Business-Driven Monitoring

WIX Engineering

Ecom Platform, Wix Stores
Or Rozenzweig

September 2024

Do you know that exciting feeling of...

Yes! It Works!!

Switch Your Focus to Monitoring Business KPIs

Hi, I'm Or

Backend @ Wix E-commerce Platform

Creating Grafana dashboards for the past 5 years

10M sites

1M e-commerce sites

150M unique metrics hourly

0.5 Trillion logs a day

Business Driven Monitoring

Monitoring Toolbox

Graphs

Metrics

HOW WELL it happened

Logs

WHAT happened

Monitoring Toolbox

Grafana

Data visualization platform.

Prometheus

Metrics collection and alerting.

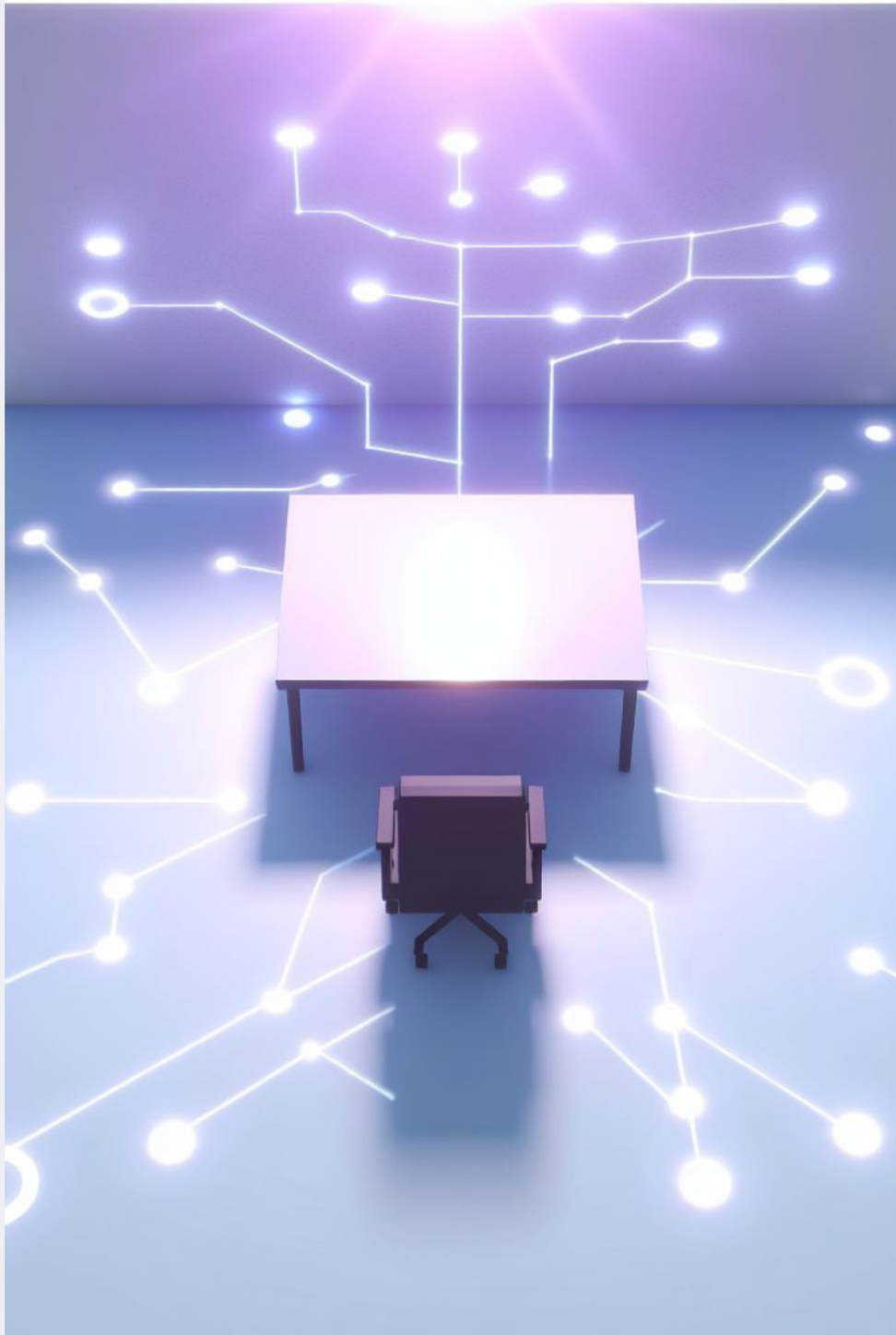
Loki

Log aggregation system.

Business Driven Monitoring: Step-by-Step Guide

1. Define Business KPIs and Funnels
2. Create Logs & Metrics
3. Visualization in Grafana

You are the owner.



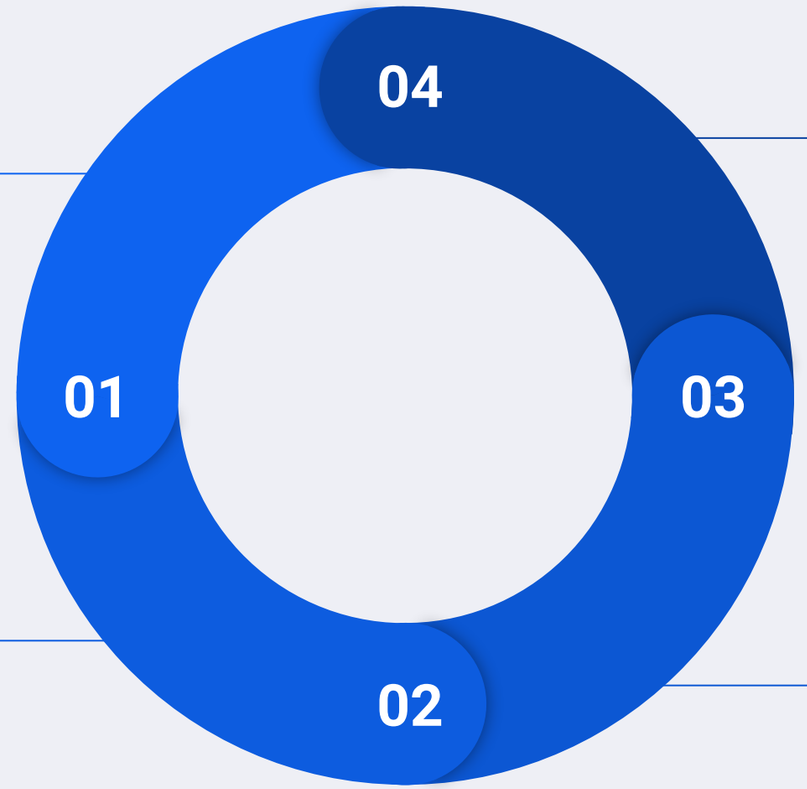
Map your funnels

1 **Identify crucial flows & Breakdown to steps**

2 **Define the business KPIs**

3 **Involve stack holders –**
Product, Business Analysts

E-commerce KPI - Checkout Conversion



Buyer Opens Checkout

Payment

Contact Details & Address

Delivery Method

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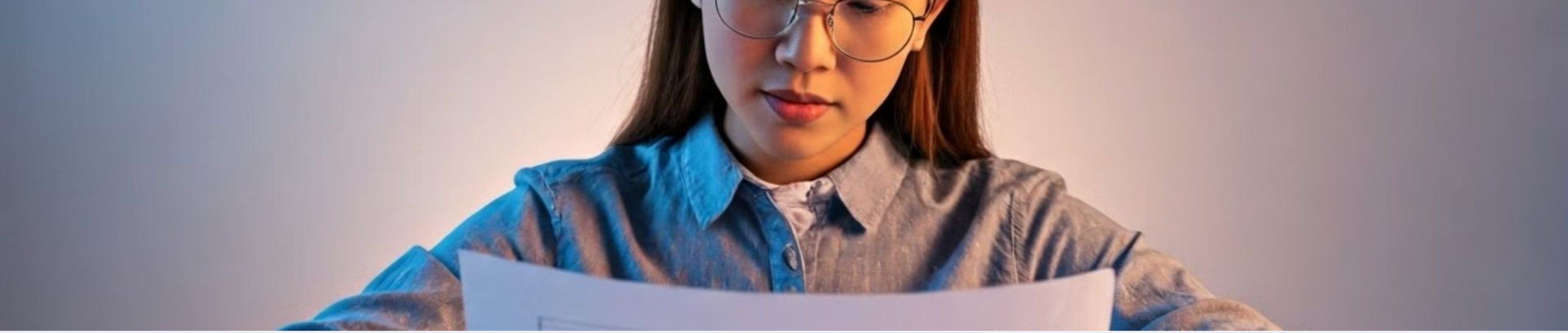

Get Intimate with Your Product

Analyze

Dive into funnel steps

Light up the dark

Fill gaps with metrics

Be Generous

as many metrics as possible

1 line of code

1 line in Grafana

1 line of code

```
case class SetFreeShippingSuccessfully() extends VisibilityEventLogWithMetric("set-free-shipping-successfully")
```

1 line in Grafana

```
sum({service="com.wixpress.ecom.delivery-rates", metric="successful-delivery-rate-spi-call"}) by (carrier)
```

The Magic Behind the Scenes

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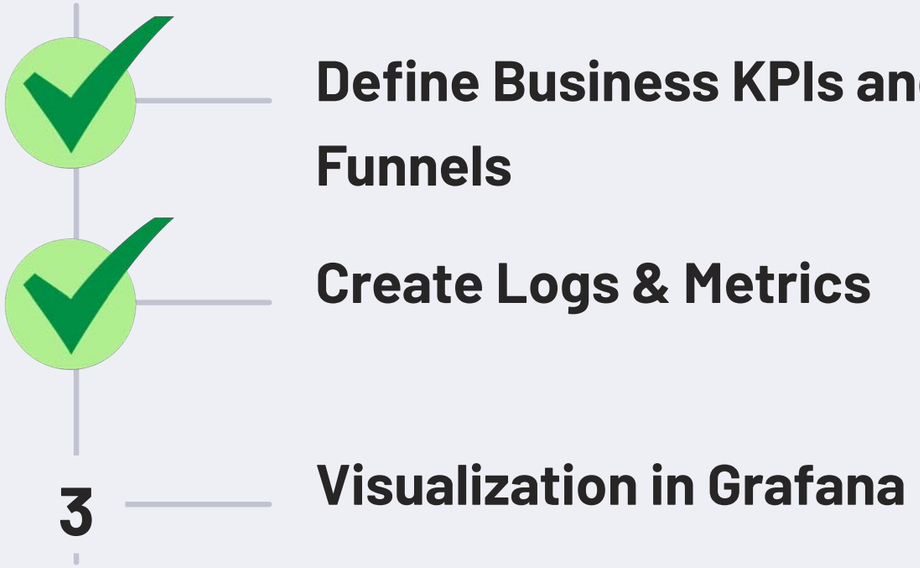

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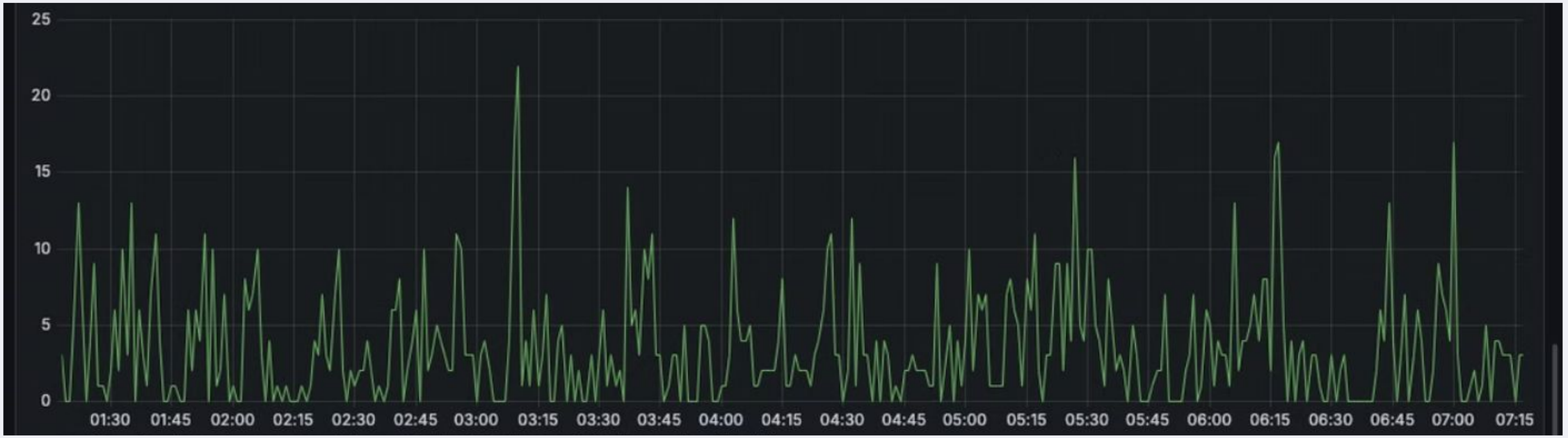
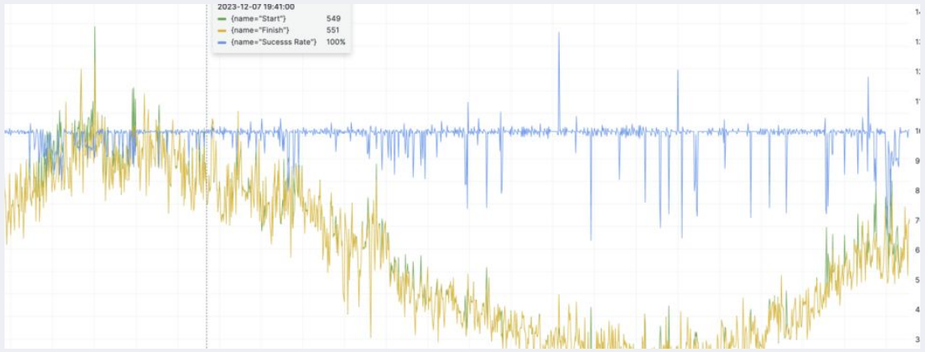
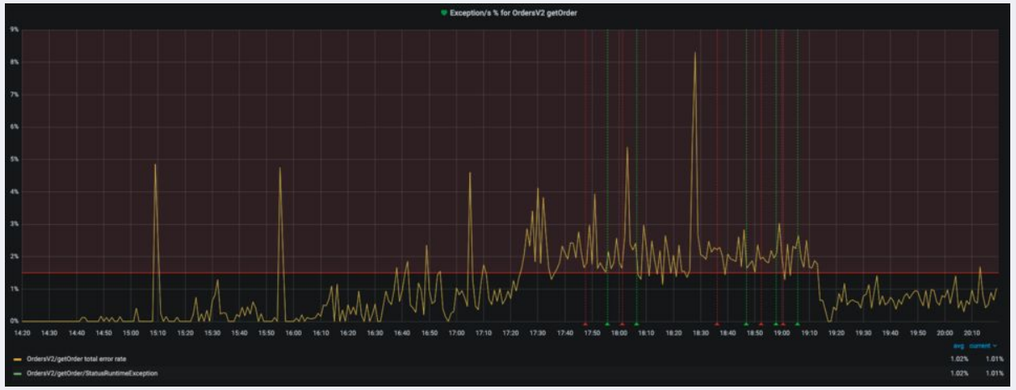
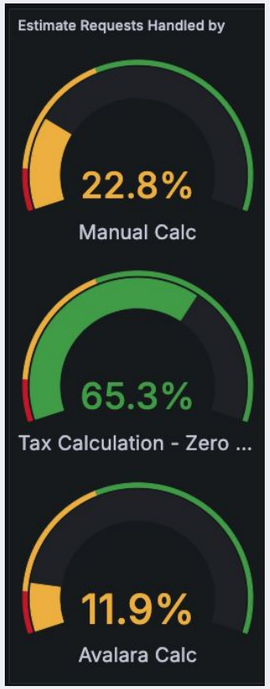
Grafana Visualizations

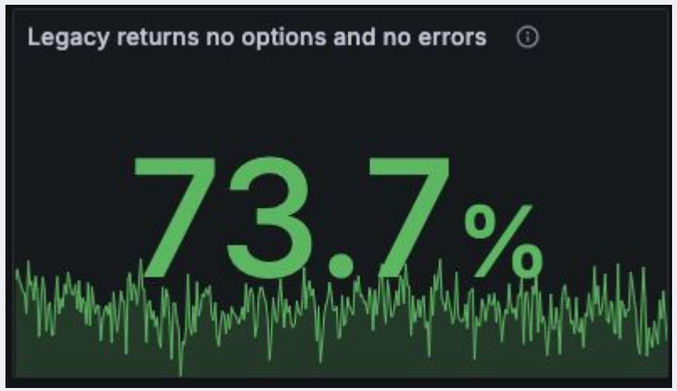


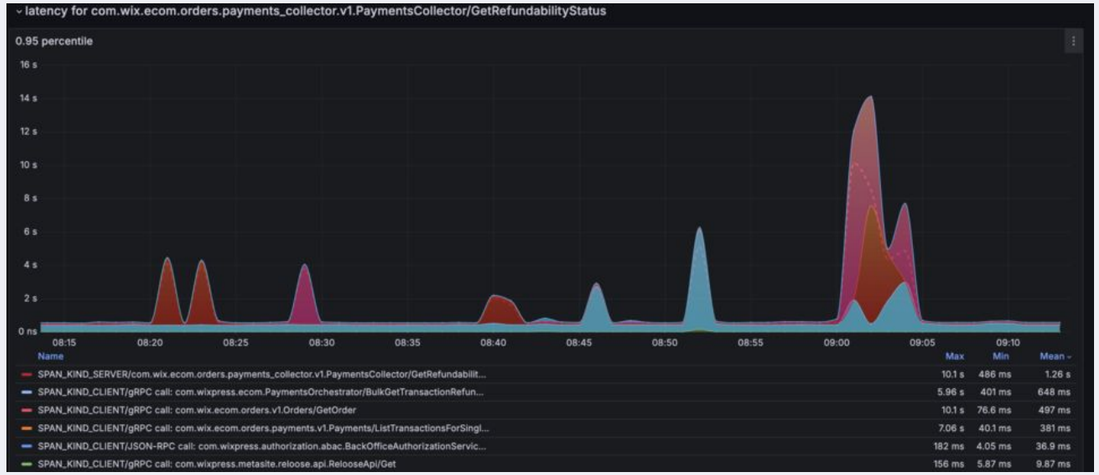
So many visualizations

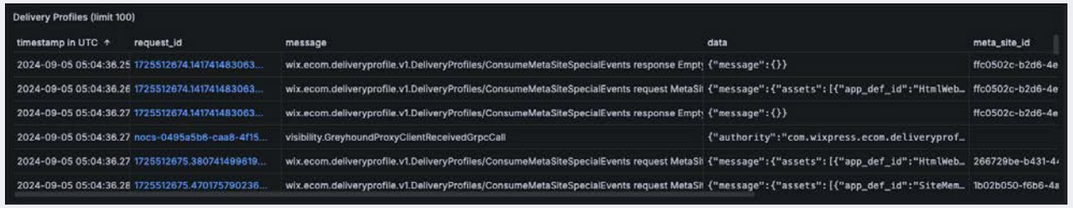












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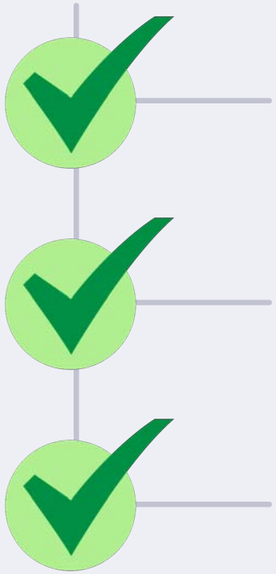

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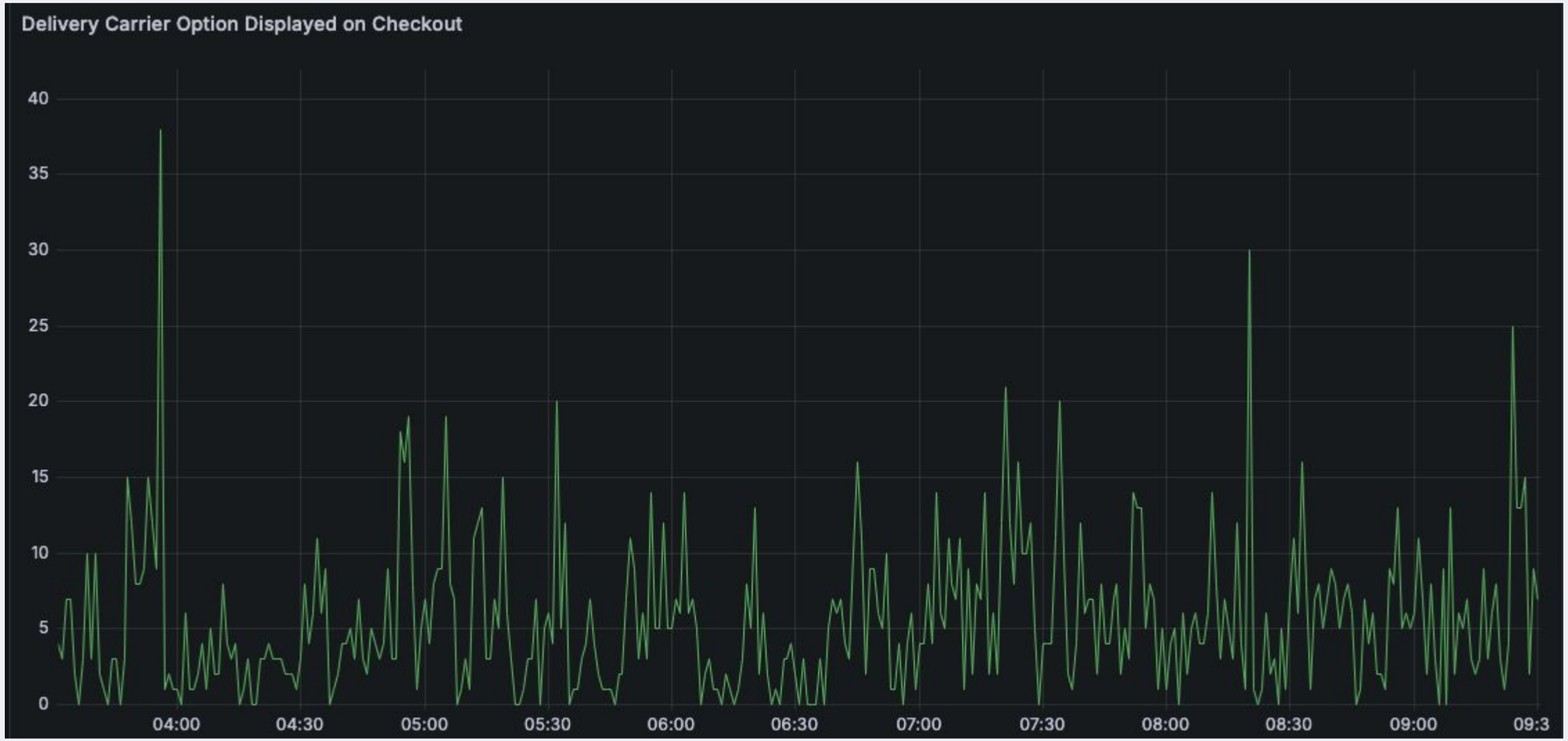
- Create Logs & Metrics
- Visualization in Grafana

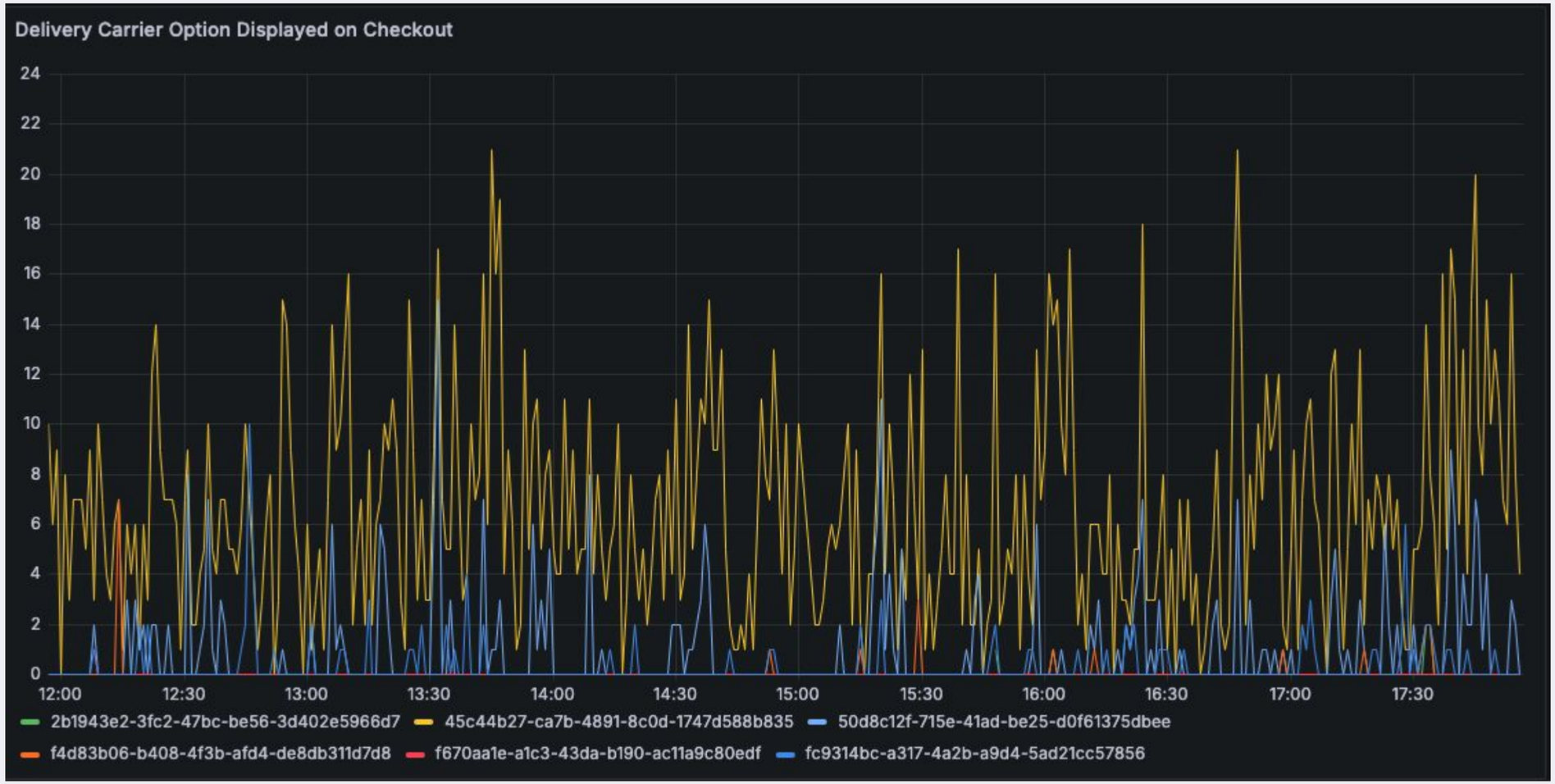
Pro Tips

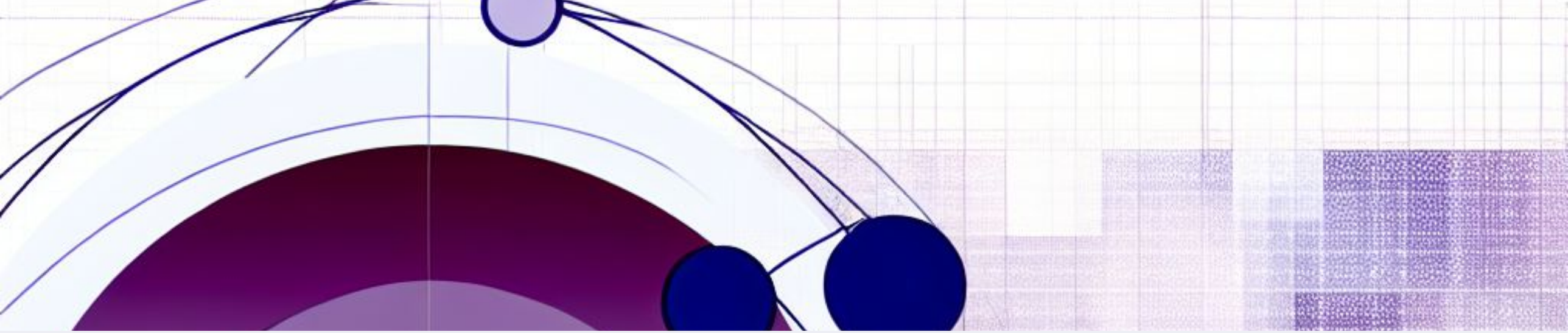
to light things up

Delivery Carrier Success



Dozens in one





The Power of Labels

different events exposed by the same metric + label = multiple metrics

```
sum({service="com.wixpress.ecom.delivery-rates", metric="successful-delivery-rate-spi-call"}) by (carrier)
```

Opsgenie APP 8 months ago

#27782: [Grafana]: [avalara-calc] Number of metrics

Number of distinct metrics sent by **avalara-calc** is too high.

"with great power, comes great responsibility"

Live Demo

Wix Delivery System

Main Business Flow

1. Buyer opens the checkout page
2. The Store offers diverse delivery carriers
3. The Delivery Carriers offer options and costs
4. The Buyer completes delivery checkout step

Things You Need To Know

Prometheus Functions

aggregations like sum, count, min, max

m1_rate = 1 minute average

Wix Internal Labels

service = the micro-service

method = the specific endpoint

Advanced Monitoring

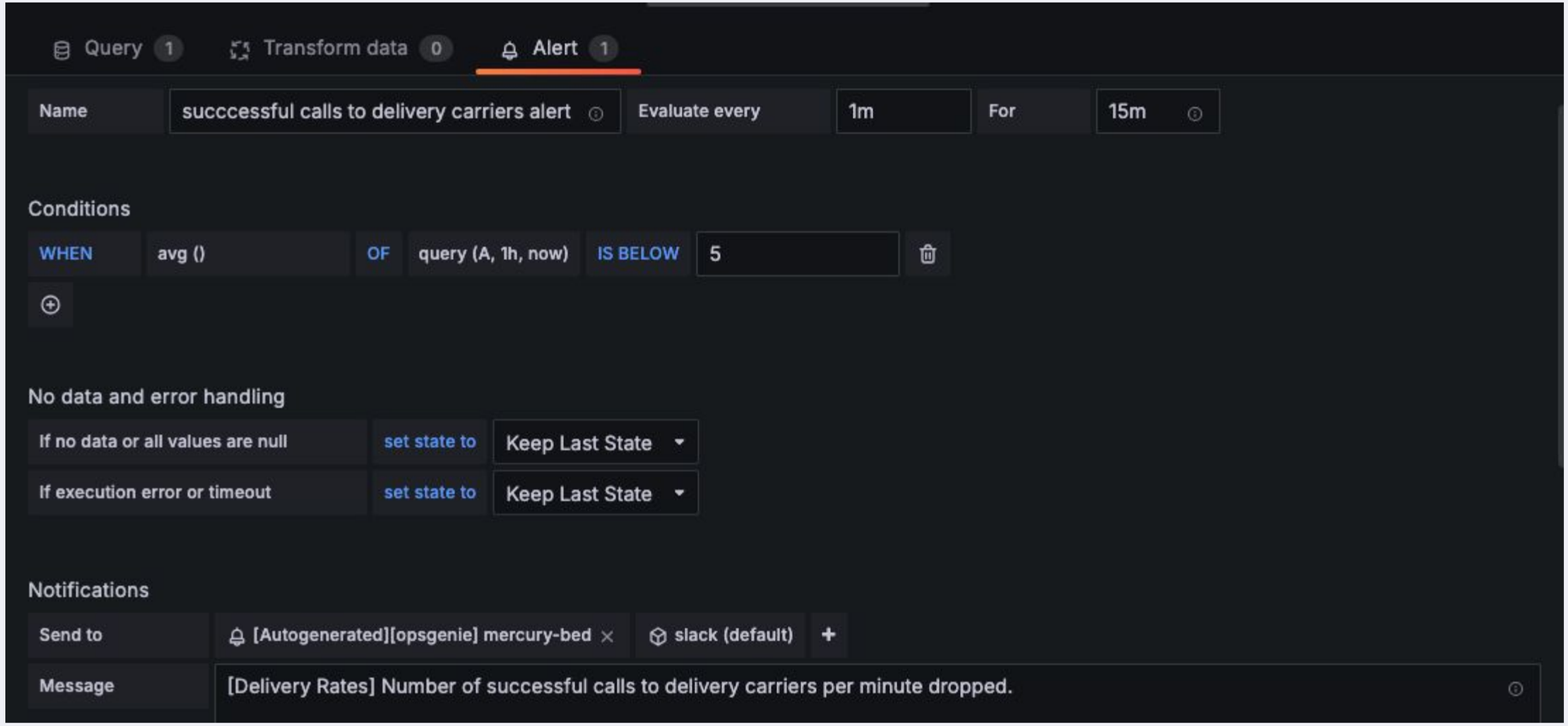
Alerts for Anomalies

Implement alerts for funnel anomalies.

Drill Down

Deep dive to a single site or request

Alerts


Query 1
Transform data 0
Alert 1
Name
succcessful calls to delivery carriers alert
Evaluate every
1m
For
15m
Conditions
WHEN
avg ()
OF
query (A, 1h, now)
IS BELOW
5
No data and error handling
If no data or all values are null
set state to
Keep Last State
If execution error or timeout
set state to
Keep Last State
Notifications
Send to
[Autogenerated][opsgenie] mercury-bed
slack (default)
Message
[Delivery Rates] Number of successful calls to delivery carriers per minute dropped.

Drill Down

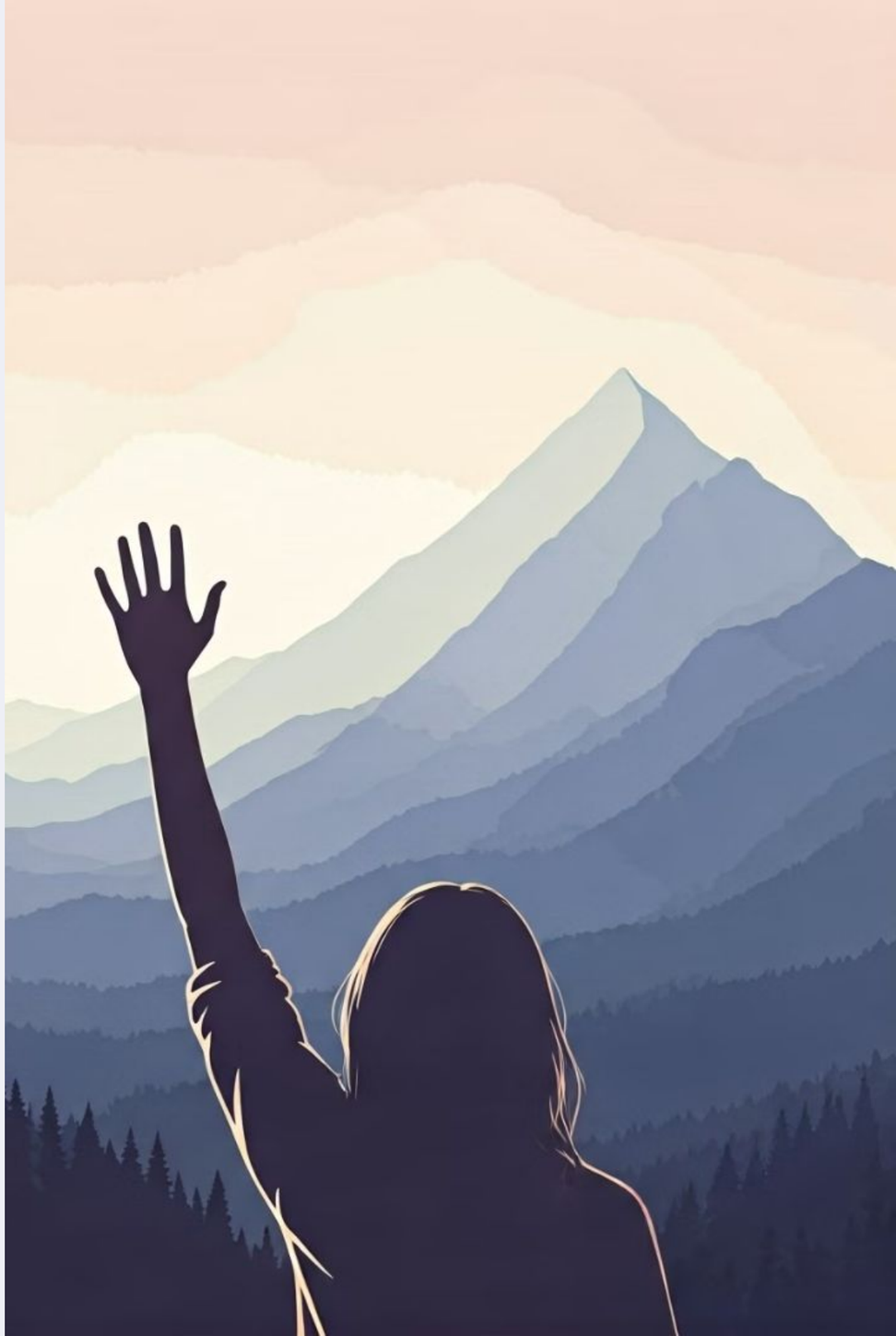
1. Filters
2. Investigation queries
3. latest logs per service

Monitor your business, be the owner

1. Map your business funnels
2. Light them up with metrics & logs
3. Add Alerts
4. Be The Owner

Thank You!

Feel free to reach out!

Or Rozenzweig, orro@wix.com

SCAN ME