

I Can Sell You Observability...

Austin Parker, *Principal Developer Advocate*



Lightstep

But You Can't Buy It.

Austin Parker, *Principal Developer Advocate*



Lightstep

Who Am I?

Austin Parker

Principal Developer Advocate



@austinparker



austin@lightstep.com



Co-Author, Distributed Tracing in Practice
(O'Reilly, 2020)



1

Observability



Observability is the process and practice of understanding your system.



Monitoring vs. Observability

Monitoring, as a discipline, requires you to pre-define *normal* and then freeze it, with ruthless efficiency, suborning agility and humanity and adaptiveness in the sake of producing a steady-state system.

THE NEW STACK

There's too many unknowns in modern software to just throw together some dashboards and call it a day.

Think about the things you might need or want to know...

- "Why does a particular type of user account have worse response times?"
- "What's correlated with this particular failure?"
- "When did this error start occurring?"





Tools



Culture

2

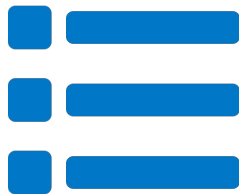
What You Can Buy



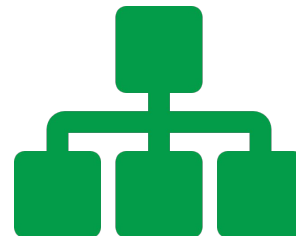
The 'Three Pillars'



Time-Series Metrics




Log Aggregation and Indexing



Distributed Tracing

Sign Up Free!



A medium shot of actor Tim Allen as Harvey Karpman from the TV show 'The Mindy Project'. He is bald with a thick black mustache, wearing a dark blue pinstripe suit, a blue and white checkered shirt, and a dark tie. He has a white pocket square in his jacket. He is looking slightly to his left with a confused or questioning expression, his mouth slightly open. The background is a wood-paneled wall with a nameplate that reads 'HARVEY'.

What?!





Tools



Culture

3

Selling Culture



Lessons from Google

“No matter how compelling that [observability] product experience is, developers (like all people) are creatures of habit who do not want to learn a new tool to check proactively”

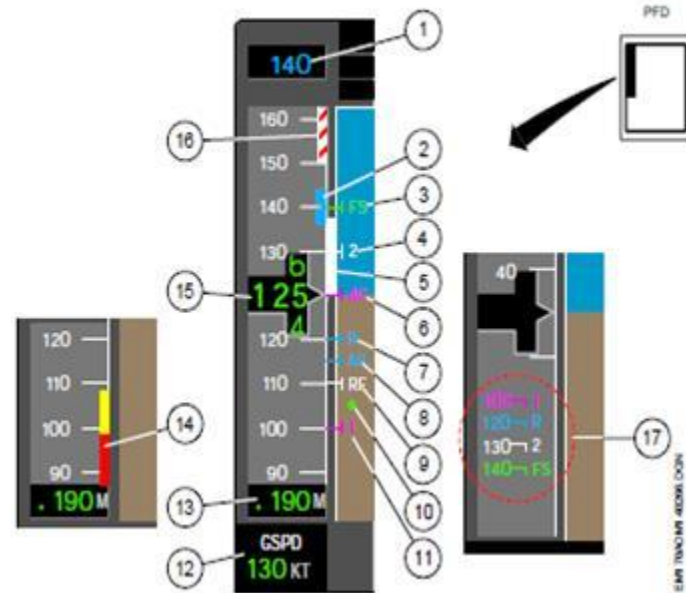
From Distributed Tracing in Practice, Foreword

Observability tools and tooling have been in development and production for years at major organizations, but initial adoption was slow; Why?

It took integration into existing workflows to find success.



Dials and Tapes





4

Evaluating Observability



Observability Pt. 2

Fundamentally, the goal of observability is to provide the tools, techniques, and the culture required to perform two activities:

Measure the impact of performance on your users.

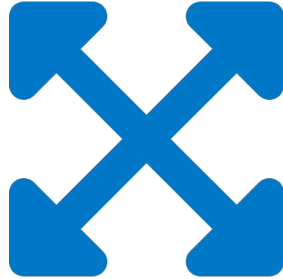
Explain variations in those measurements.



Evaluation Characteristics



Statistical Fidelity



Cardinality Limitations



Volume Limitations



Time Limitations

Facilitating Observability Goals

Tools must narrow the search space of explanations quickly and accurately –

- Provide context
- Prioritize by end-user impact
- Automate correlation





Thank you.

John Doe, Title
Hue Mon, Title
Abby Normal, Title



Lightstep