

How can web analytics improve accessibility?



Tom Widerøe, FINN.no, 22.03.2018

@twidero

Who am I?

Tom Widerøe

Front end developer,
accessibility advocate,
web analytics wannabe

FINN.no, Schibsted Media Group

Father of three, husband of one,
owner of cat

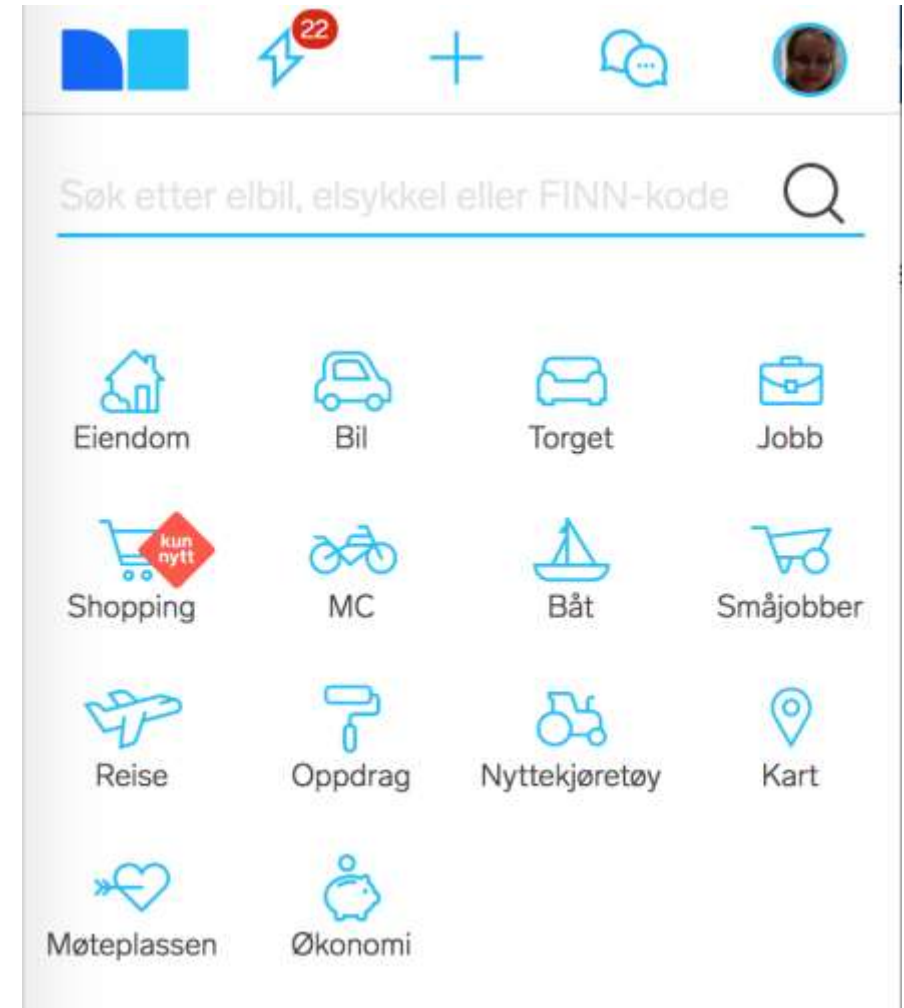
@twidero



Where I work

FINN.no

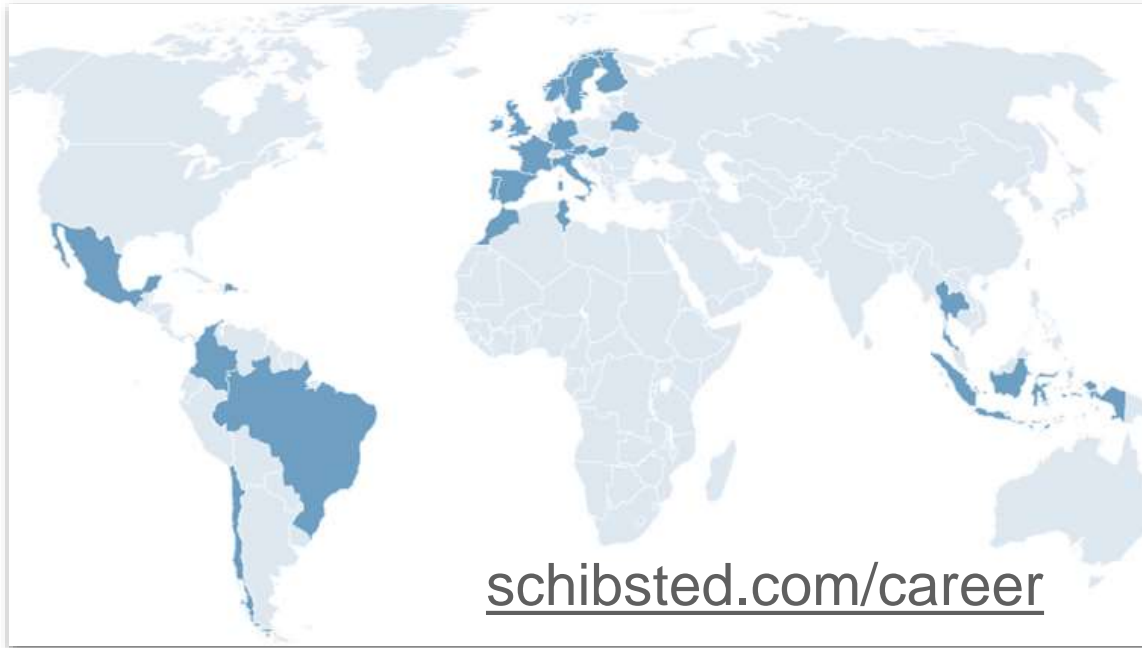
- Leading online marketplace in Norway



Where I work

Schibsted Media Group

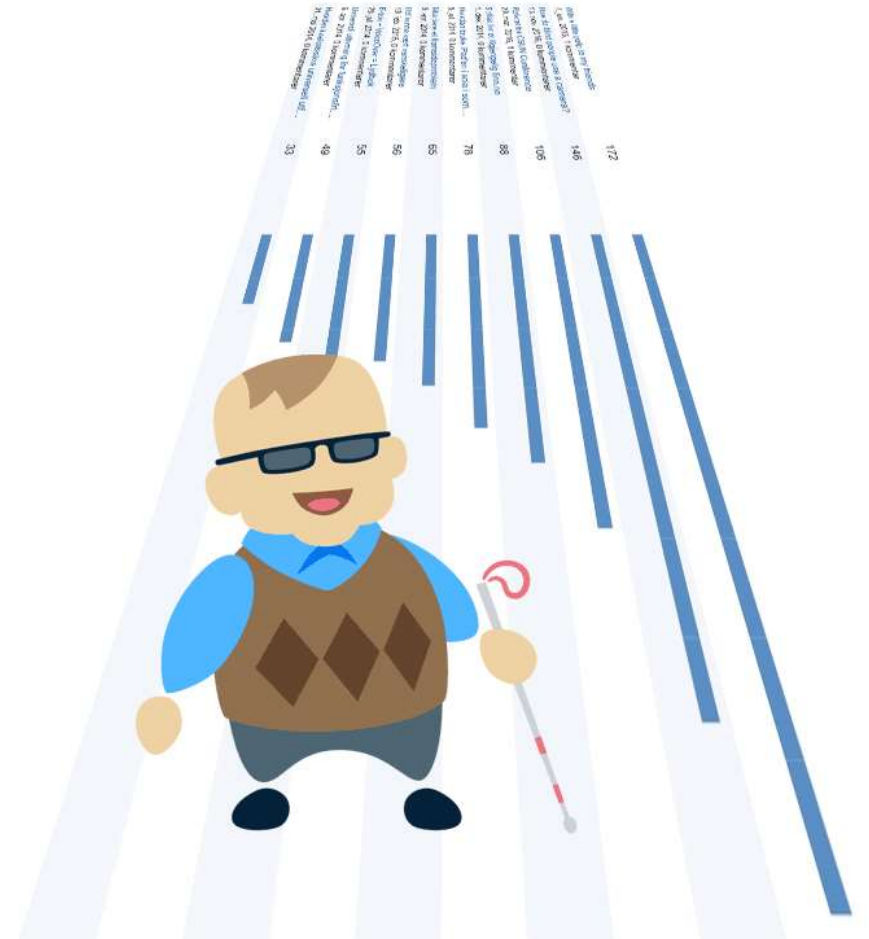
Media and marketplaces around the world



What to talk about?

Analyzing accessibility in web analytics

- Why so **difficult**?
- What are we **missing**?
- Can we **do it** anyway?



Why so difficult?

What does a website know about us?

Device type

Web browser

Screen size

**...but nothing about
assistive technologies**

Operating system

Language

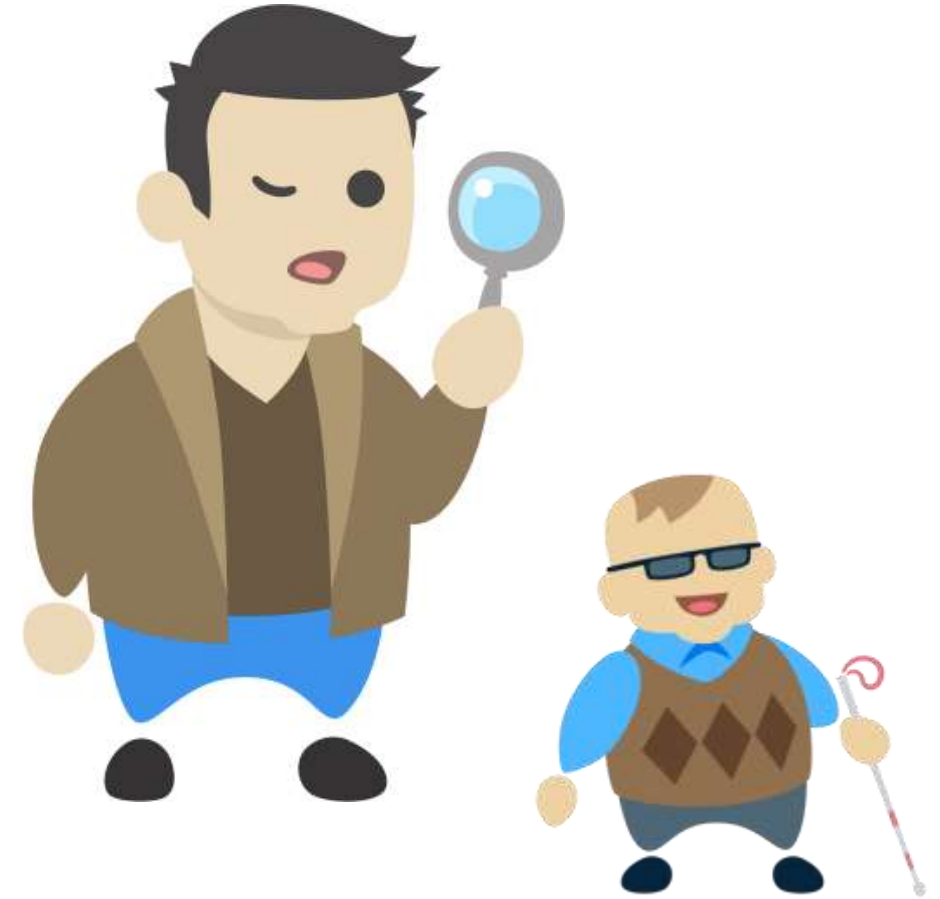
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Why so difficult?

Why AT users don't want to be detected

- Fear of **discrimination**
- **Privacy** concerns
- You are not **counting people**



Why so difficult?

GDPR and ePrivacy

EU General Data Protection Regulation
Enforcement May 25 2018

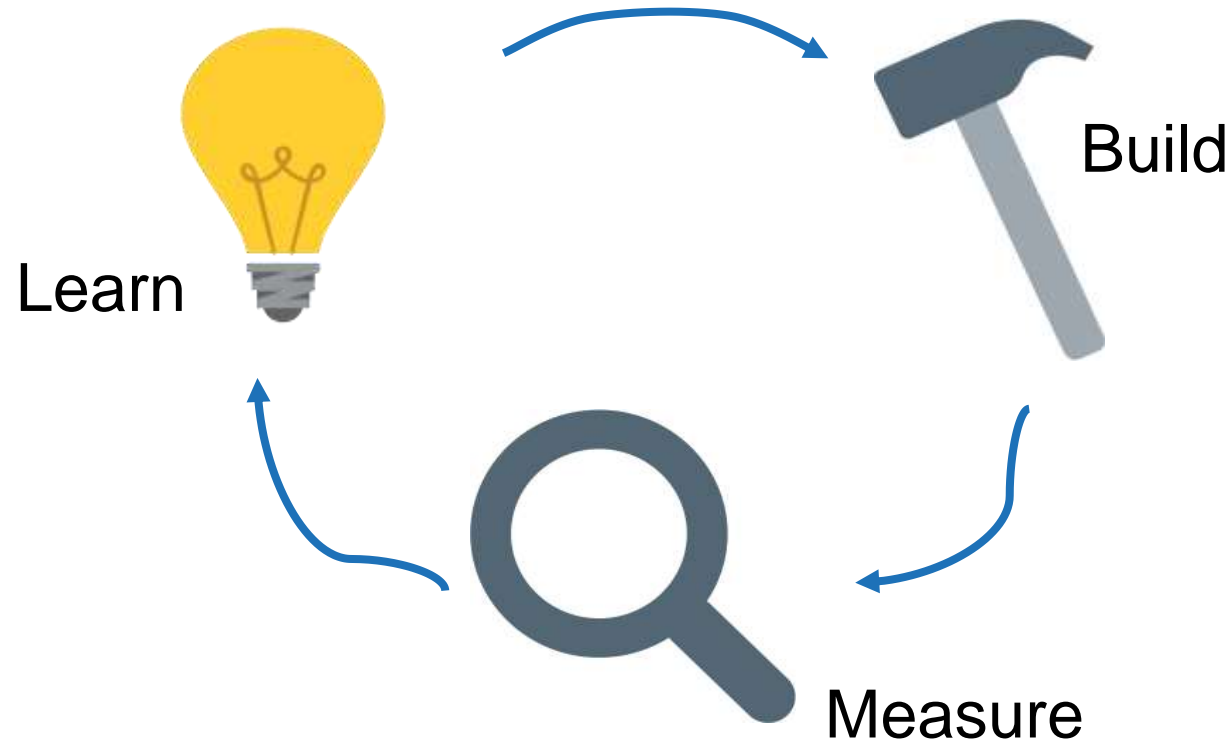
Require consent to gather personal
information



<https://www.eugdpr.org/>

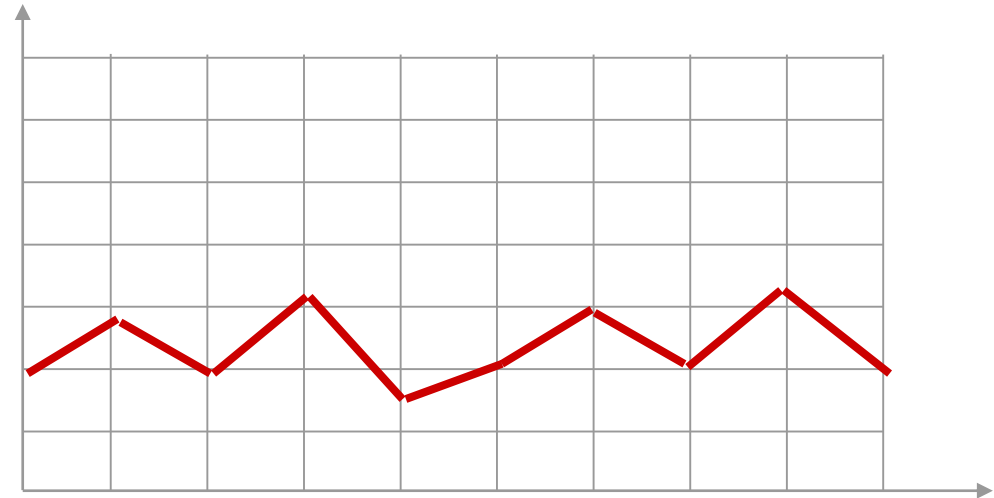
What are we missing?

Lean startup model



What are we missing?

Small groups drown in the masses



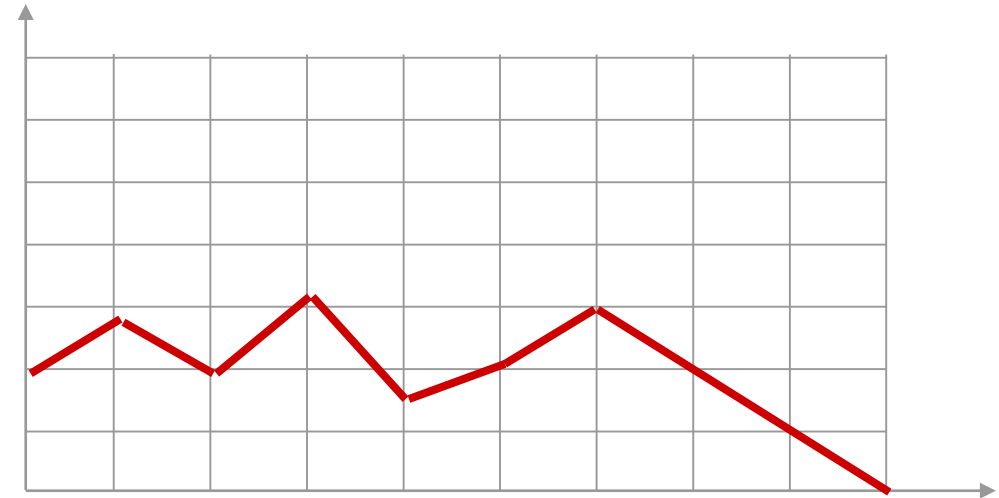
What are we missing?

Small groups drown in the masses



What are we missing?

Small groups drown in the masses



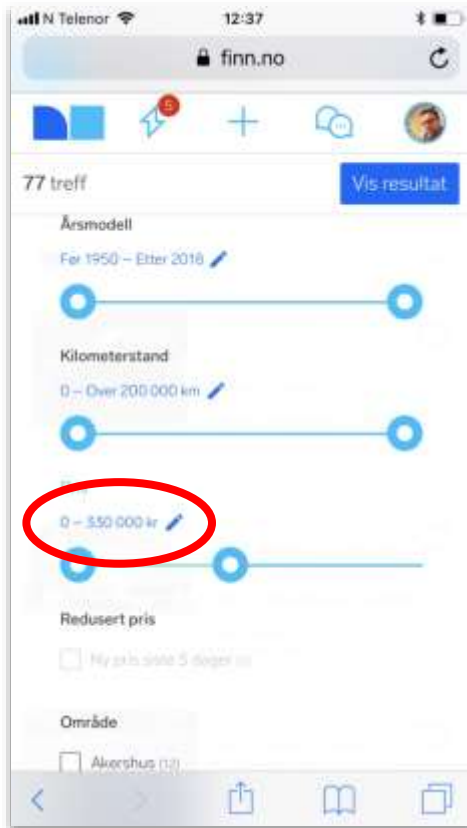
Can we do it anyway?

Possible ways to log accessibility

- Measure use of **accessible alternatives**
- **A/B test** effect of improvement
- Using **age** of registered users
- Recognize **user patterns**
- **Ask for consent** to use data

Can we do it anyway?

Logging accessible alternative features



3.7 mill users



100 K users
2.7 %

Can we do it anyway?

A/B testing

2 equal groups get 2 different alternatives

- measure and compare



Can we do it anyway?

Age

...when you have registered users



Can we do it anyway?

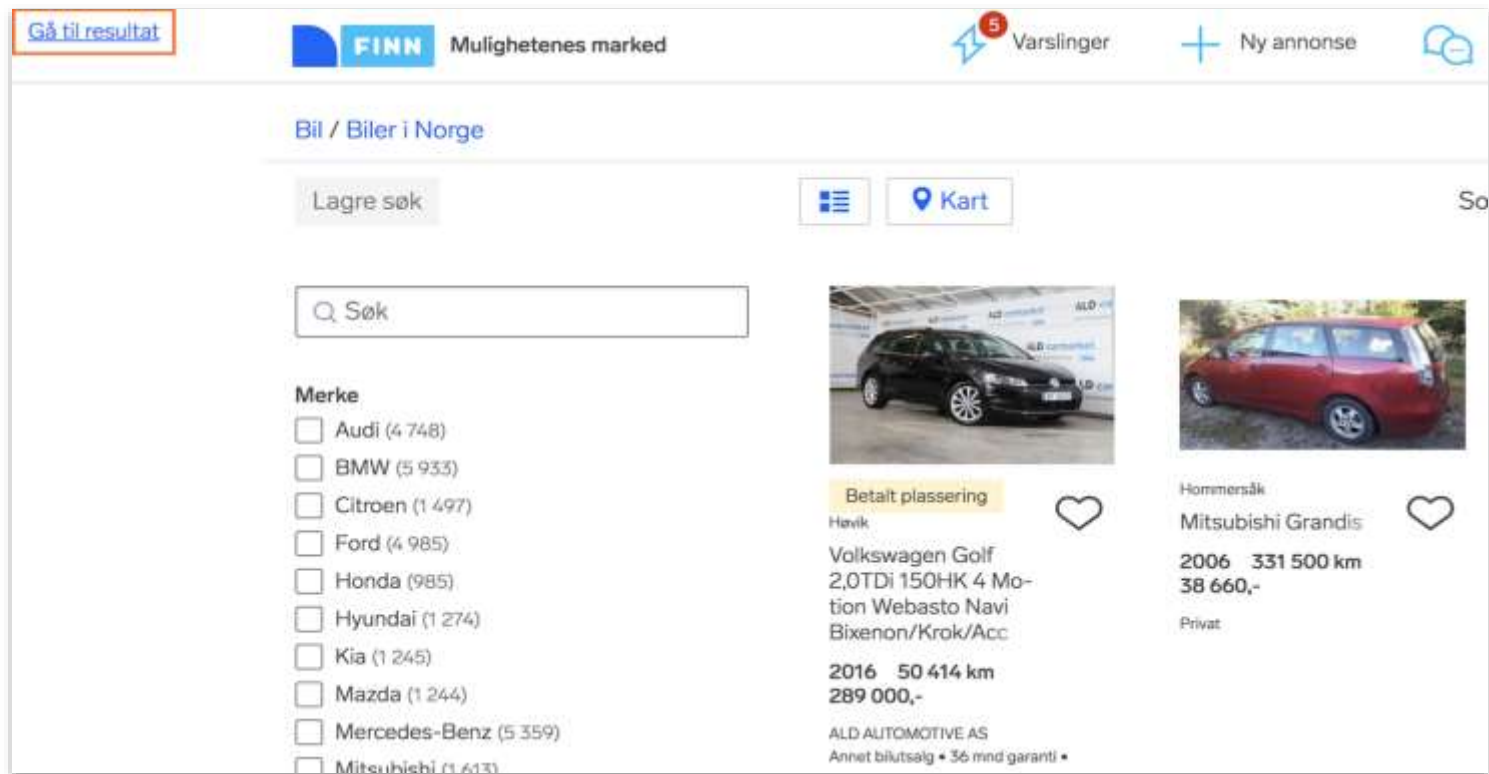
Recognize user patterns

- Zooming the screen
- Focus on skip links



Can we do it anyway?

Log focus event on skip links



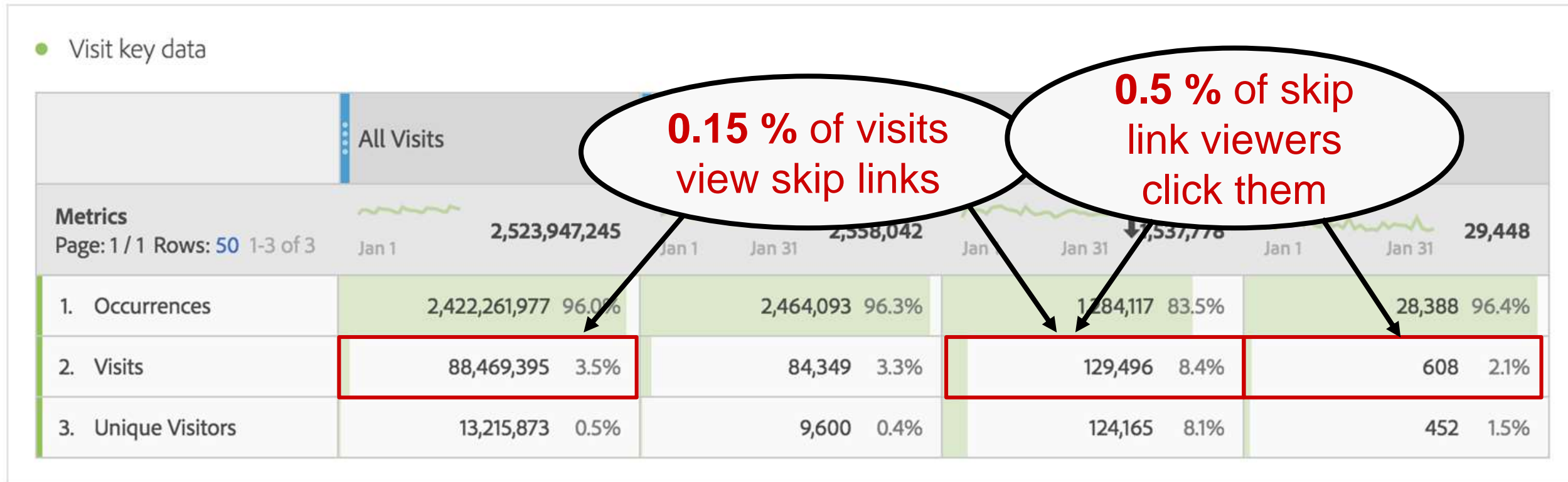
Can we do it anyway?

Log focus event on skip links

```
ele.addEventListener('focus', () => {  
  // event tracking magic  
});  
ele.addEventListener('click', () => {  
  // event tracking magic  
});
```

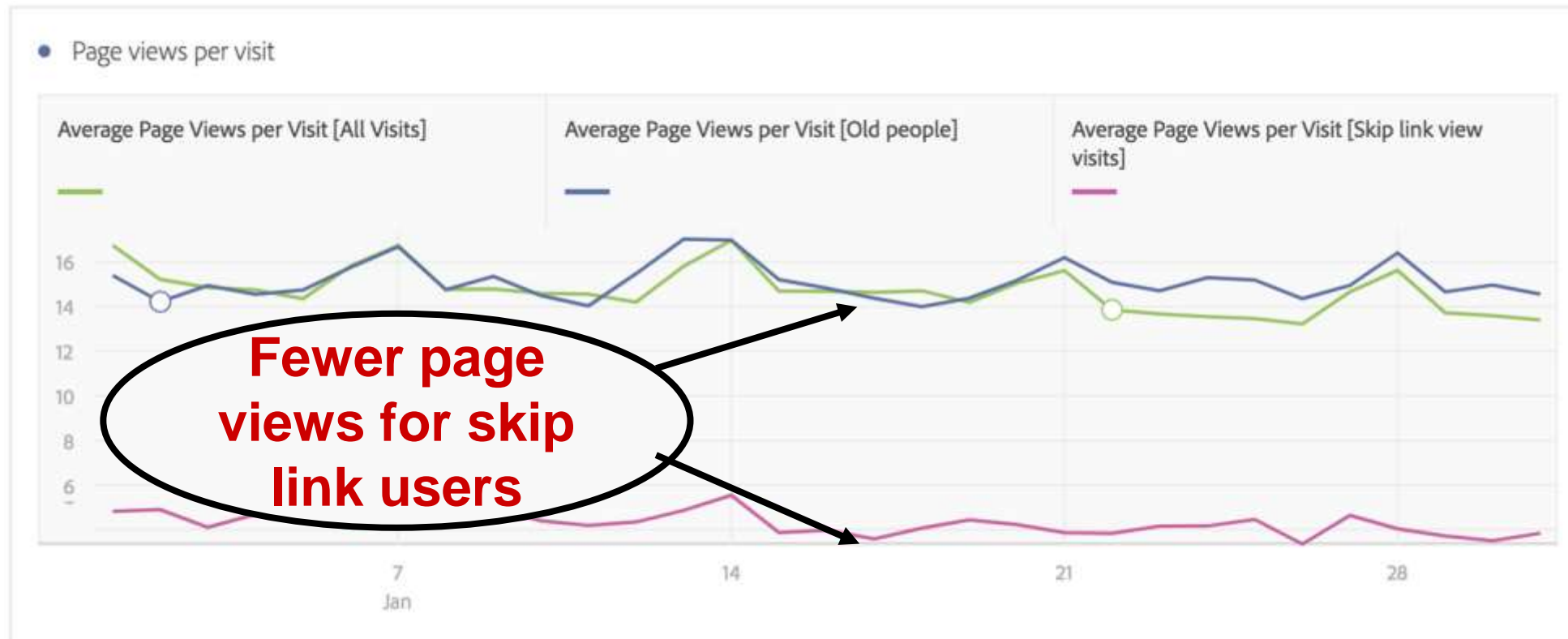
Can we do it anyway?

Compare user groups



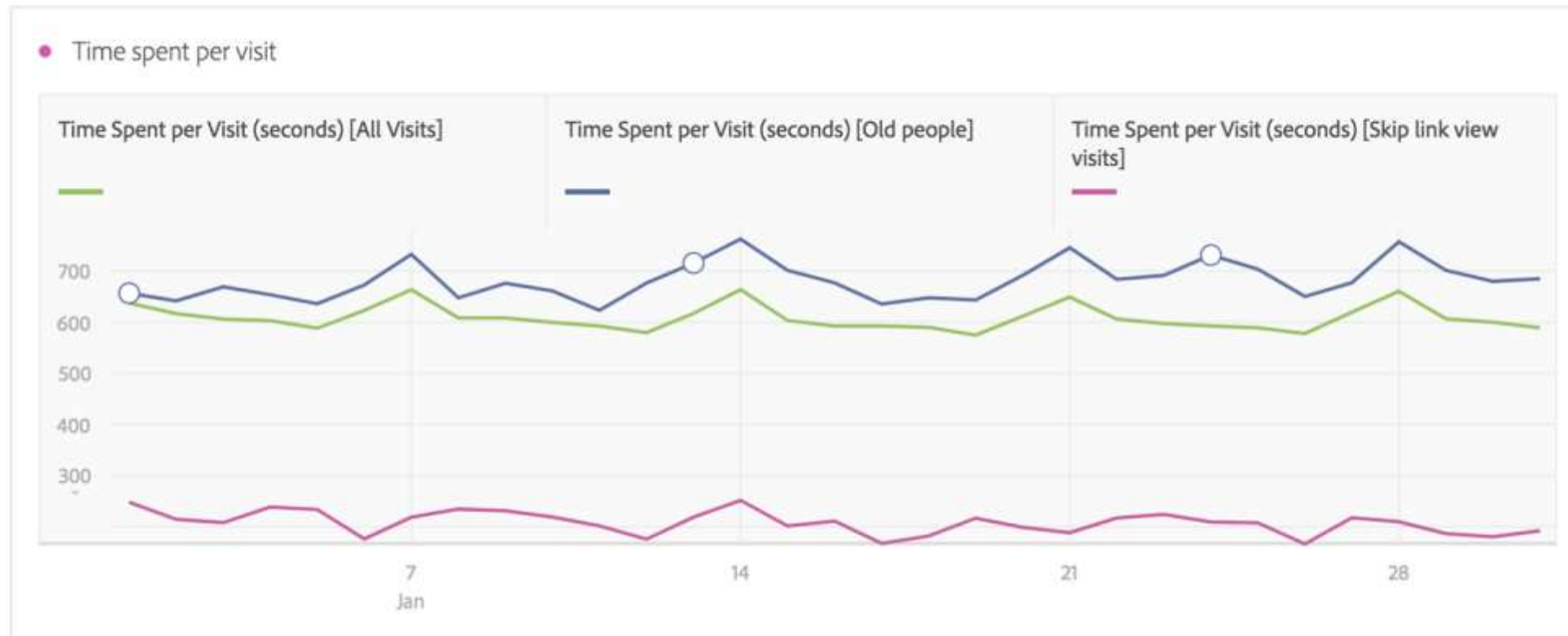
Can we do it anyway?

Compare user groups - page views per visit



Can we do it anyway?

Compare user groups - time spent per visit



Can we do it anyway?

Compare user groups - page views


• Page views



More ad
page views

Can we do it anyway?

A/B test of inaccessible links



Torget - 26.01.2018

gammelt ræl

[Se annonsen](#)

Aktiv

10,-

Utløper: 27.03.2018

Endre annonsen

Skjul annonsen i søkeresultater

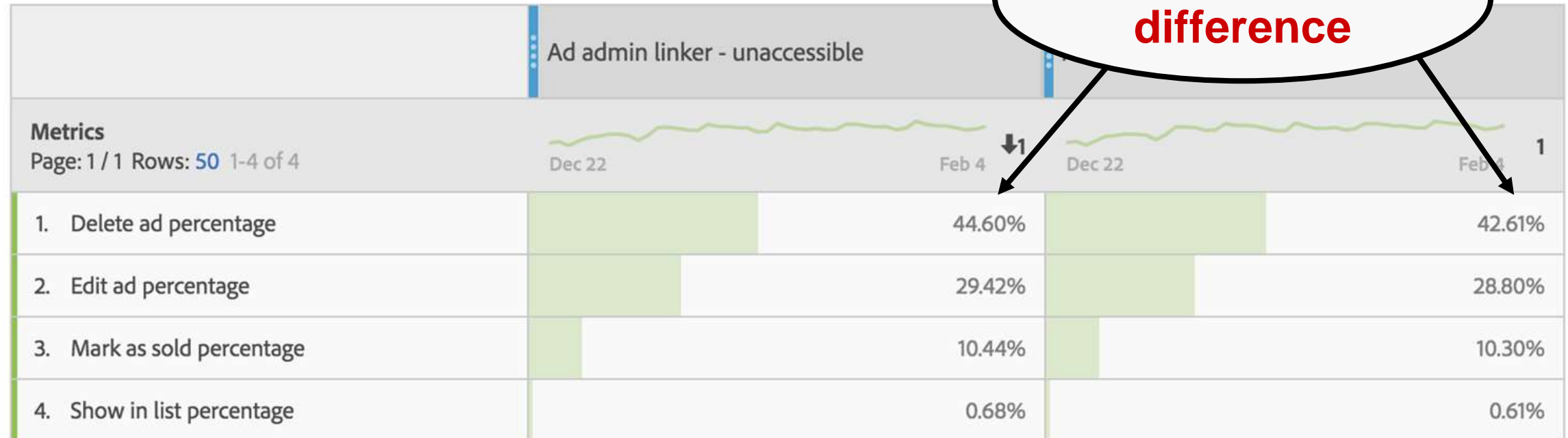
Slett

Marker som solgt

Can we do it anyway?

A/B test - all visits (1.5 mill)

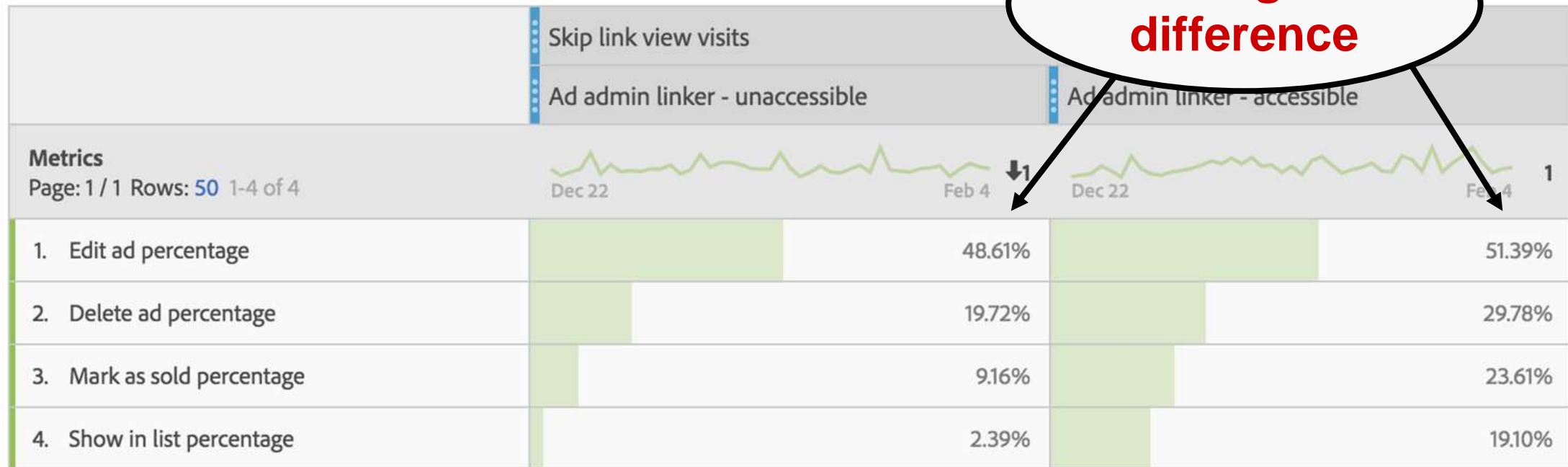
● AB-test percentage



Can we do it anyway?

Skip link visits only (556)

● AB-test percentage - skip link users



Can we do it anyway?

Ask for user's consent



I use assistive technologies and accept that my user data can be used to improve this website

Wrap up

How to measure accessibility

- Accessible features
When you need to **prove it's value**
- A/B test
To prove you're **not making it worse**
- Age
When you have **registered users**
- Skip links
To know users who **don't use a mouse**
- Ask for consent
To better know **who you are watching**

Then what?

Something seems wrong, what do I do?

- Analyze
 - Run filters on **detailed reports**, find the **failing feature**
- Investigate
 - **Test** with keyboard navigation, screen readers and other **assistive technologies**
- Fix
 - Make it **work!**

Thank you!

That's my thoughts. What's yours?

There are plenty of other possibilities

@twidero



See you again tomorrow!

How to Train Colleagues in Accessibility

Tor-Martin Storsletten, Lotte Johansen and me



Friday - 2:20 PM, Hillcrest CD, 3rd Floor, Seaport Tower