Off The Beaten Path

Observability Focus: From Service, To Customer

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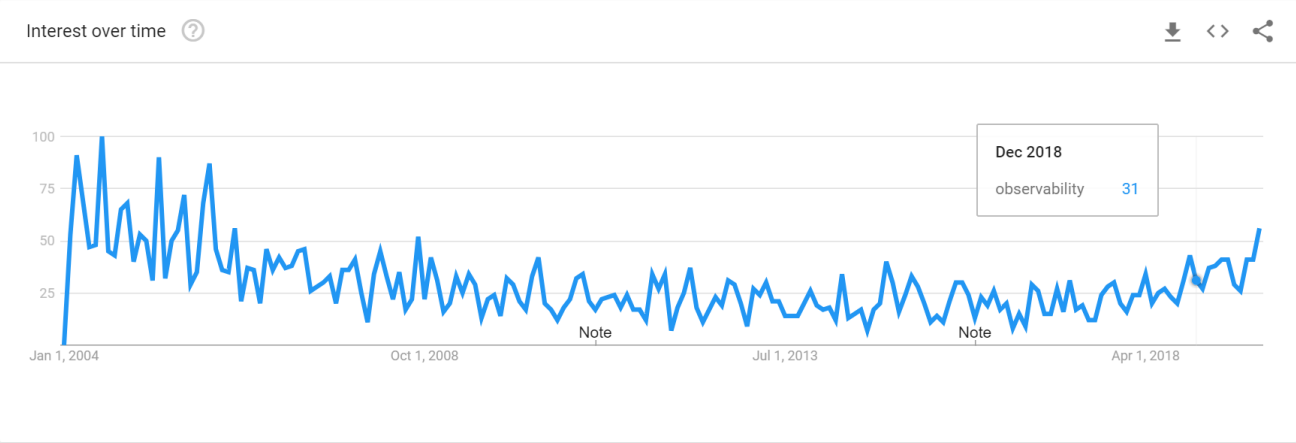
You're Probably Not Alone

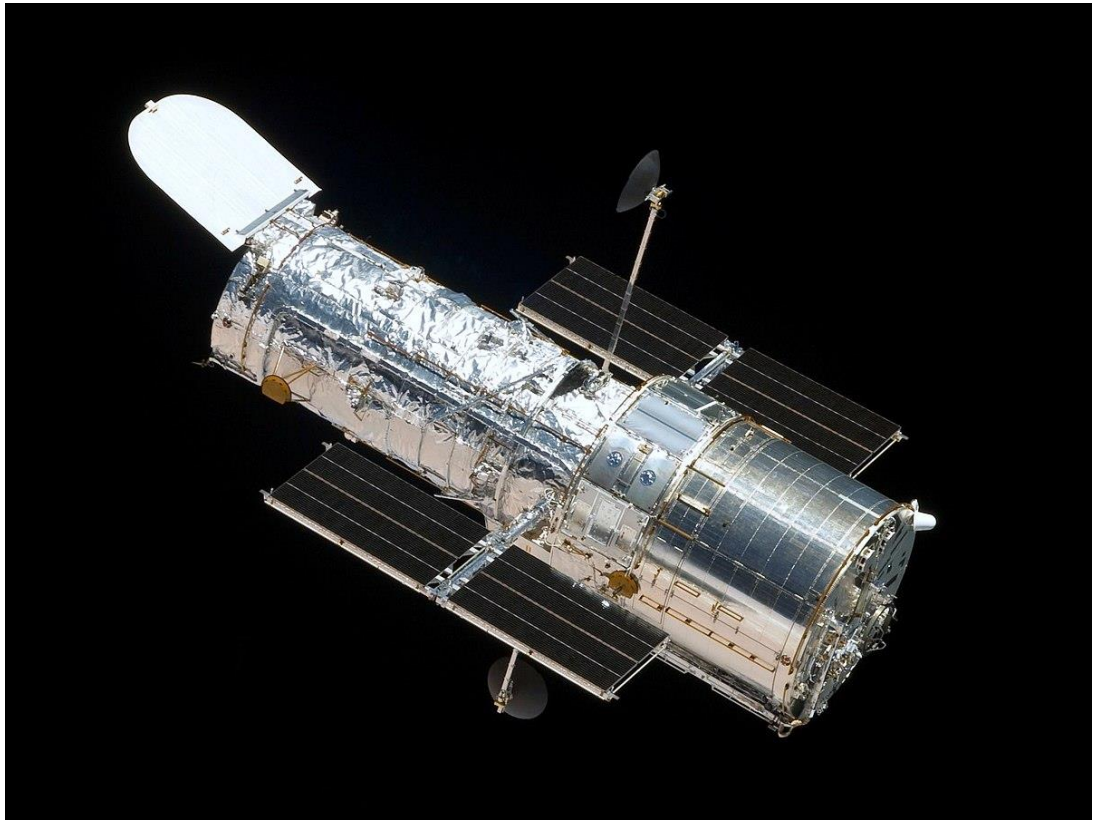
> — *Why call it monitoring? That's not sexy enough anymore.*
>
> — *Observability, because rebranding Ops as DevOps wasn't bad enough, now they're devopsifying monitoring too*
>
> — *Is that supposed to be like the second coming of DevOps? Or was it the Second Way? I can't remember. It all felt so cultish anyway.*

https://medium.com/@copyconstruct/monitoring-and-observability-8417d1952e1c Recommended Reading



Observability, for the next 45 minutes, in this room

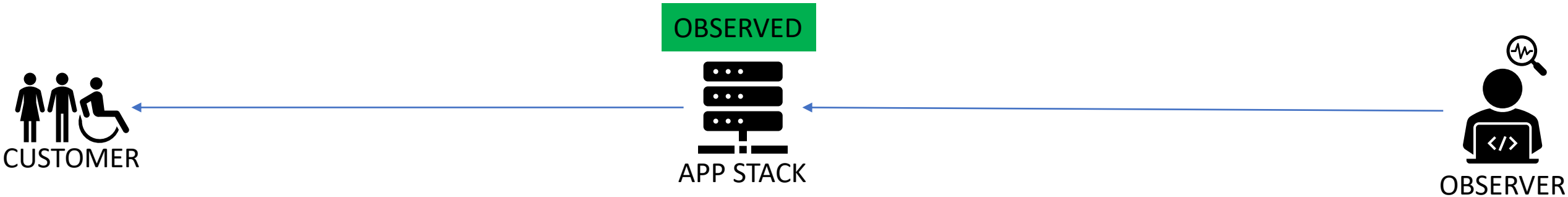
- Monitoring
  - Alerting
- Debugging
  - Distributed Tracing
  - Log Aggregation
- Testing
- Insights
- And more…



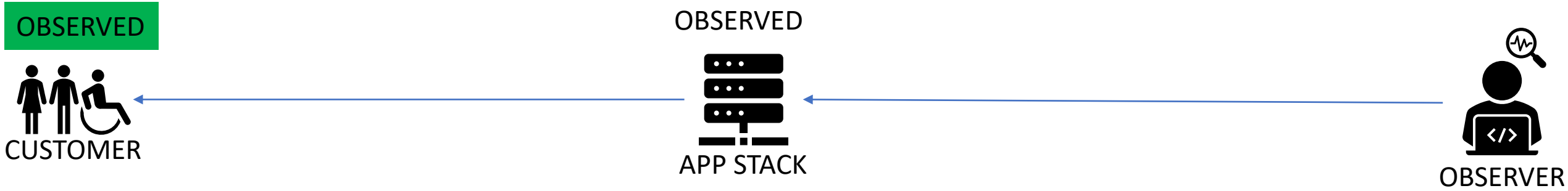
https://en.wikipedia.org/wiki/Hubble_Space_Telescope

Observability ⊇ Monitoring

Observability Focus



Observability Focus – A Shift



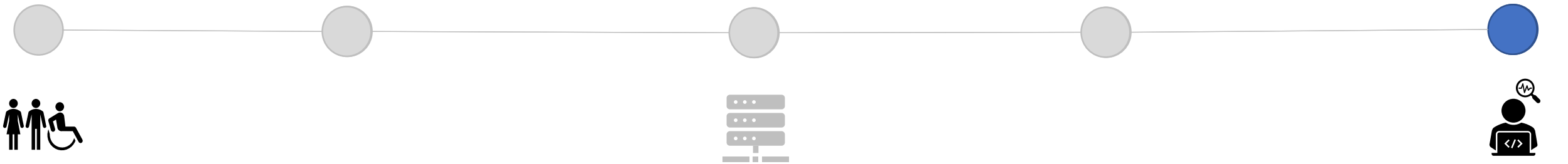
Focus Doesn’t Mean…

https://youtu.be/jkVD8wkPEMw?t=6

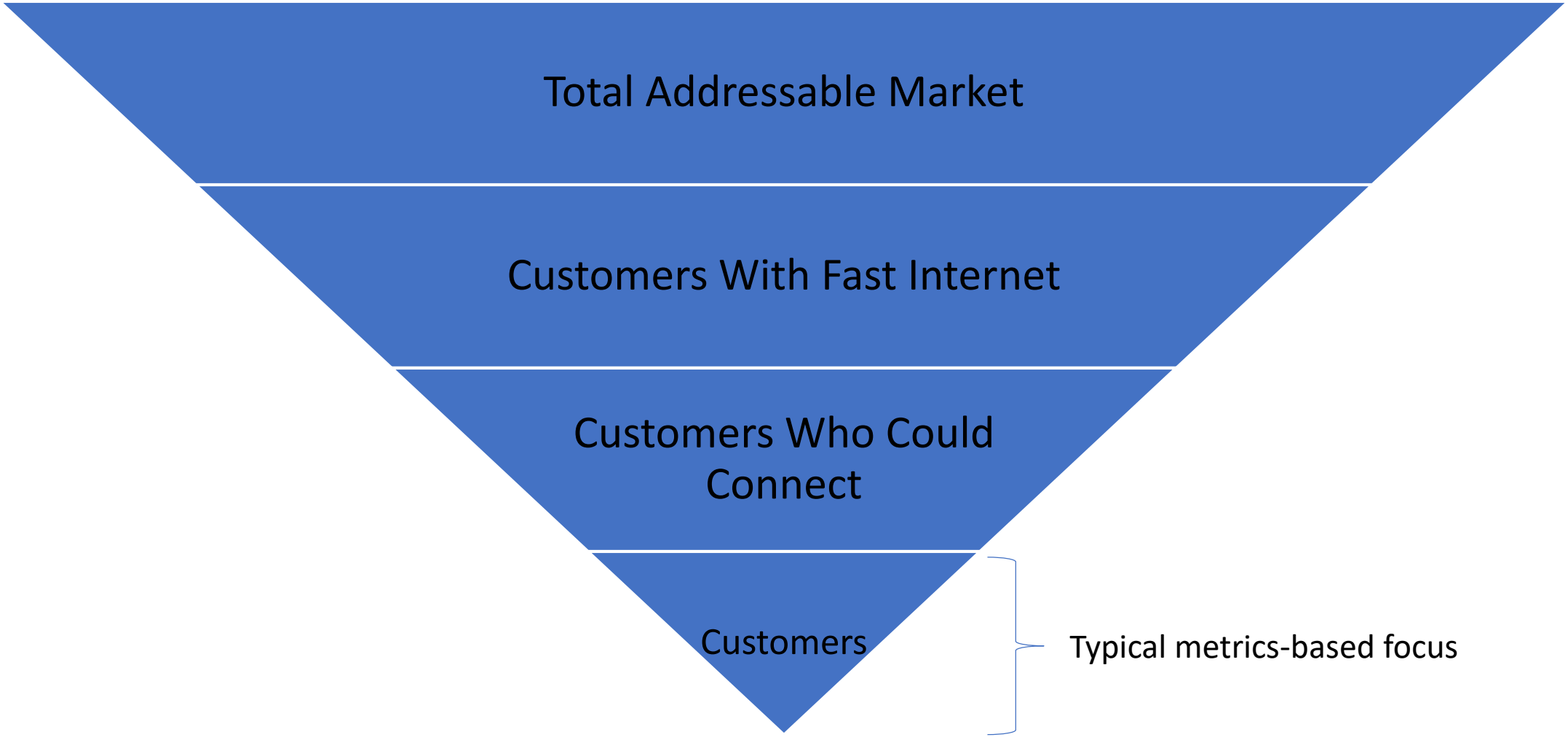
Hearing or Listening?

App Metrics

Our Comfort Zone

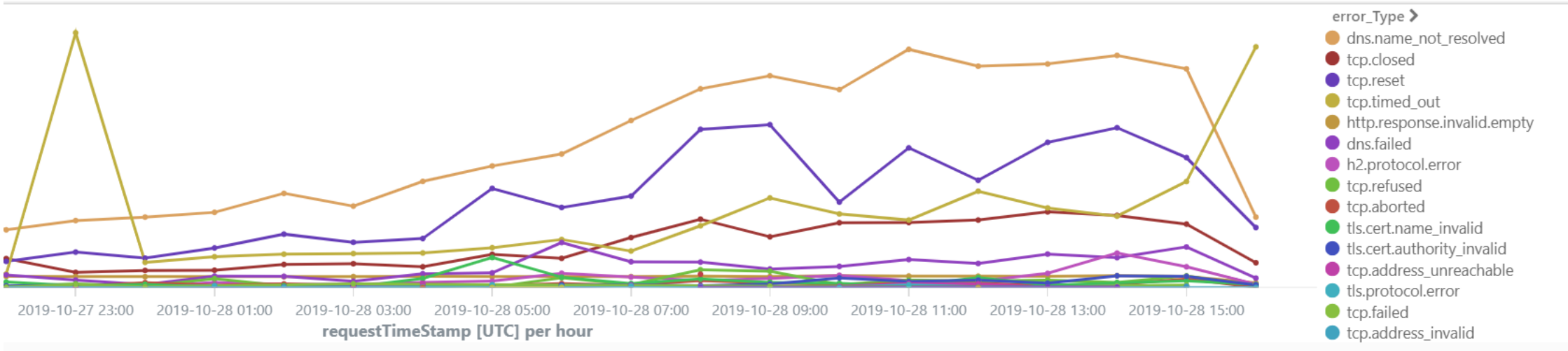


Availability: Less Than What You Think It Is



Thinking Beyond 9's: https://www.usenix.org/conference/srecon19asia/presentation/srinivasamurthy

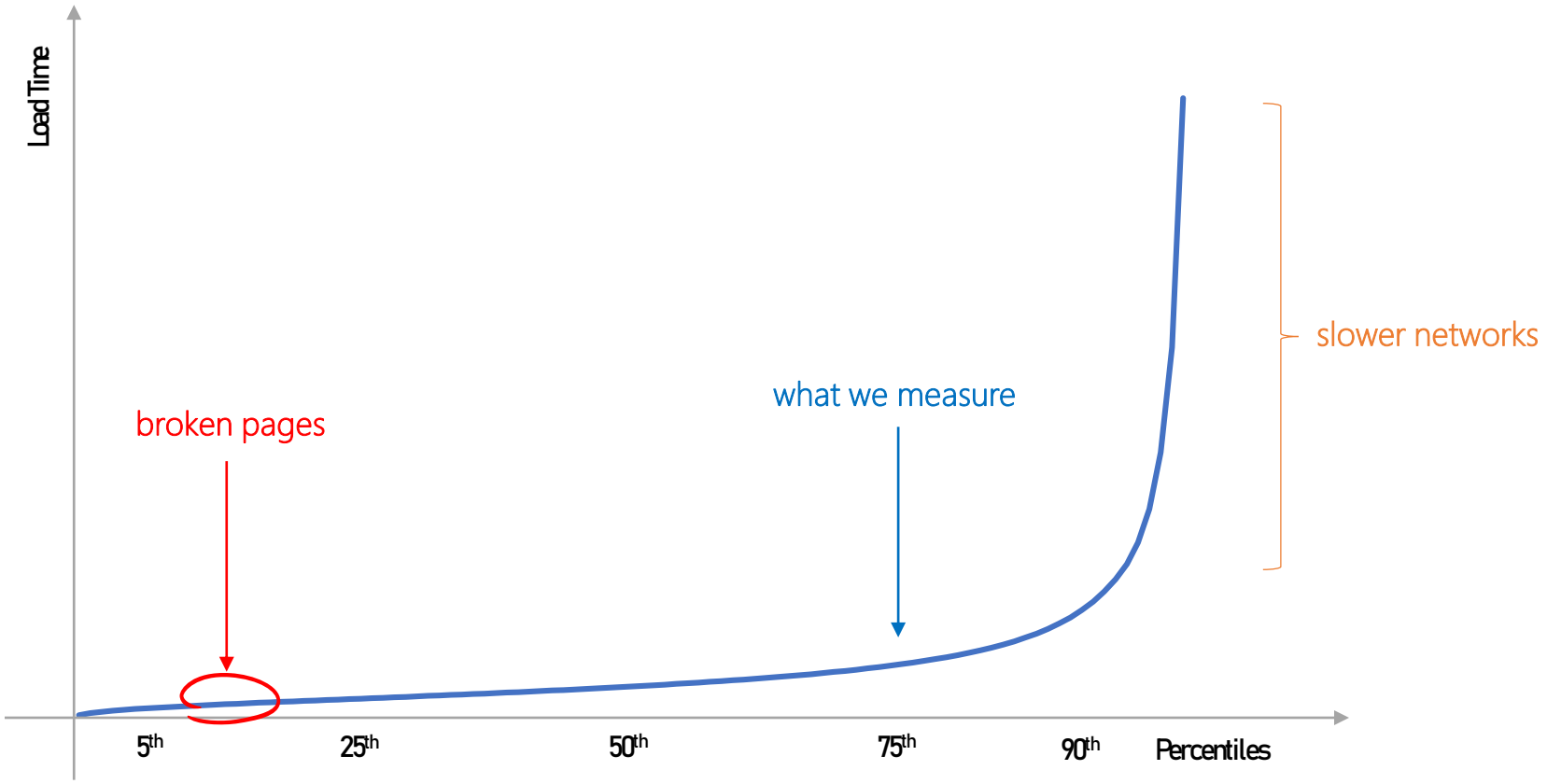
Network Error Logging



Today, application developers do not have real-time web application availability data from their end users. For example, if the user fails to load the page due to a network error, such as a failed DNS lookup, a connection timeout, a reset connection, or other reasons, the site developer is unable to detect and address this issue. Note that these kinds of network errors cannot be detected purely server-side, since by definition the client might not have been able to successfully establish a connection with the server.

https://w3c.github.io/network-error-logging/

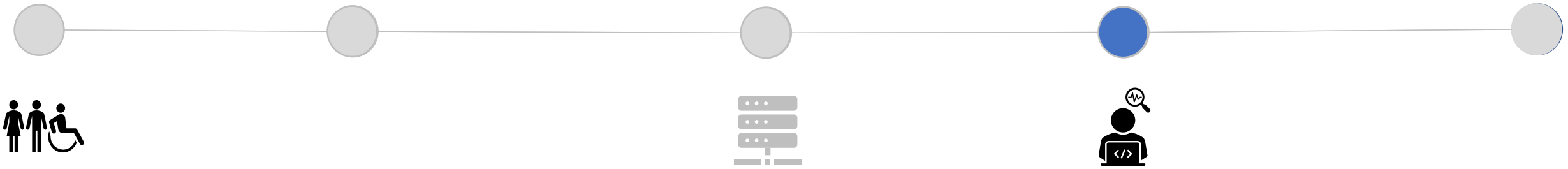
Performance: More Than A Numbers Game



Focus on Overall Distribution, Not Just One Point

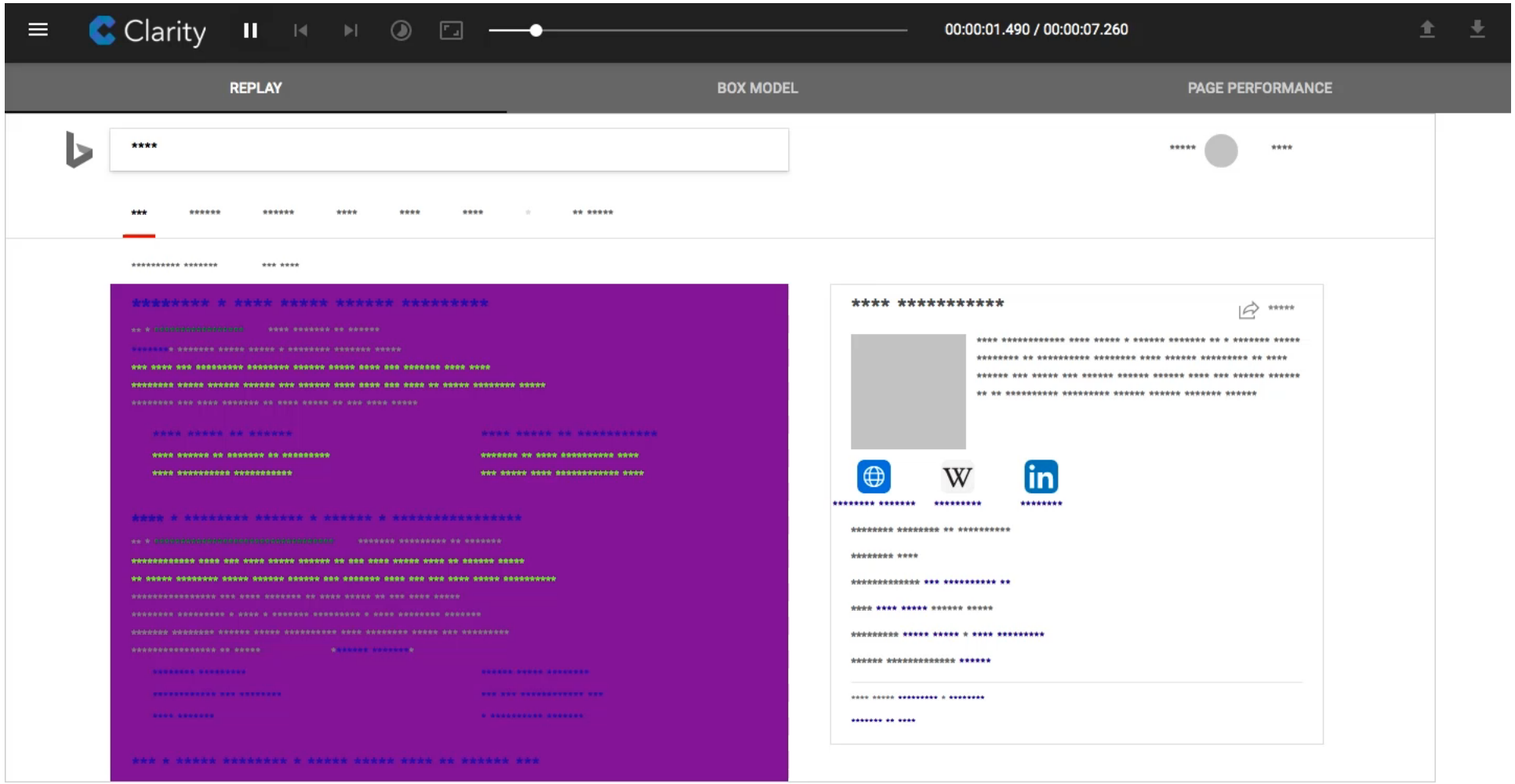
Usability

Is There A Way To Measure Behavior?

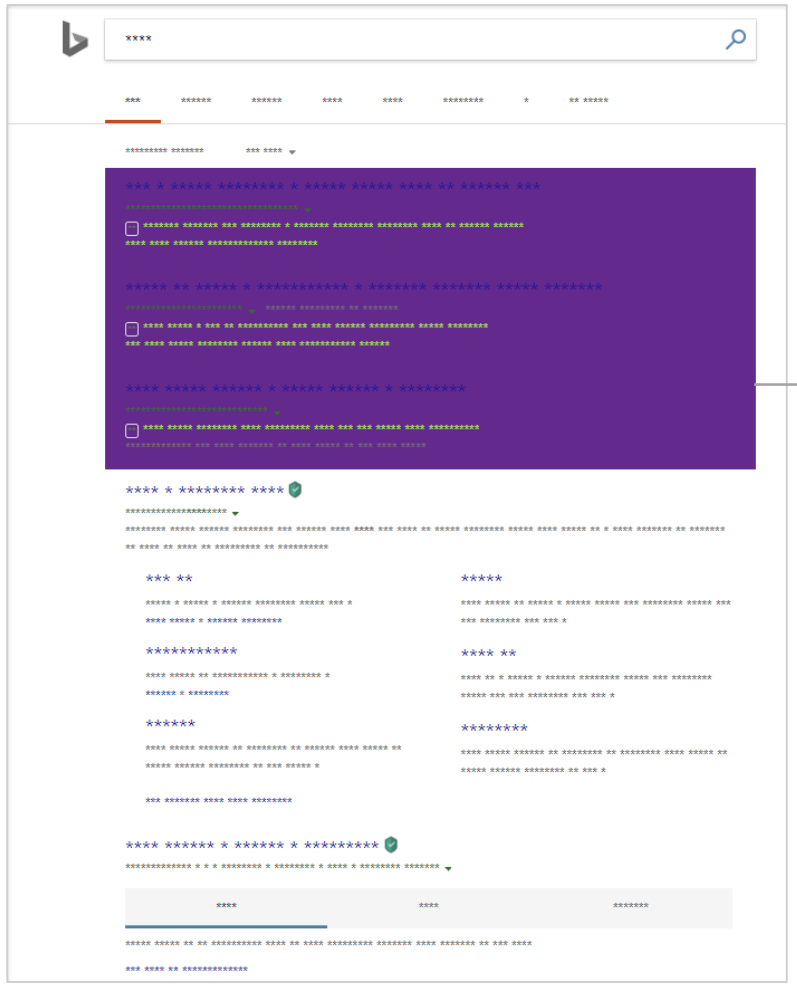


How do you debug usability issues?

What if you could see what your user saw?

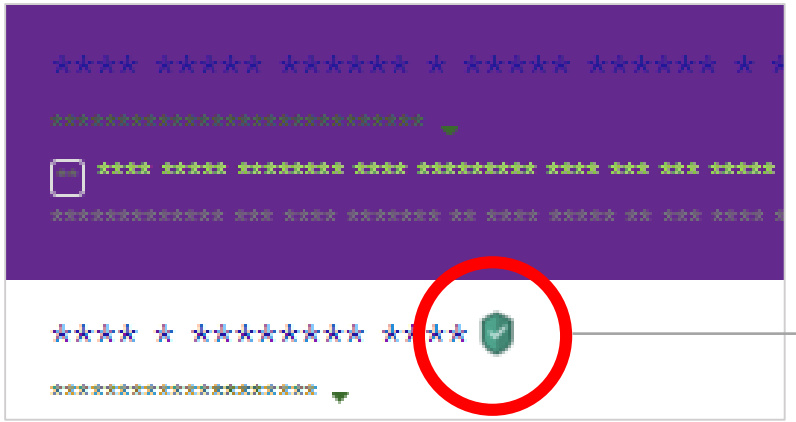


And, had the data to solve the usability issue



Search criteria:

- Ads are present
- Ads background color not default



Root cause: KASPERSKY lab


```
{
  "id": 100,
  "time": 764,
  "type": "Layout",
  "state": {
    "index": 99,
    "parent": 71,
    "source": 0,
    "action": 0,
    "tag": "LI",
    "attributes": {
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    },
    "layout": {
      "x": 0,
      "y": 0,
      "width": 0,
      "height": 0,
      "background": "#6e2091"
    }
  }
},
{
  "id": 1064,
  "time": 931,
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  "state": {
    "index": 1059,
    "parent": 146,
    "source": 1,
    "action": 0,
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    "attributes": {
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      "src": "https://gc.kis.v2.scr.kaspersky-labs.com/83E9FFF
      "style": "width: 12px; height: 12px;"
    },
    "layout": {
      "x": 360,
      "y": 312,
      "width": 12,
      "height": 12
    },
    "mutationSequence": 23
  }
}
```

Measuring Usability @ Scale

Session Replay

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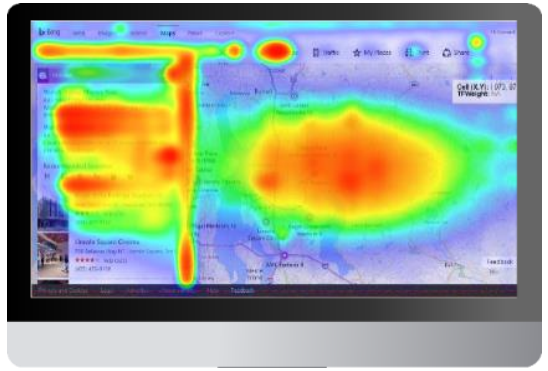
"tag": "DIV",
"attributes": {
  "class": "fb_fltscol1"
},
"layout": {
  "x": 133,
  "y": 1489,
```

Structured Data



Behavioral Analytics

https://github.com/microsoft/clarity-js

Customer Feedback

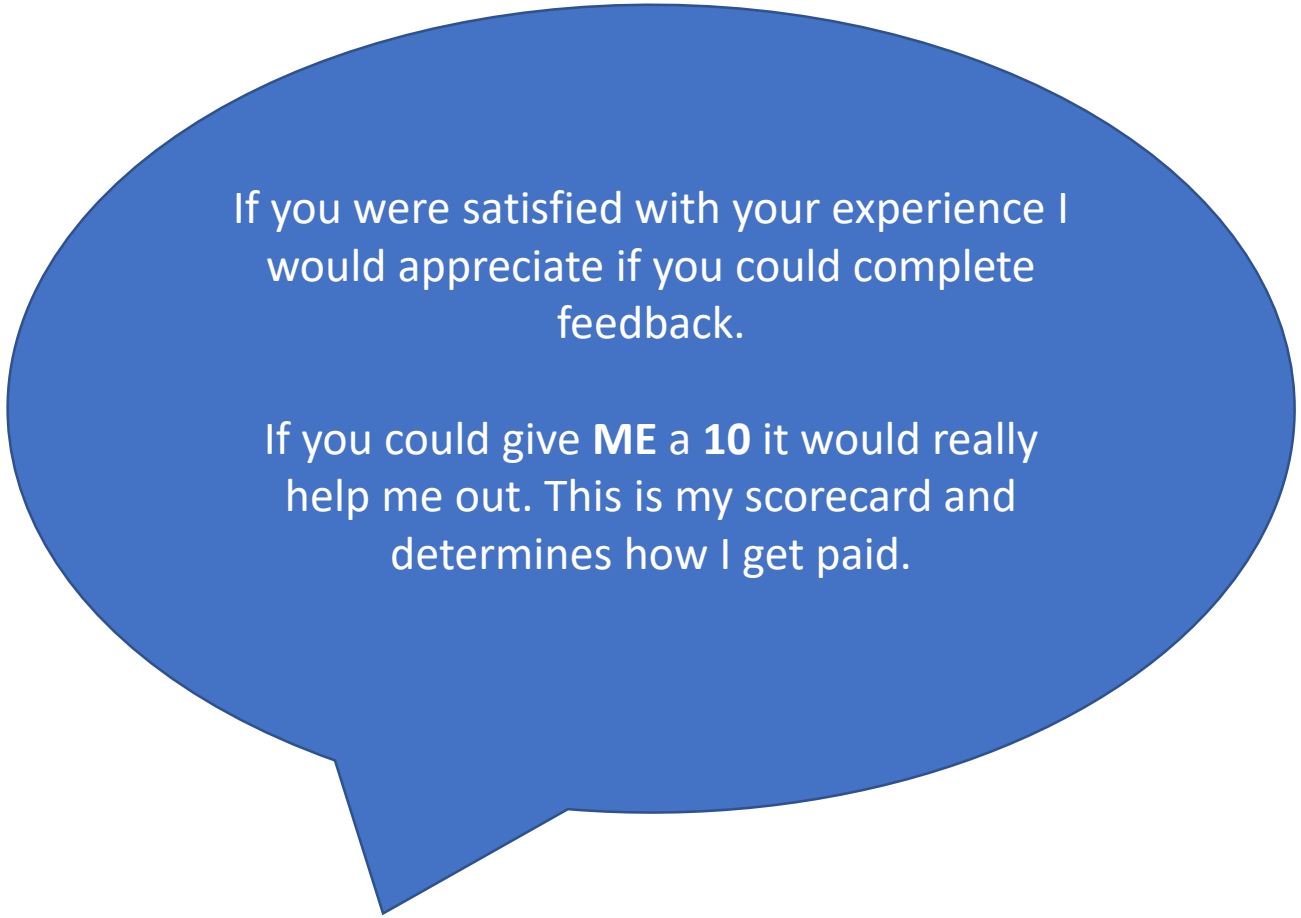
Read ‘The Feels’

FEEDBACK

USABILITY

METRICS

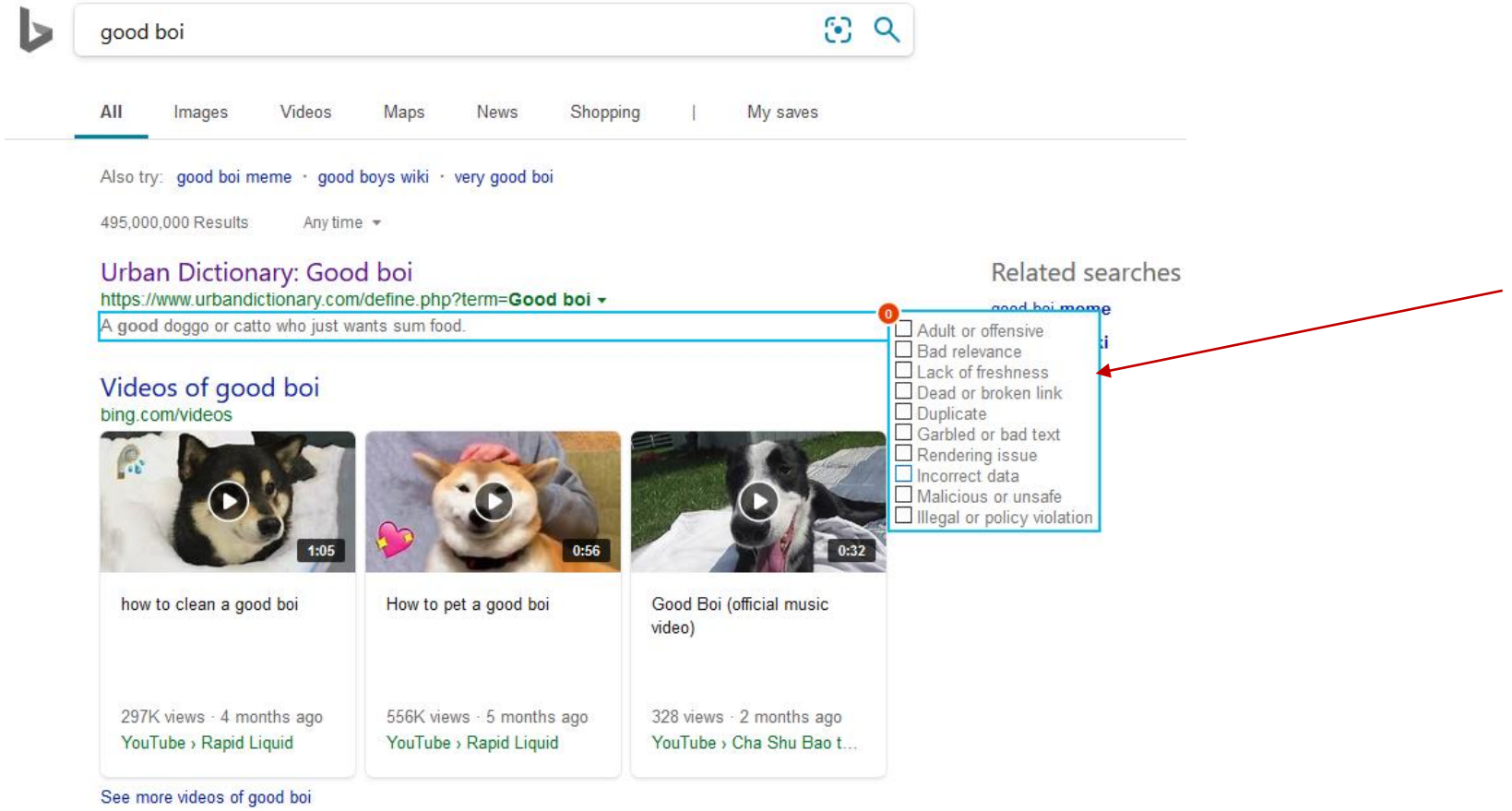
The Ugly


If you were satisfied with your experience I would appreciate if you could complete feedback.
If you could give **ME** a **10** it would really help me out. This is my scorecard and determines how I get paid.

The Bad

How Do You Feel On a Scale of 1 to 5?

The Better



Structured, Context-Aware

The Best

“Email address appears to be incorrect. Looks like the name of the business has changed as well. You might want to change this.”


```
"sentimentDetection": {
    "label": "Negative",
    "score": 0.3231718112516975,
    "api": "BingSentimentDetection"
```


“I didn’t expect you could get scores this fast!”


```
"sentimentDetection": {
    "label": "Positive",
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    "api": "BingSentimentDetection"
}
```


Start - Stanford CoreNLP http://corenlp.run/

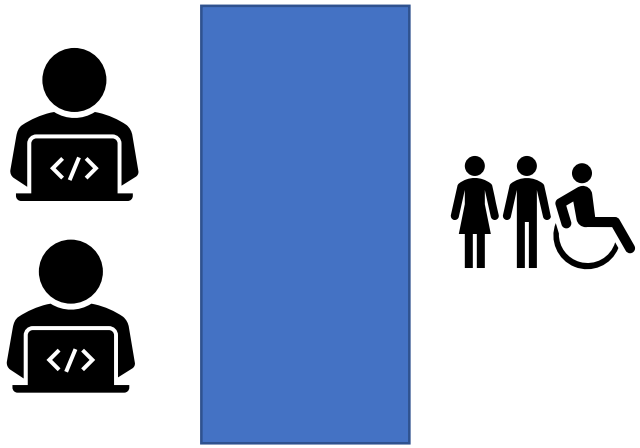
A Good Feedback System Is …

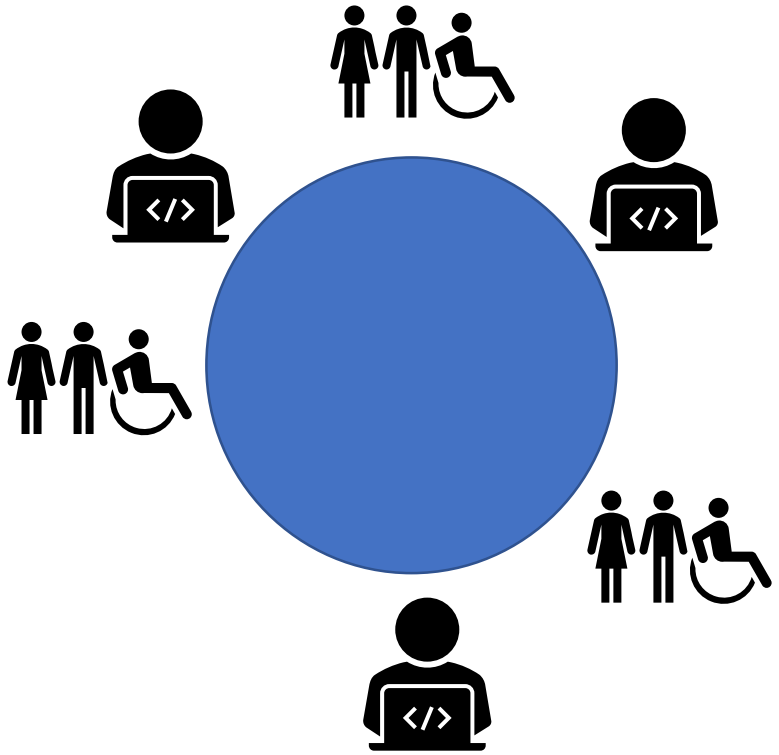
- Context-Aware
- Accessible
- Proactive
- Capable of Sentiment Extraction
- Actionable

Insider Programs

Extend, Embrace … Engage

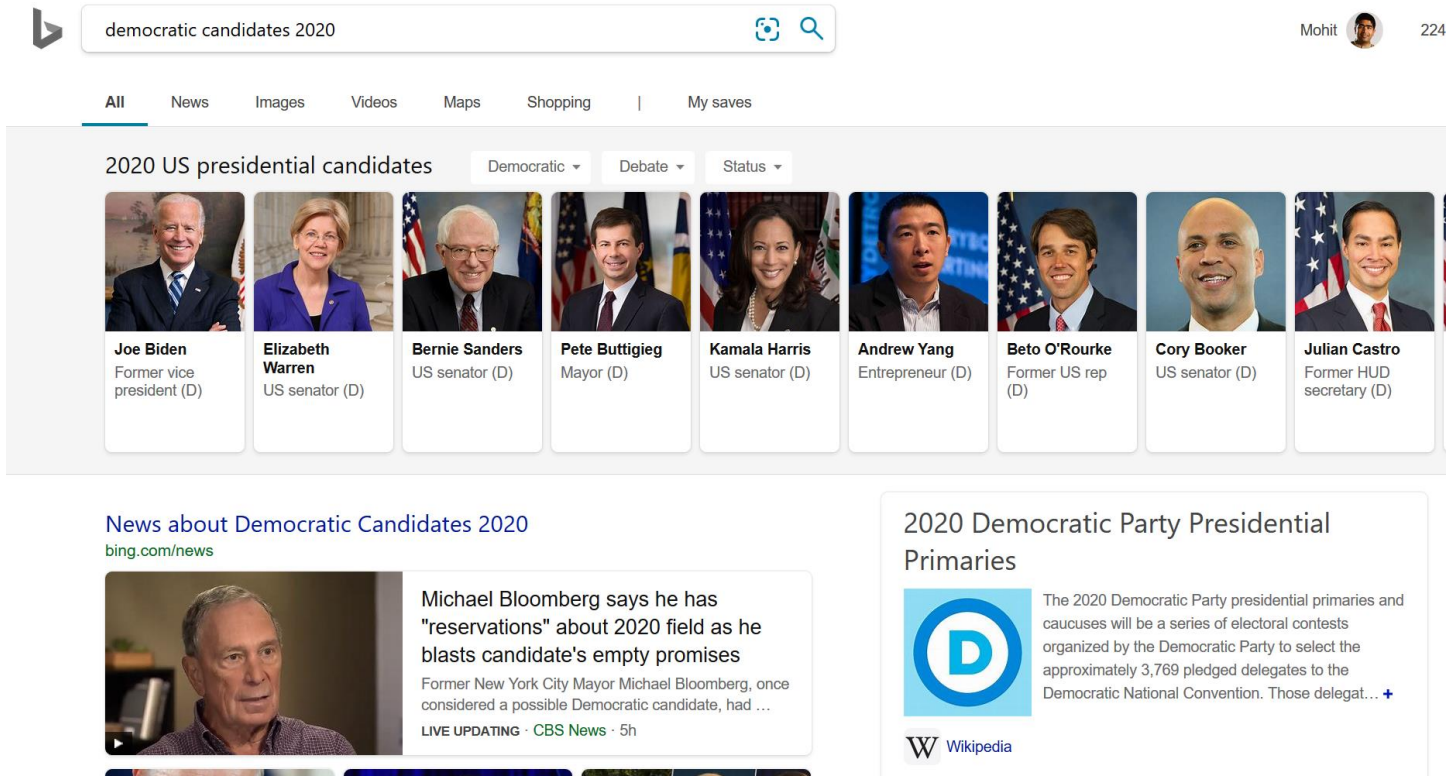
People Want To Be Cool Too





Work *With* Customers, Not Just *For* Customers

Going Beyond Experimentation



https://www.bing.com/search?q=democratic+candidates+2020

Engaged Customers Can Tell You What Your Numbers Can't

Isn’t That Dogfood?

- Dogfooding doesn’t mean you’re an Insider
- You might use your own product, but you’re not a customer

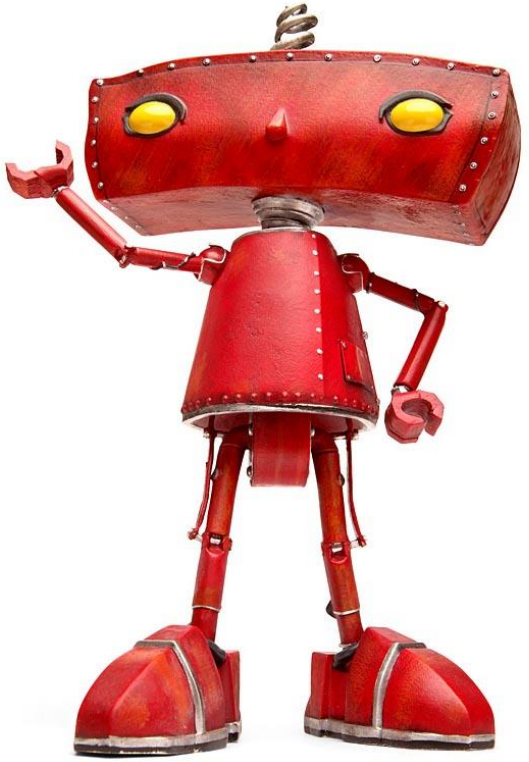
Dogfooder ≠ Insider

Listening Tours

Zero Distance To Customers

LISTENERS INSIDERS FEEDBACK USABILITY METRICS

Customer, Meet Engineer



CC: http://gadgetsin.com/uploads/2011/03/limited_edition_bad_robot_collectible_figure_1.jpg
CC: https://upload.wikimedia.org/wikipedia/commons/thumb/d/dd/CashRegister.svg/670px-CashRegister.svg.png

Engineers Are People Too

How Does It Help Engineering?

- You realize its not all ‘bots’.
- Talk To Product Fans
- Understand Diversity of Location/People

Finishing Notes

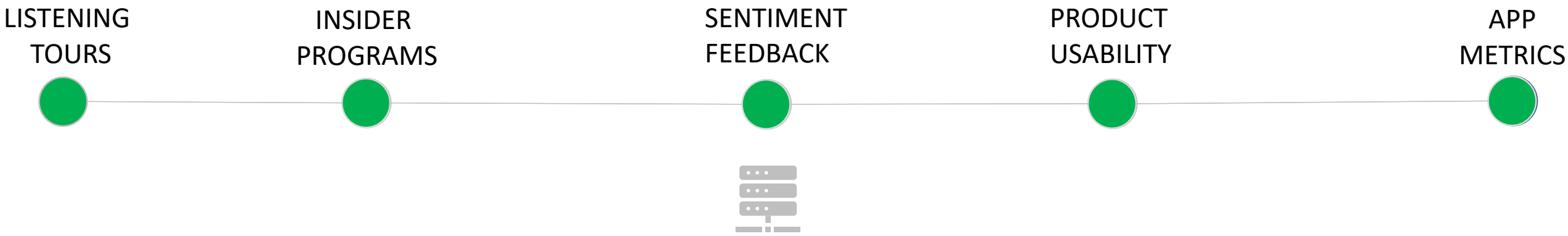
Why This Audience?

The Feature You Work On Is ‘The Site’

- You Run Telemetry Platforms
- You Are The First Line of ‘Help!’
- You Know Ground Reality of Systems *and* the 30K feet view

You Are The Most Appropriate Customer Advocate

Observability: The Collective Path



Thank You!

Deck Link

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