

Collecting UX-impacting metrics your boss understands

Jacob Groß | 13th Nov 2024 | kurtextrem.de

Who am I?



- Senior Performance Engineer @ Framer *(you might know us from “Framer Motion”)*
- Participant in W3C WebPerfWG calls, if you have webperf topics, come chat 😊
- Studied Human-Computer-Interaction (UX) @ University

I like making things **fast & accessible** for all users of the internet

What languages do bosses (usually) speak?

They do:

 Business / money

 CTR, CVR, ...

 Search ranking

Often less so:

- UX
- Performance
- SEO

That's why they hire experts (us)

What do we speak?

FCP

INP

TBT, FID, CWV,
PSI, UXR, WTF



LCP

CLS

Mission: Impossible



Mission: Possible



<convincing arguments for your boss.slide>

What aspects of page experience are used in ranking?

Core Web Vitals are used by our ranking systems. We recommend site owners achieve good Core Web Vitals for success with Search and to ensure a great user experience generally. Keep in mind that getting good results in reports like Search Console's Core Web Vitals report or third-party tools doesn't guarantee that your pages will rank at the top of Google Search results; there's more to great page experience than Core Web Vitals scores alone. These scores are meant to help you to improve your site for your users overall, and trying to get a perfect score just for SEO reasons may not be the best use of your time.

- 

Build performance alliances.
Grab a coffee with SEO & UX.

SEO team

they'll over-and-over tell your boss why CWVs must be green for **search ranking & CTR**.

UX team

Performance is important for great UX.
Great UX can improve **CVR**.

Bosses listen to their SEO team, because they know it all starts and ends with organic reach (search clicks).

CWVs have lots of case studies.

wpostats.com

web.dev/case-studies

SpeedCurve, RUMvision, DebugBear, NitroPack, ...

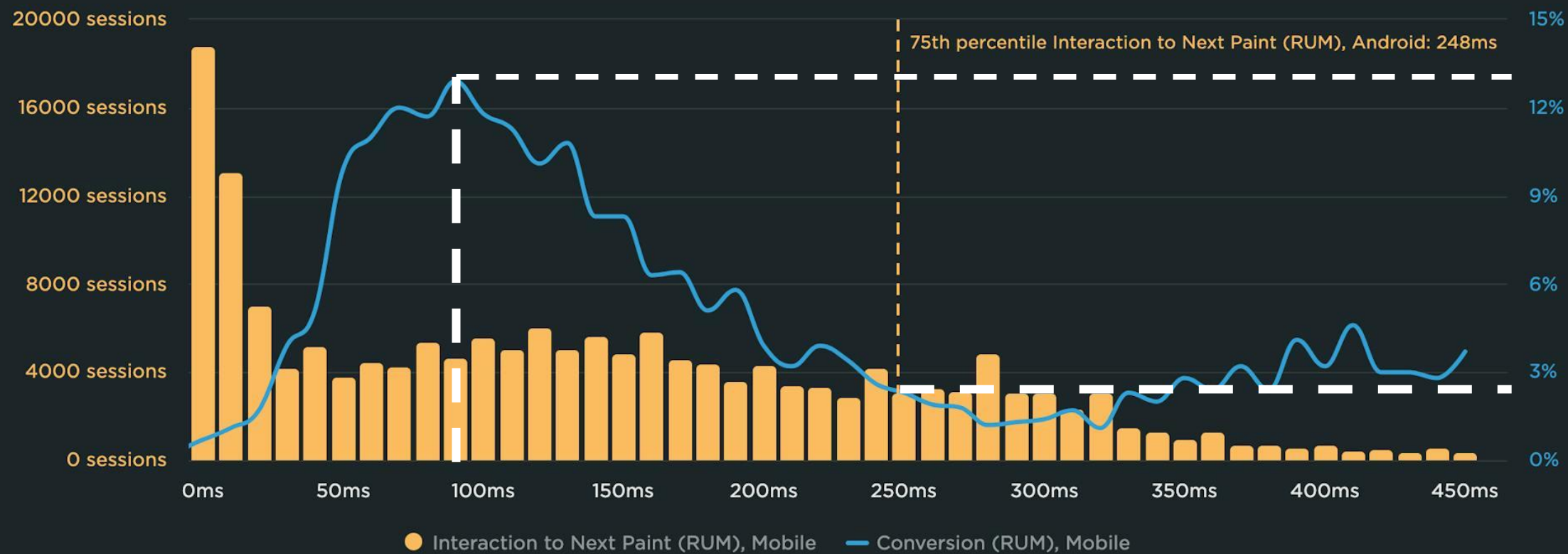
INP is a great proxy for felt UX

MOBILE INP VS. CONVERSION



Interaction to Next Paint (RUM), Mobile

248ms



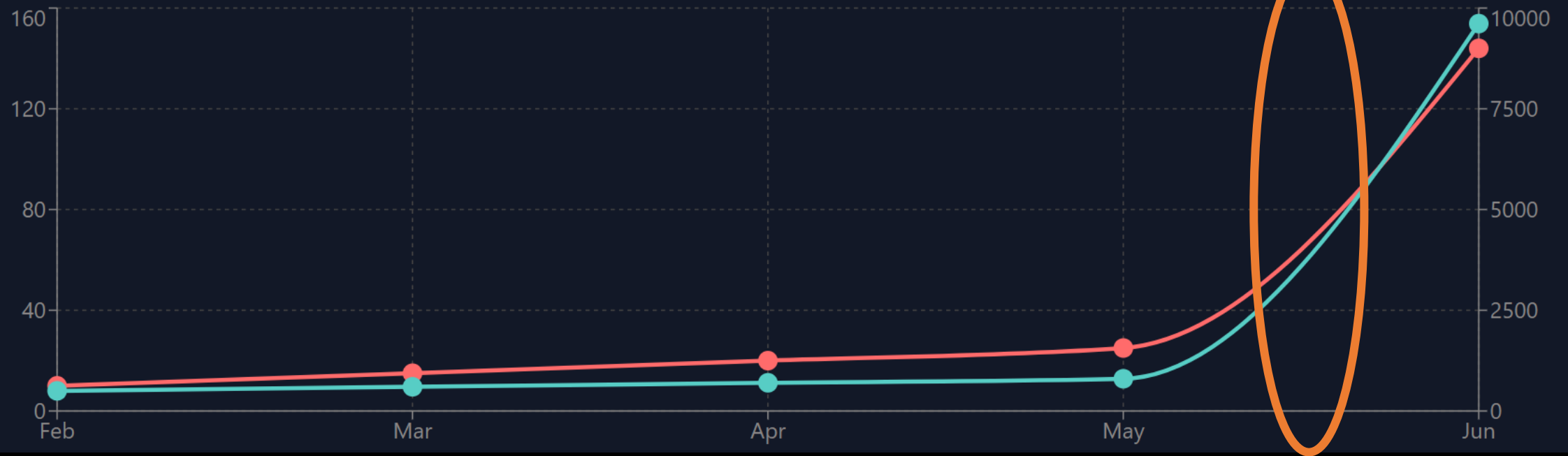
13% CVR @ 100 ms

VS.

3% CVR @ 250 ms

We shipped big INP improvements in...?

Search Performance



Customer reported 85% faster INP
> +100% search impression
> +100% search clicks

- ✓ our boss understands **CWVs** (*somewhat*)
- ✓ **CWVs** are green

What do we do?

End the talk? Are we done?

Throw the towel and quit the job?

- ✓ our boss understands **CWVs** (*somewhat*)
- ✓ **CWVs** are green

What do we do?

~~End the talk? Are we done?~~

~~Throw the towel and quit the job?~~

Think outside the box.

Collecting UX-impacting metrics everyone understands (*not only your boss*) means we can improve them together.

Let's collaborate on performance.

Question for the audience:
When does a page feel 'ready'
to you?



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Get Started

The screenshot shows a user interface for 'DEIN LOGO'. On the left is a sidebar with a search bar 'Ask me anything' and a menu containing: Dashboard, Trainings, Menu plan, Vacation & Sick, Goodwill, and Wiki. Below the menu is a list of training modules under 'Introduction to the training' (5 lessons - 105 minutes): 'What we do as a company' (5 minutes), 'This is your position in our company' (5 minutes), 'That's why your position is so enormously relevant' (5 minutes), and 'Your team' (5 minutes). The main content area features a personalized greeting 'Good morning, Mark' and a notification for a new training video: 'The best way to talk to the customer during the first strategy meeting' (Sales - Strategy Consultant) with a 'Watch' button. A survey pop-up asks 'How was the event for you?' with a 1-10 rating scale and options for 'Lectures', 'Seminar room', 'Meet customers', and 'Miscellaneous'. Below the survey is a section 'What are you doing now?' with buttons for 'Customer contracts', 'HubSpot', 'Afterclose Formular', 'Consultation', 'Send contract', and 'Backup Mail'. At the bottom, there is a section 'Our reference customers that you can show to interested parties' with image placeholders.

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Get Started

DEIN LOGO

Ask me anything

- Dashboard
- Trainings
- Menu plan
- Vacation & Sick
- Goodwill
- Wiki
- News
- Surveys

Good morning, Mark

There is a new training video for you:

Sales - Strategy Consultant

The best way to talk to the customer during your first strategy meeting

Watch →

Survey: How was the event for you?

What did you think of the preparation?

1 2 3 4 5 6 7 8 9 10

What did you like best about our customer event?

Lectures Seminar room Meet customers Miscellaneous

Customer contracts HubSpot Afterclose Formular Consultation Send contract Backup Mail

Our reference customers that you can show to interested parties

LCP

Core Web Vitals: **100**

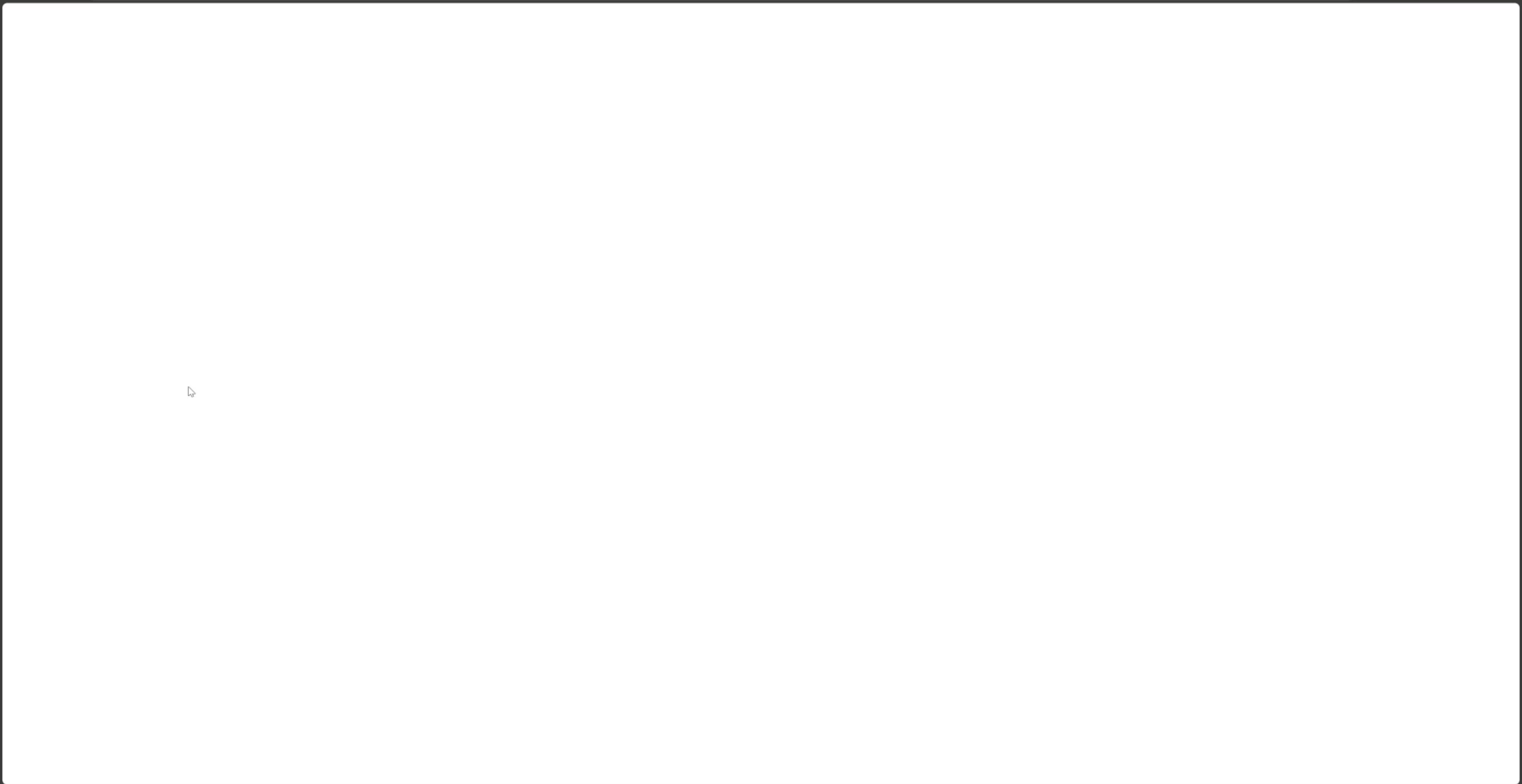
**Are CWVs the only predictors for
good UX?**

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Reject

Accept

We got told “it’s slow”.
What’s slow?



I work on

<metric in simple terms>

so that

<effect in simple terms>

I work on

making the cookie banner show up earlier

so that

users can interact with our shop earlier

How do we measure UX
beyond CWVs?

UX-impacting metrics **everyone** understands

- When is my site usable: Time until the app responds to **clicks**
- Time until **cookie banner** shows up
- Time until the **most meaningful videos** run
- Time until **scroll effects** work

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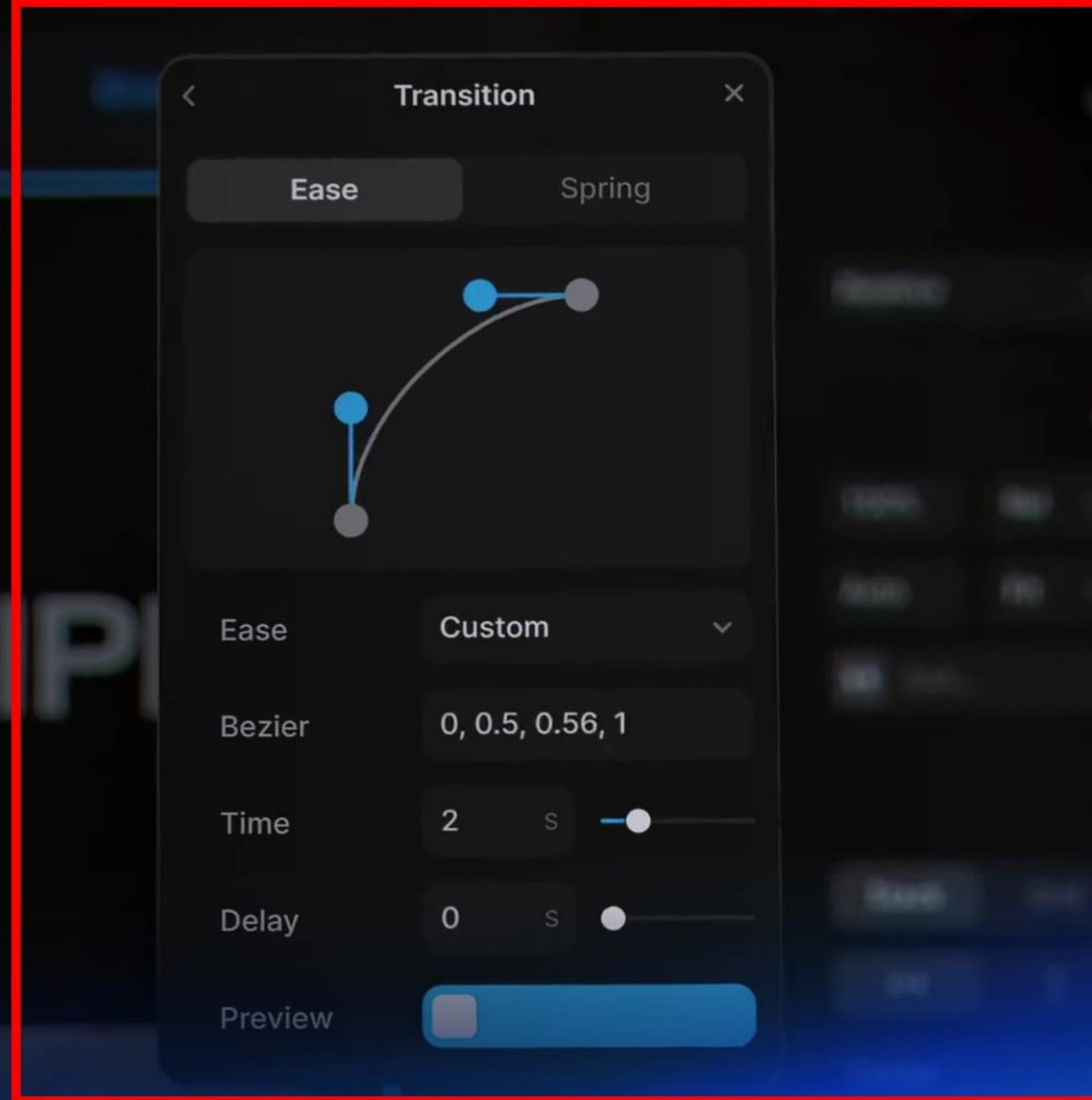
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Reject

Accept






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Reject

Accept

Ideas for the new era of metrics

- When does my **<h1>** render?
- When do the **most meaningful animations** run?
- When is it **visually complete**?
- When does my **primary feature** show up / become interactive?
 - Burger menu, amount of products in the cart, search bar, company logo, ...
- When can I read the **first tweet?** (about this talk)



rmance
.now()

performan
.now()



Malte Ubl ✓
@cramforce



Time-to-focused-input is the key metric for search/chat tools meant to be used many times a day.

What can be noticed in the image is that @v0 is streaming in data, but even that part is done before ChatGPT even runs its animation because PPR streams on the initial HTTP request

[Post übersetzen](#)



Guillermo Rauch ✓ 🚩 @rauchg · 20 Std.

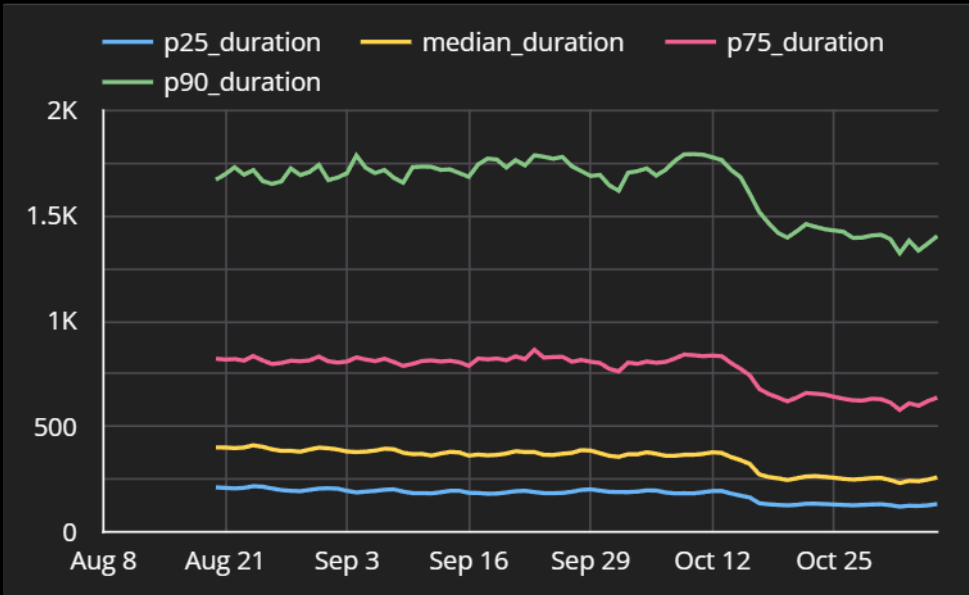
Obscene how fast @v0's time-to-focused-input is thanks to Partial Prerendering – it's "hitting the limits of physics" fast



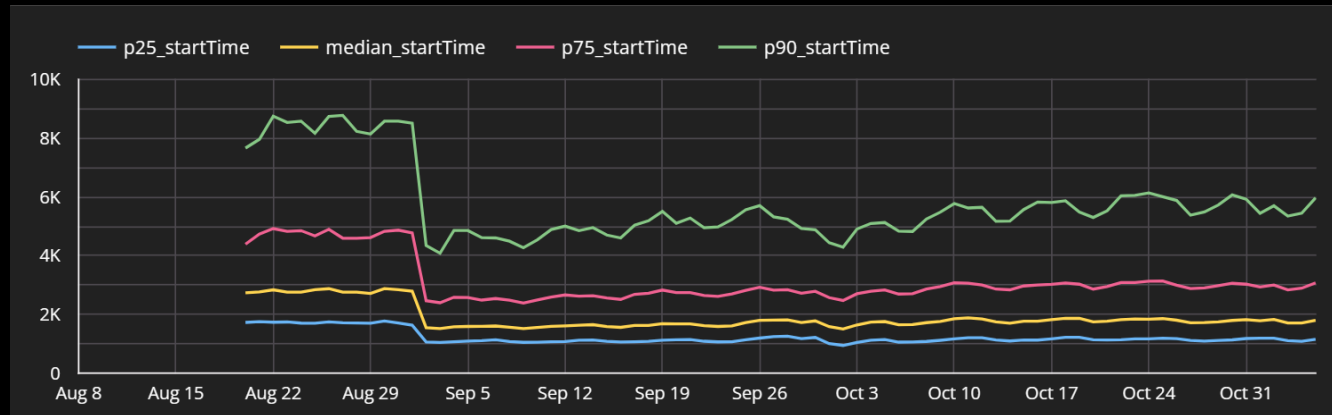
You can't improve what
you don't measure.

(in)visible metrics @ Framer

Hydration Duration · ms



Cookie Open start time · ms




How fast do we:

- accept clicks?
- make animations and other JS effects work?

How fast do we paint the cookie banner?

Visible metrics

Bring work to spotlight ✨

- Performance & UX approximations we can measure, on-going
- Makes it tangible (as number / %) 
- Less guess work: catch UX regressions that don't regress CWVs

Visible metrics

Numbers:

- Understandable by upper management
=> why it's worth spending money on you / perf / UX
- Can be correlated to business metrics
=> you know which ones are the most important

How to measure custom metrics?

- performance.mark() / performance.measure()

○ ○ ○

```
async function navigate(url) {
  performance.mark('route-start')
  const data = await fetch(url)
  await updateUI(data)

  // await paint
  requestAnimationFrame(async () => {
    await scheduler.yield()
    performance.mark('route-end')
    performance.measure('route-change', 'route-start', 'route-end')
  })
}
```

○ ○ ○

```
<html>
<head> ... </head>
<body>
  <header> ... </header>
  <script>performance.mark('header')</script>
</body>
```

How to measure custom metrics?

- performance.mark() / performance.measure()
- ``

```


<p elementtiming="important-text">Some very important information.</p>
```

How to measure custom metrics?

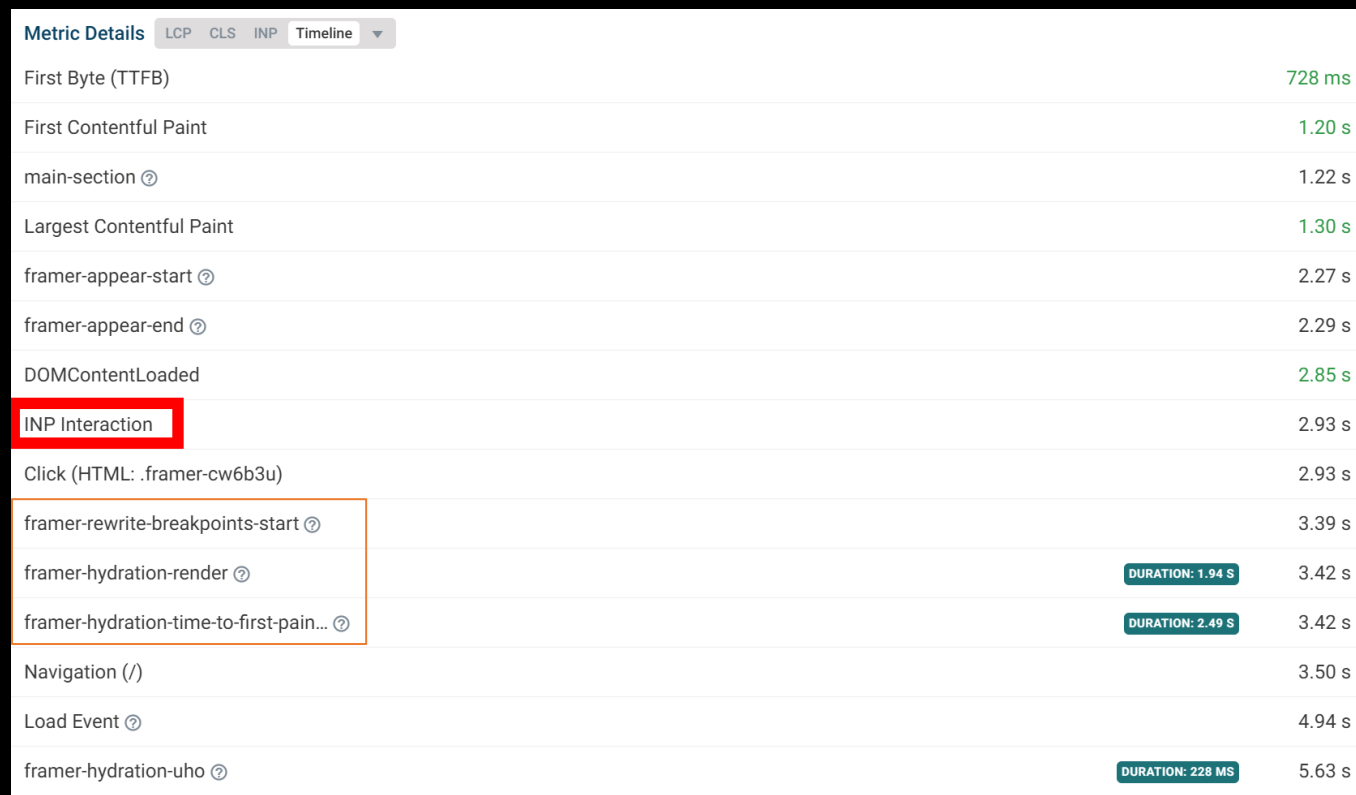
- performance.mark() / performance.measure()
- ``
- Maybe soon Container Timings as proposed by Bloomberg

(this is one of the topics discussed at the WebPerfWG btw)

```
<body>
  <div containertiming="wrapper" class="container">
    
    <div>
      <h2>Some title for the container</h2>
      <p>
        "Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do
        eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad
        minim veniam, quis nostrud exercitation ullamco laboris nisi ut
        aliquip ex ea commodo consequat. Duis aute irure dolor in
        reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla
        pariatur. Excepteur sint occaecat cupidatat non proident, sunt in
        culpa qui officia deserunt mollit anim id est laborum."
      </p>
    </div>
  </div>
```


How to collect custom metrics?

- RUM providers like DebugBear, RUMvision, SpeedCurve collect them



Metric Details		LCP	CLS	INP	Timeline
First Byte (TTFB)					728 ms
First Contentful Paint					1.20 s
main-section					1.22 s
Largest Contentful Paint					1.30 s
framer-appear-start					2.27 s
framer-appear-end					2.29 s
DOMContentLoaded					2.85 s
INP Interaction					2.93 s
Click (HTML: .framer-cw6b3u)					2.93 s
framer-rewrite-breakpoints-start					3.39 s
framer-hydration-render				DURATION: 1.94 s	3.42 s
framer-hydration-time-to-first-pain...				DURATION: 2.49 s	3.42 s
Navigation (/)					3.50 s
Load Event					4.94 s
framer-hydration-uh0				DURATION: 228 MS	5.63 s

Helpful in debugging INP
*(was something running meanwhile
-> less guess work)*

How to collect custom metrics?

- RUM providers like DebugBear, RUMvision, SpeedCurve collect them
- DIY:

```
// Make sure we collect metrics that have been added before the PerformanceObserver was initialized.
const userTimingQueue = new Set<PerformanceMark | PerformanceMeasure>(
  [
    ...(performance.getEntriesByType("mark") as PerformanceMark[]),
    ...(performance.getEntriesByType("measure") as PerformanceMeasure[]),
  ].filter((entry) => entry.name.startsWith("framer-"))
);
new PerformanceObserver((list) => {
  const entries = list.getEntries();
  entries.forEach((entry) => {
    if (entry.name.startsWith("framer-")) {
      userTimingQueue.add(entry as PerformanceMark | PerformanceMeasure);
    }
  });
}).observe({ entryTypes: ["measure", "mark"] });
```

Am I collecting the
right metrics?

Idk, unless I'm your user.
Asking your customers is
always the best option 😊

Summary

- Visible metrics reduce the **guess work**
 - true for both what to improve and what needle you move
- Improving CWVs & UX-metrics will lead to...
 - more happy customers, returning customers
 - more sales (or whatever your most important business metric is)
- talk to your customers - sounds simple but this is its own art
=> Make friends with UX & other teams



Thank you. Questions?

Find me on

X: [@kurtextrem](https://twitter.com/kurtextrem) | Bluesky: [@kurtextrem.de](https://bsky.app/profile/@kurtextrem.de) | LinkedIn: [in/kurtextrem](https://www.linkedin.com/in/kurtextrem)

Liked the approach to metrics at  Framer ?

We're always looking for smart people. Hit me up!