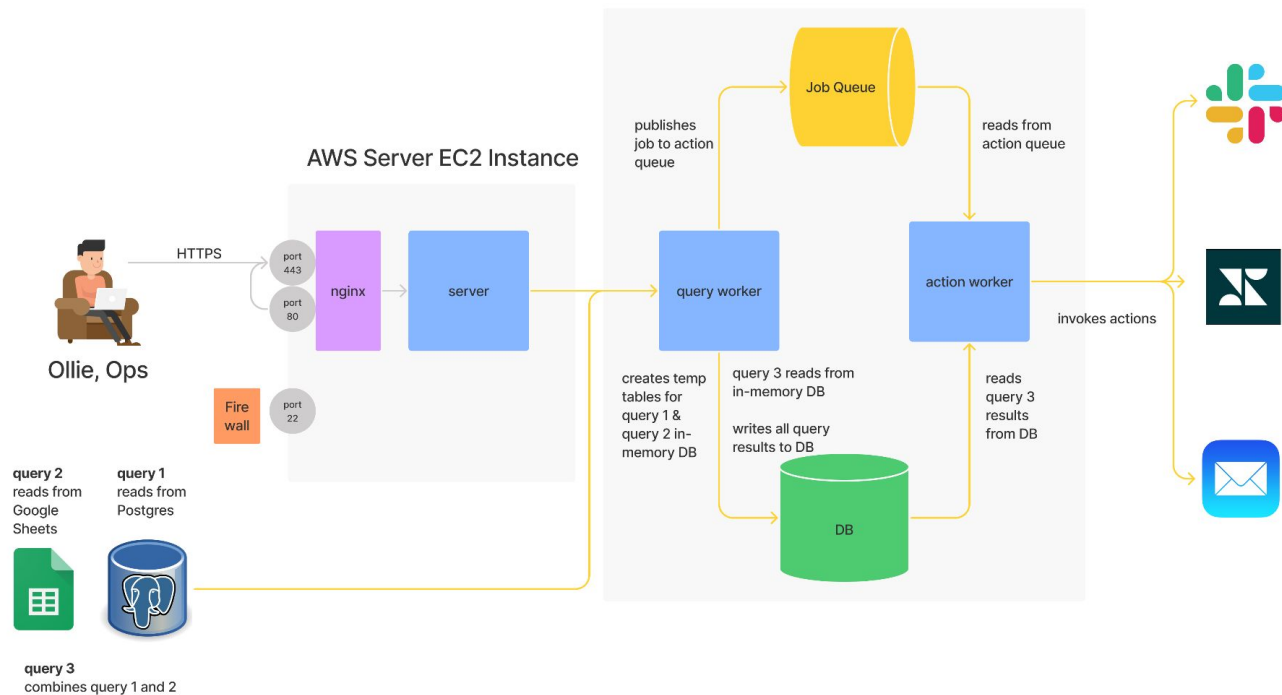
An ideal business user experience



What a solution could look like

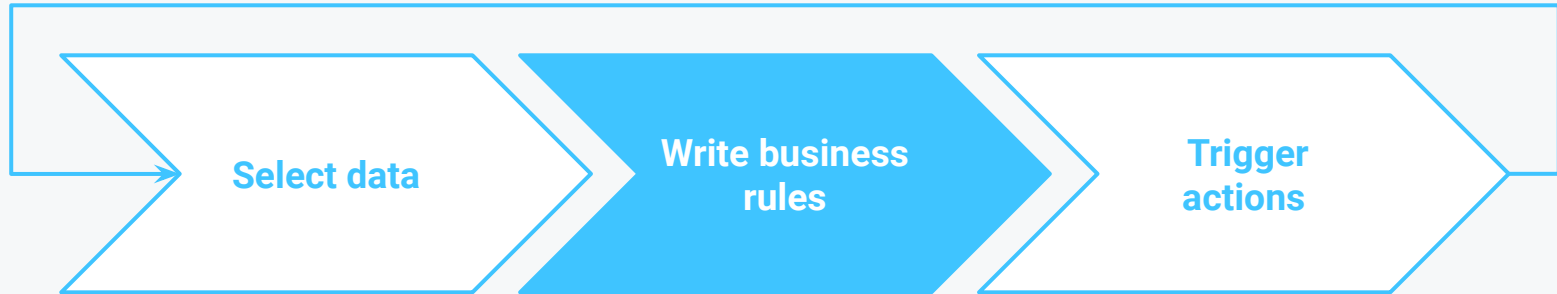


What a solution could look like



Common pattern amongst best internal tools

A system for *business users* to detect and act quickly



Business users need to combine real-time with warehouse data

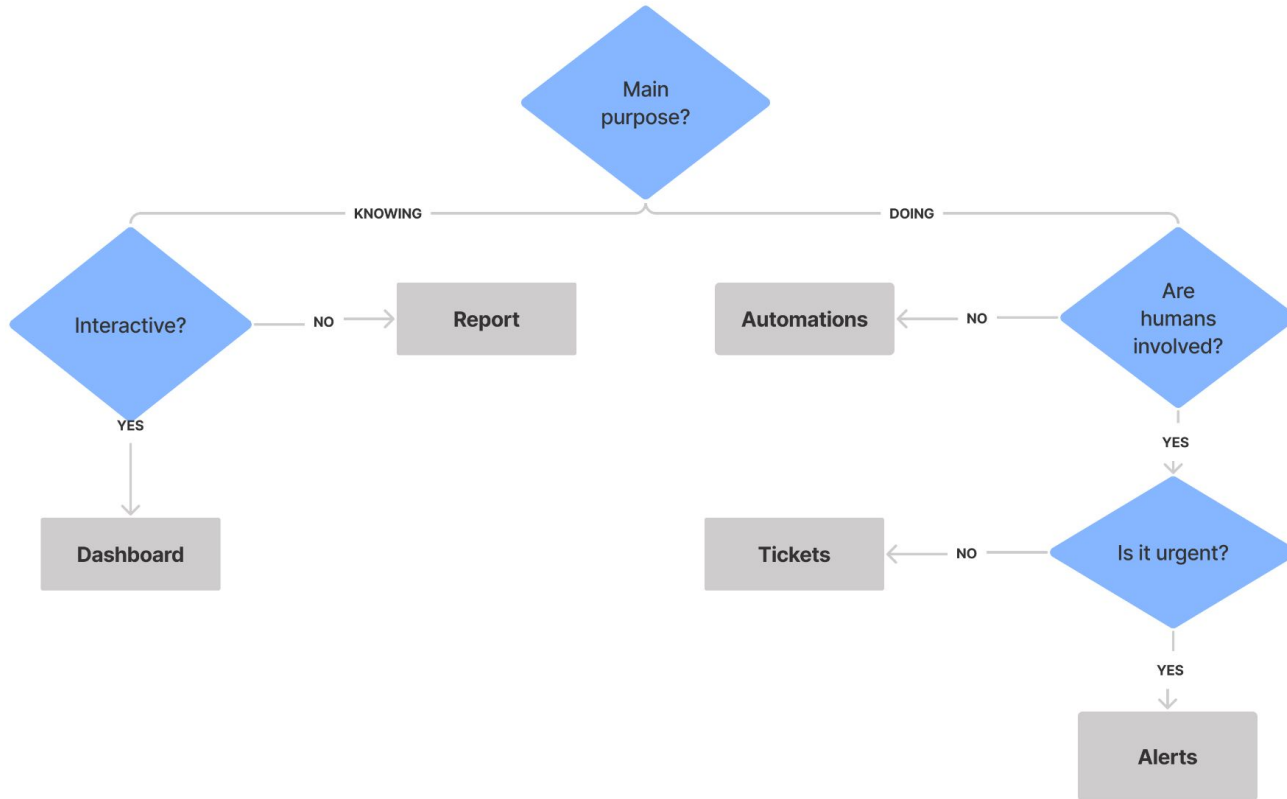
Business users need to set and change thresholds

Business users need to route data to Slack alerts, emails, customer communications etc.

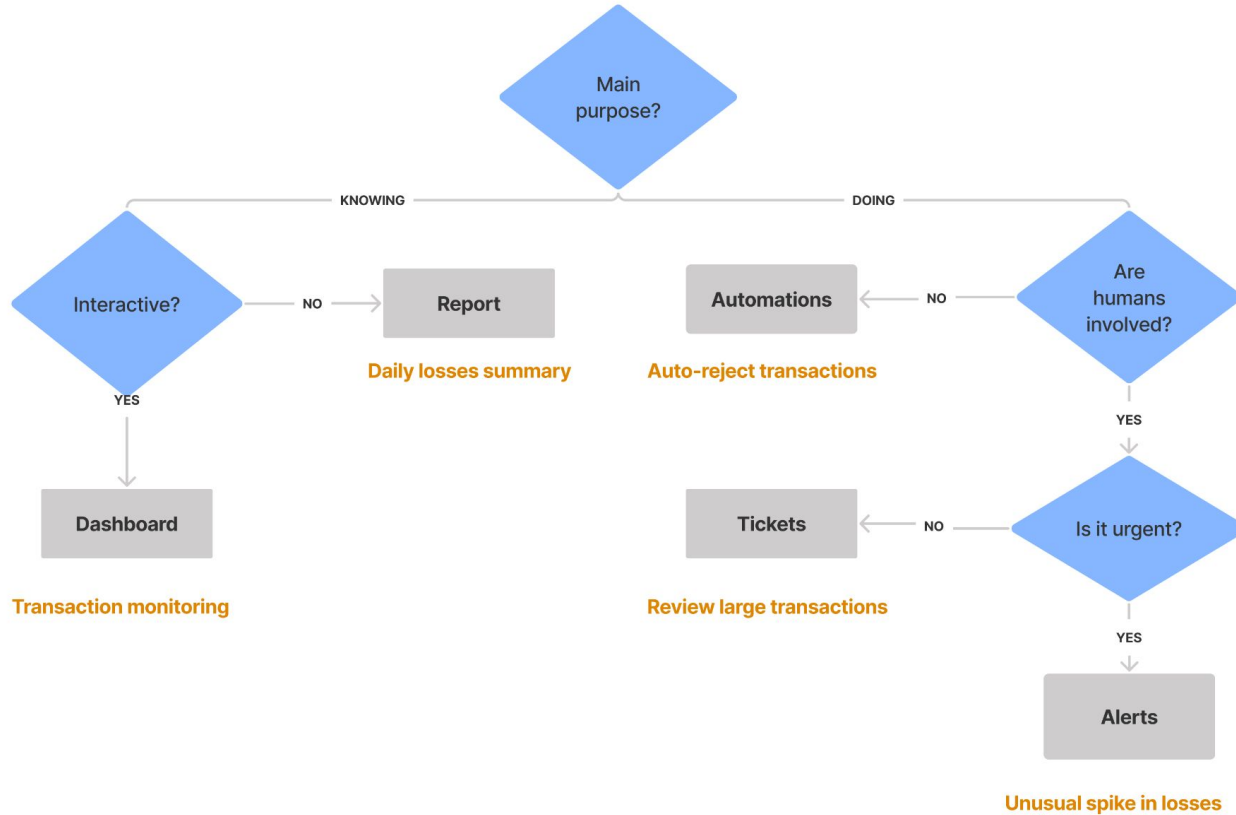


How to get the most out of a business alerting and automation system

#1 Route operations data correctly



Example: fraud data operations



#2 Deep dive: alerting best practices

Alerts should be real, urgent and actionable

Creation

- ❑ Don't re-alert for the same issue
- ❑ Calibrate as early and often as possible
- ❑ Aim for <5 / week

Tip: Over-monitoring is harder to solve than under-monitoring

Content

- ❑ Which system created the alert
- ❑ Description
- ❑ Severity of deviance
- ❑ Link to resolve / debug
- ❑ Owner
- ❑ SLA for resolution

Tip: Use emojis to help skim!

Management

- ❑ Audit and action logs
- ❑ Debugging dashboards

Tip: Snooze or set reminder schedules



Example: a fraud alert

System of origin

Clear owner

Deviance

Call to action



Your App APP 12:37 PM

@Jesika Haria you have a new large transaction for review:

Fred Enriquez - Large Transaction Alert

Type:


Computer (laptop)

Reason:

Amount \$15,000 exceeded limit \$100.

When: Aug 10, 4:22 am

Risk:

 High
(review in 1 hour)

Approve

Deny

Skimmable

Link to details

Relevant info

Urgency level

#3 Iterate, iterate, iterate

Improve signal

- ❑ Weed out alerts $>x\%$ false positive rate
- ❑ Consolidate alerts that have $>x\%$ overlap
- ❑ Distinguish between data and system failure

Monitoring as code

- ❑ Version control changes
- ❑ Backtest
- ❑ Permissioning
- ❑ Approval process

Management

- ❑ Ensure commensurate staffing
- ❑ Groom backlogs every month
- ❑ Track time to resolve and automate biggest time sinks
- ❑ Consolidate decisioning systems



Example: Improving fraud alerting system

Step 1

Add a Slack notification & adjust thresholds

Step 2

Create review tickets

Step 3

Auto reject





How to get the most out of a business alerting and automation system

Route data correctly

Decision Tree + Example

Deep dive: alerting best practices

Checklist + Example

Iterate, iterate, iterate

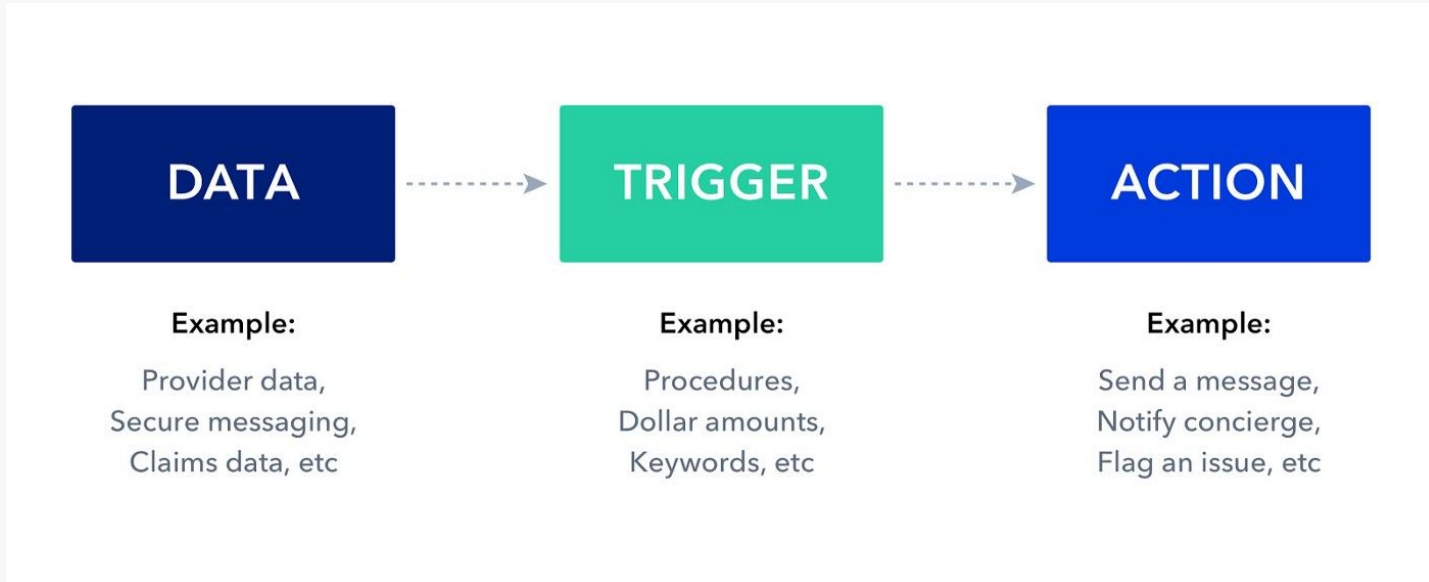
Checklist + Ladder



References & Success Stories

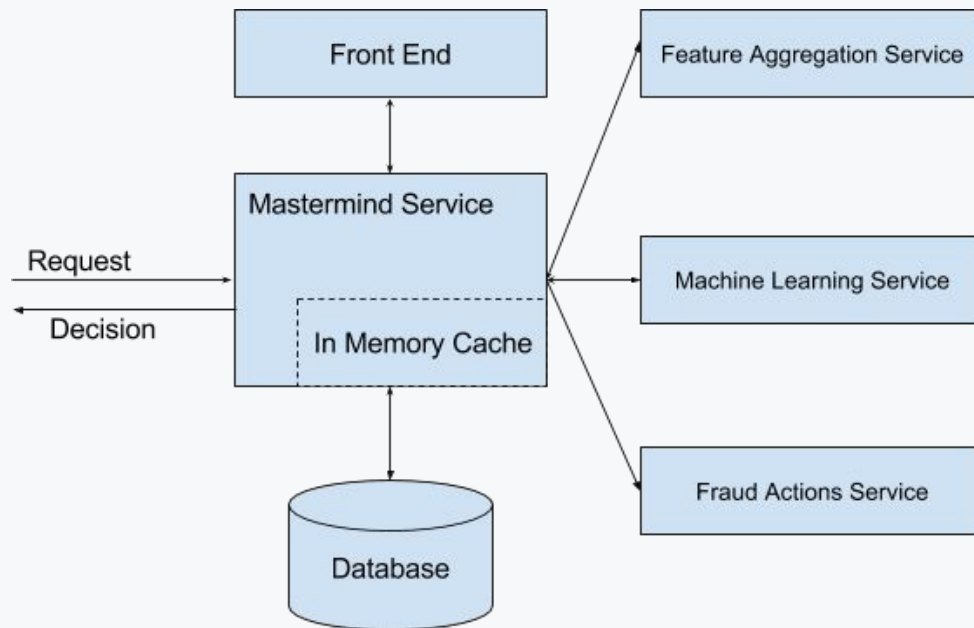
Case study: Oscar Health

Built Automat, a self-service configuration platform



Case study: Uber

Built Mastermind, a real-time fraud rules engine



And results you won't find blogs about

\$95B fintech

1M
saved

per quarter by risk
analyst writing
fraud rules

Series B fintech

40%
revenue

generated by
retargeting high-
value customers

Recruiting Co

32x
ROI

on automating
account summary
emails

Series C fintech

2
eng
months

saved with
deduping

Summary



What we talked about

- ❑ **200+ leaders' operations data needs**
 - ❑ Self-serve maturity checklist
- ❑ **A system for business alerting & automation**
 - ❑ Reference architecture for Data → Triggers → Action
- ❑ **How to get the most out of it**
 - ❑ Examples and best practices on how to route data, alert and iterate
- ❑ **References & success stories**
 - ❑ Architectures and case studies



I think about this a lot because we're building it – let's talk!

@jesikaharia
jesika@logicloop.com

