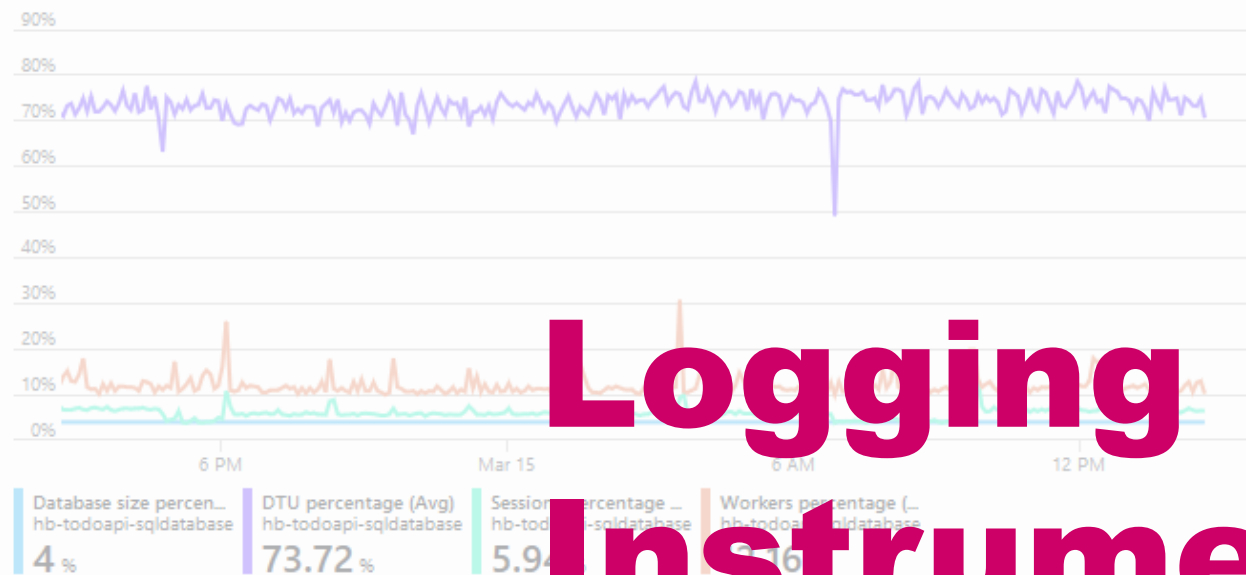
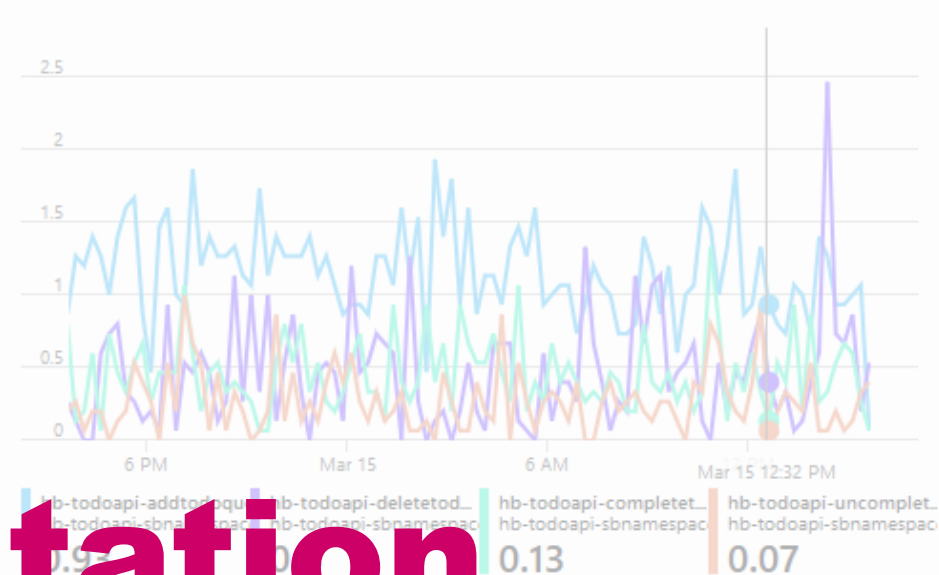


Local Time : Past 24 hours

Max Database size percentage, Avg DTU percentage, and 2 other metrics (percentage) - 24 hours



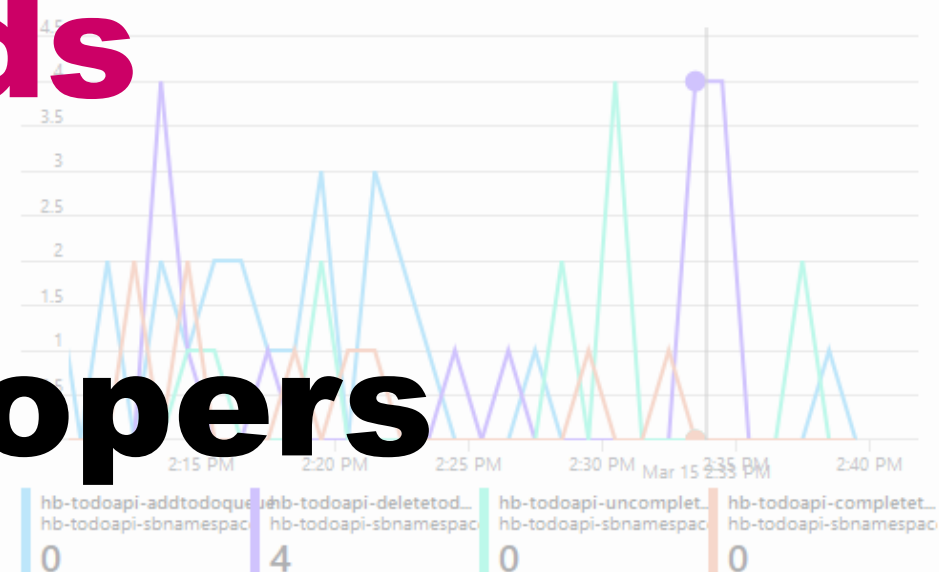
Active queue messages (Count) - 24 hours



Max Database size percentage, Avg DTU percentage, and 2 other metrics (percentage) - 30 minutes



Active queue messages (Count) - 24 hours30 minutes



Logging
Instrumentation
Dashboards
Alerts
- for developers

WONDERING **WHO** IS THAT GUY?



HENRY BEEN
Independent Devops & Azure Architect
Microsoft MVP & MCT, Pluralsight & book author

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LOGGING, INSTRUMENTATION, DASHBOARDS & ALERTS

Monitoring Theory

What to monitor

Demo

MONITORING

-or-

KNOWING WHAT IS HAPPENING

MONITORING

Instrumentation

Most often forgotten

Concerned with metrics

- (Timestamp, value) tuples
- Events & values
- Dimensions
- Used for Dashboards & Alerts

Rolled up over time

Tracing

Used for troubleshooting

What we developers call logging

- When
- Code location
- Very, very verbose message
- Can be a source of metrics

Retained for a limited time

Logging

Often combined with tracing

Concerned with state changes

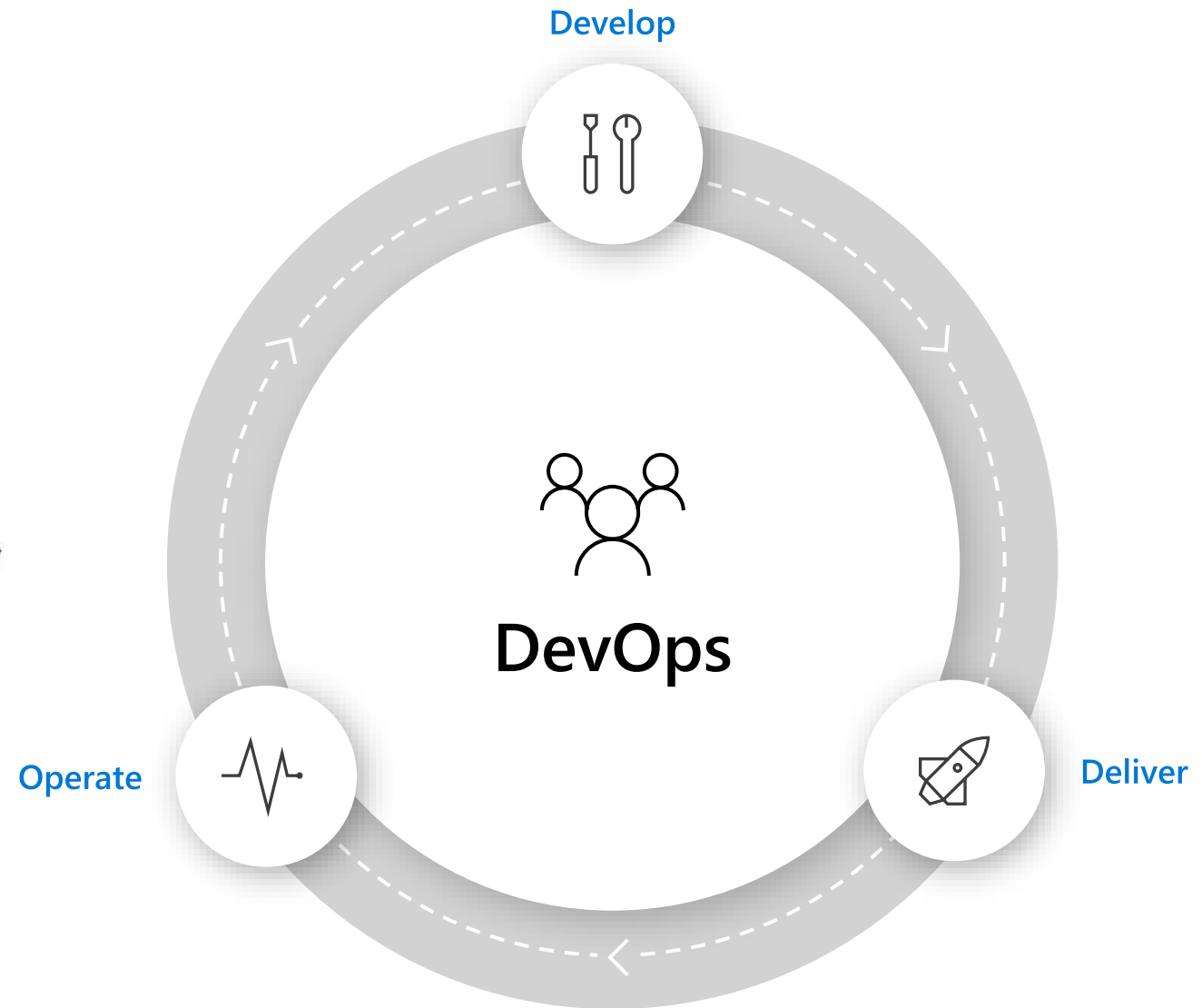
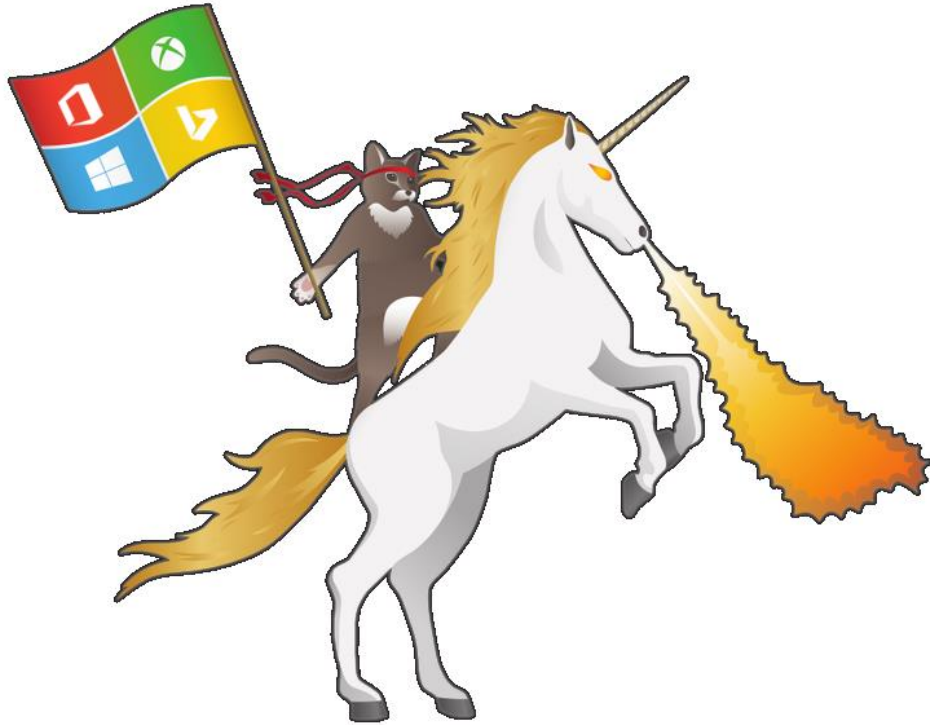
- When
- By who
- What changed
- Can be a source of metrics

Retained for longer or indefinitely

BUT HEY THAT STUFF
IS OPERATIONS...

WHY WOULD I CARE?

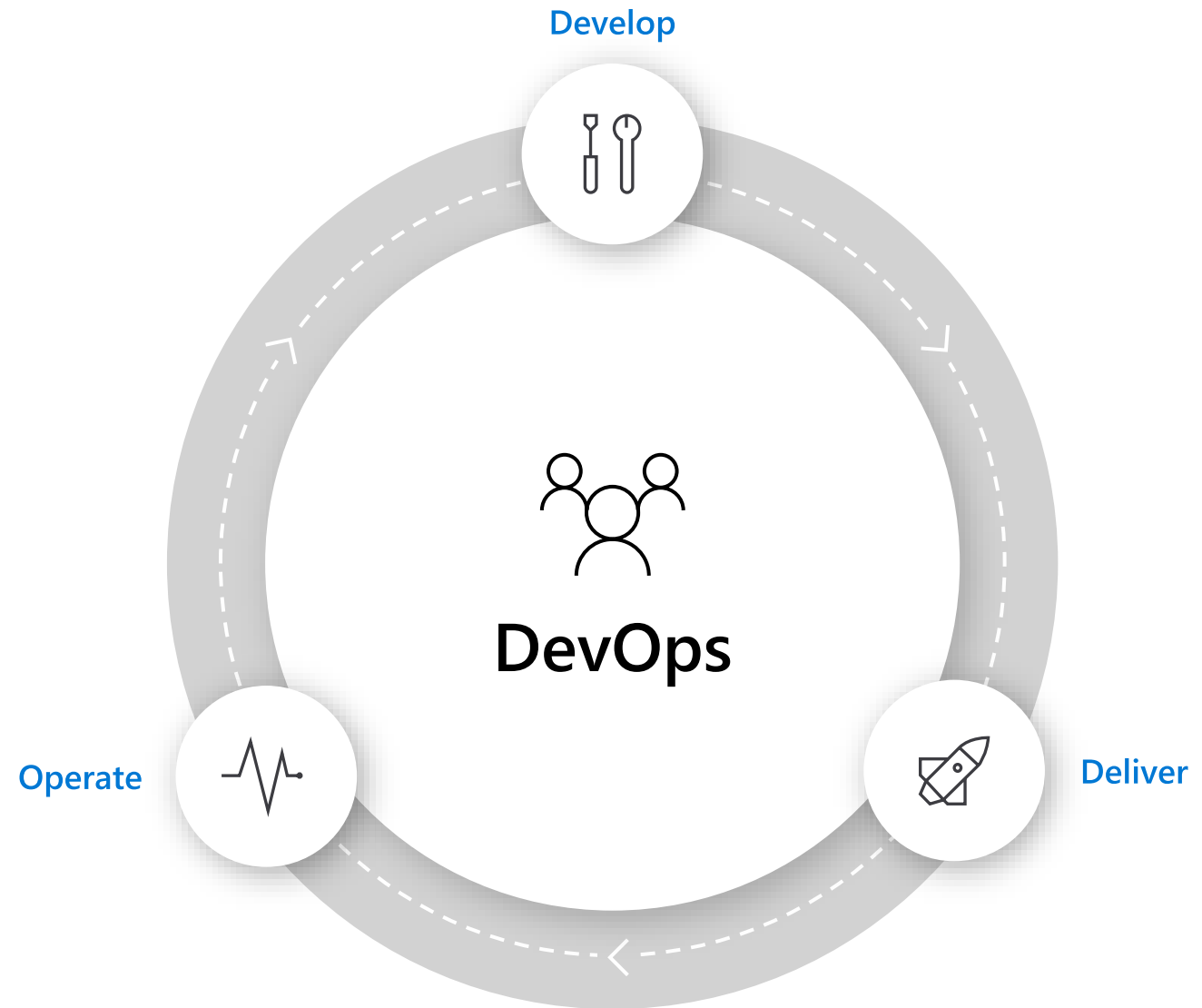
DEVOPS POWERRRR



DEVOPS



- DevOps is the union of **people**, **process**, and **products** to enable continuous delivery of value to your end users.



OKAY, OKAY I CARE...
NOW, WHAT TO MONITOR?

OKAY, OKAY I CARE...
NOW, WHAT NOT TO MONITOR?

WHAT NOT TO MONITOR (MAYBE)

FOCUS ON YOUR SYSTEMS

Do you think your users care? At all?

- Is the amount of disk IO really interesting?
- Does page file usage predict conversion?

FOCUS ON AVERAGES

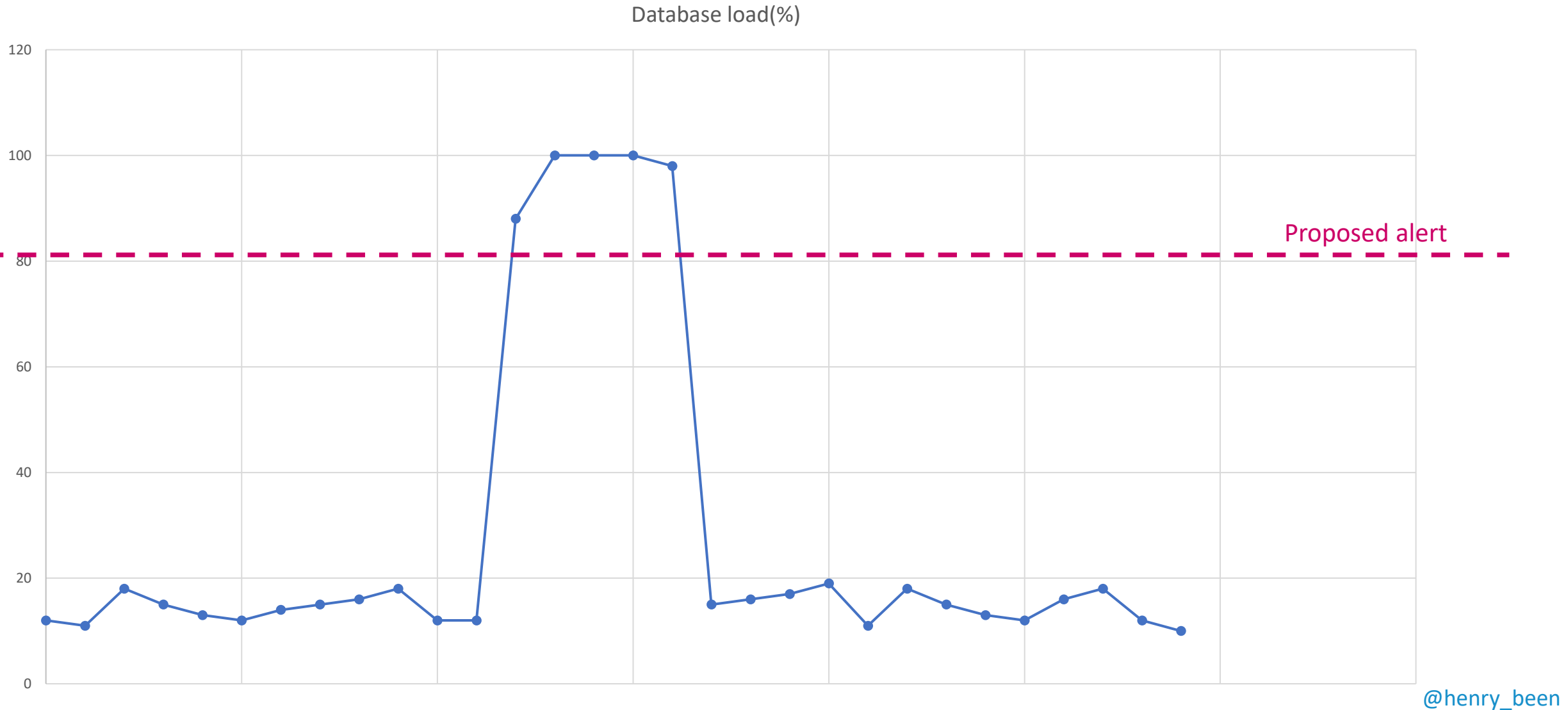
Averages are lying cheats and hide real issues!

- Use dimensions to find outliers
- Use maximums or percentiles to identify spread

To add some nuances:

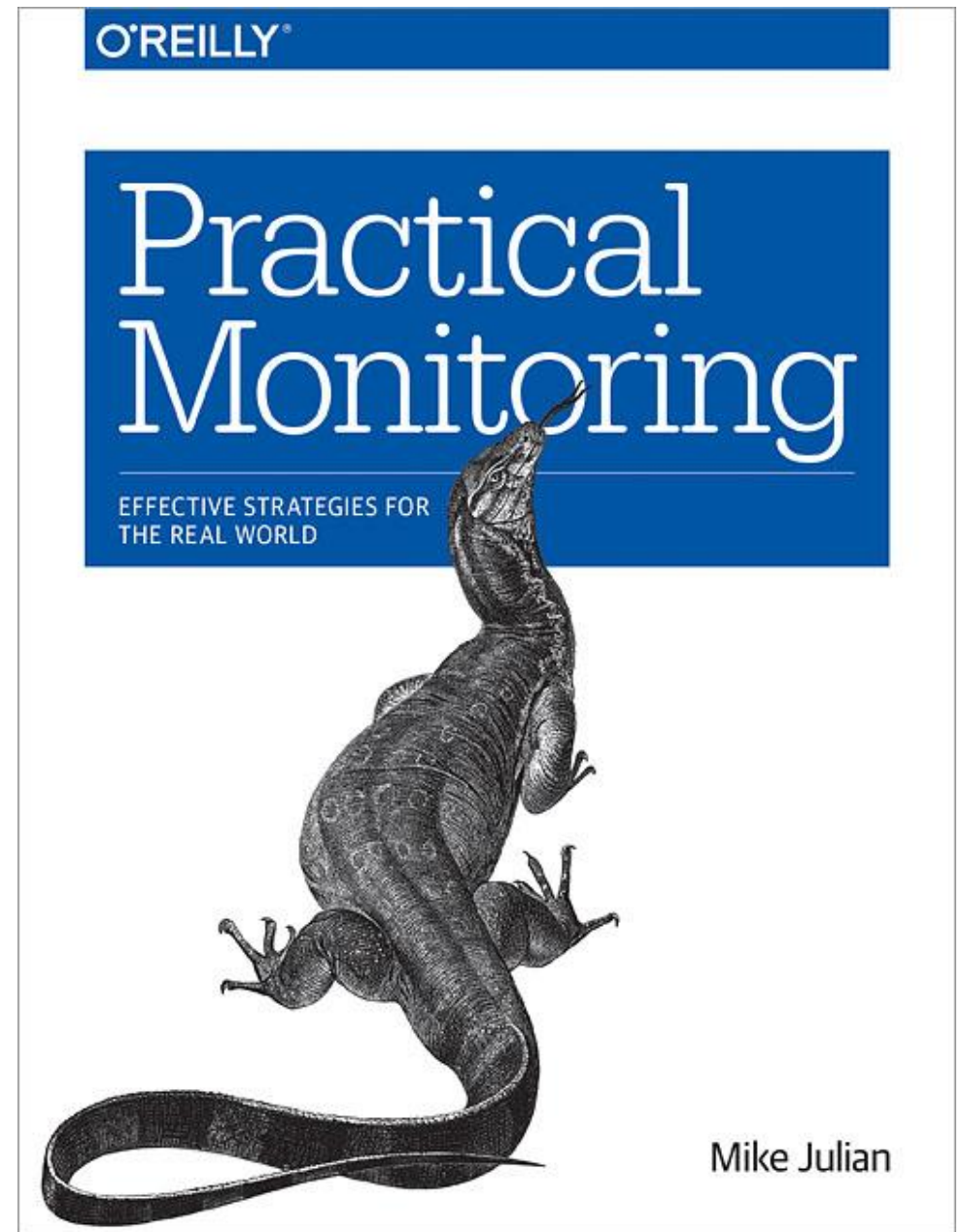
- Some system metrics are handy, just don't start there maybe
- Same goes for averages

DO WE HAVE AN ISSUE?

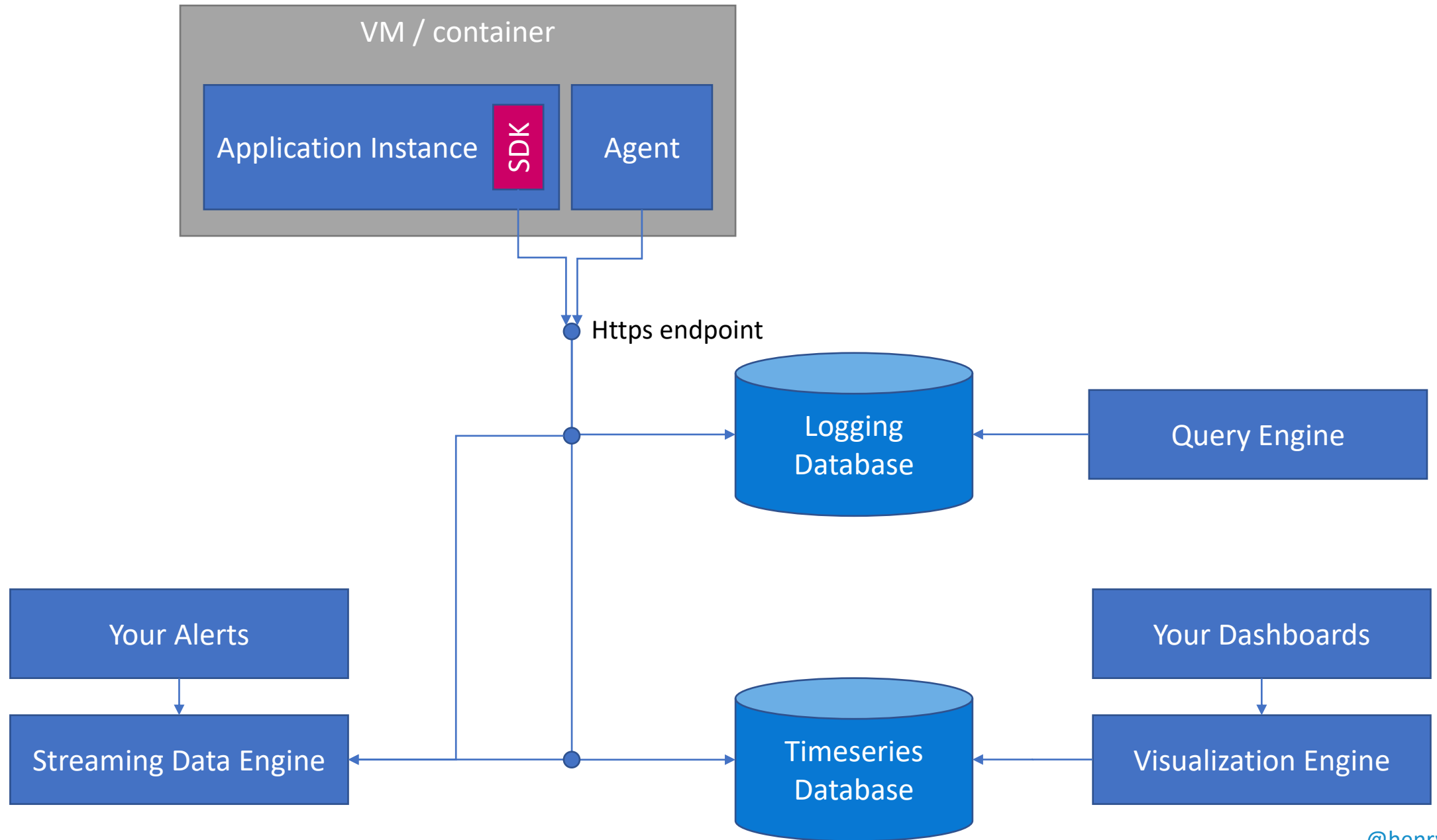


MEASURE THINGS
THE USER CARES ABOUT
AND THINK IT THROUGH!

A VERY GOOD BOOK
ALSO QUITE THIN



FOR THOSE USING AZURE
HOW WOULD YOU DO IT?



AZURE SERVICES



Application Insights



Log Analytics



Azure Monitor

AZURE SERVICES



Azure Monitor



Log
Analytics

←
<< stores data in >>



Application
Insights

	Logs	Metrics
Application specific	Manual Application Insights SDK + Application Insights + Log Analytics	Manual Application Insights SDK + Application Insights + Log Analytics
Application Generic	Enable/Automatic Application Insights + Log Analytics	Enable/Automatic Application Insights + Log Analytics
Infrastructure	Configurable/Automatic Diagnostic settings + Log Analytics Workspace	Built-in, free (90 days retention) Metrics tab <i>Alternative: Log-based metrics</i>

And now for real...

SPEED:
120



Two more things



DASHBOARDS
AND ALERTS

AS CODE



DO TRY THIS **AT HOME!**

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Questions?

Now is the time!

A photograph of a white CRT computer monitor lying on its side on a grey surface. The screen is shattered with several large cracks. A wooden baseball bat is positioned diagonally across the top left of the monitor. The background is a plain, light-colored wall.

DO TRY THIS **AT HOME!**

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