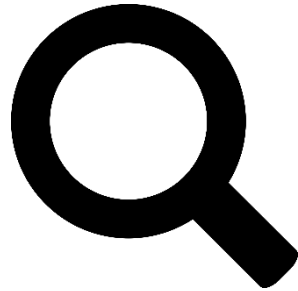


Effective Notification Campaigns on the Web: A Matter of Trust, Framing and Support

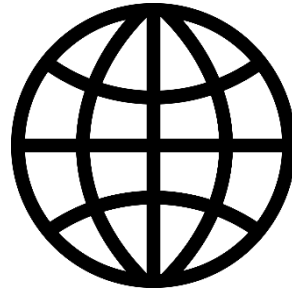
M. Maass, A. Stöver, H. Pridöhl, S. Bretthauer, D. Herrmann, M. Hollick, I. Spiecker



Let us imagine...



A new
problem...



...very wide-
spread...

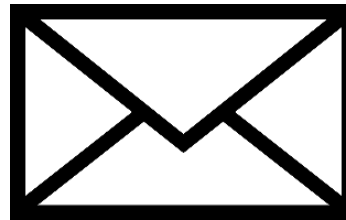


...how do you
reach operators?

How to Notify?



Who sends the
message?

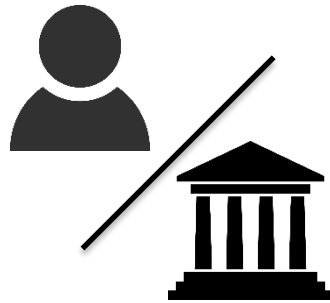


How do you
send them?

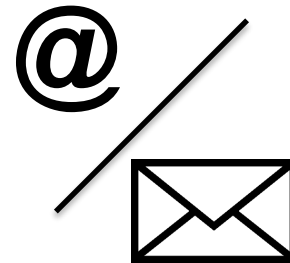


How to describe
the problem?

Our Focus



Sender



Medium



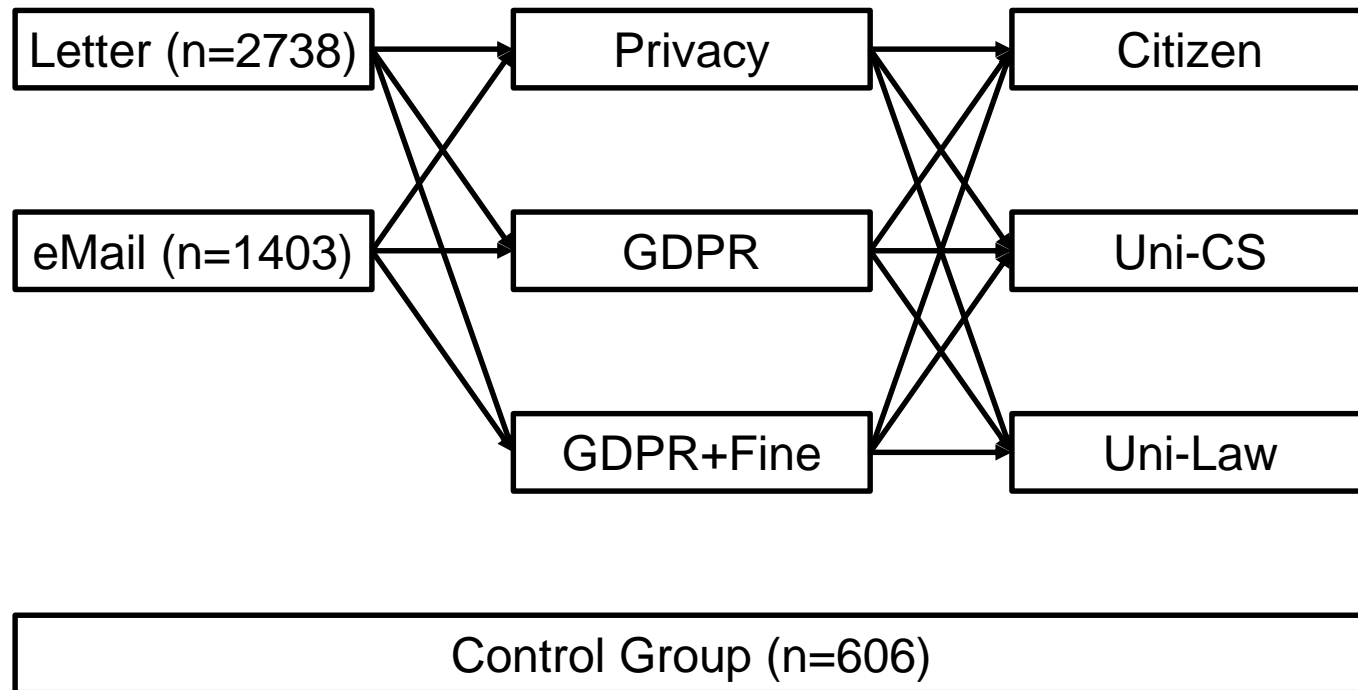
Framing

Finding an Issue – Google Analytics IP Anonymization

```
1. (function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
2. (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
3. m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
4. })(window,document,'script','https://www.google-analytics.com/analytics.js','ga');
5.
6. ga('create', 'UA-XXXXX-Y', 'auto');
7. ga('set', 'anonymizeIp', true); // This is the critical line
8. ga('send', 'pageview');
```

```
6. ga('set', 'anonymizeIp', true); // Activated too early
7. ga('create', 'UA-XXXXX-Y', 'auto');
8. ga('set', 'anonymizeIP', true); // Misspelled (IP instead of Ip)
9. ga('send', 'pageview');
10. ga('set', 'anonymizeIp', true); // Activated too late
```

Study Design



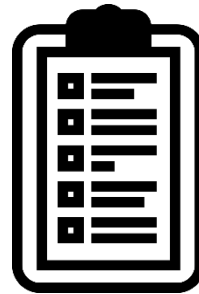
Messages:

- Initial Message (07/2019)
- Reminder (08/2019)
- Debriefing / Survey (09/2019)

Further Contributions



Tool
(N=38 485)

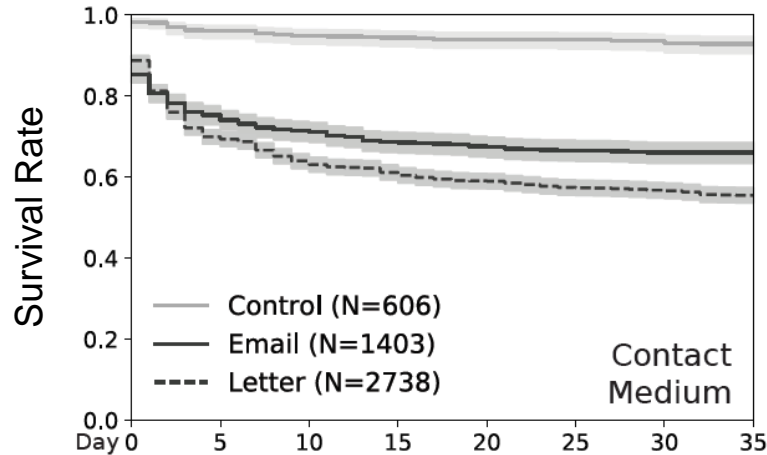


Survey
(N=477)

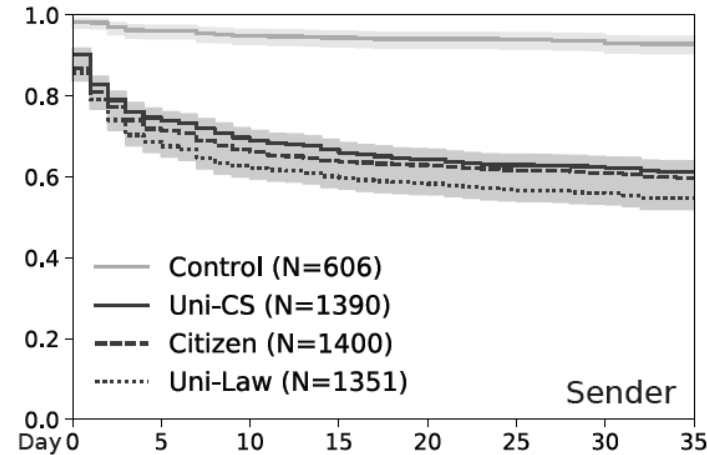


Responses
(N=1043)

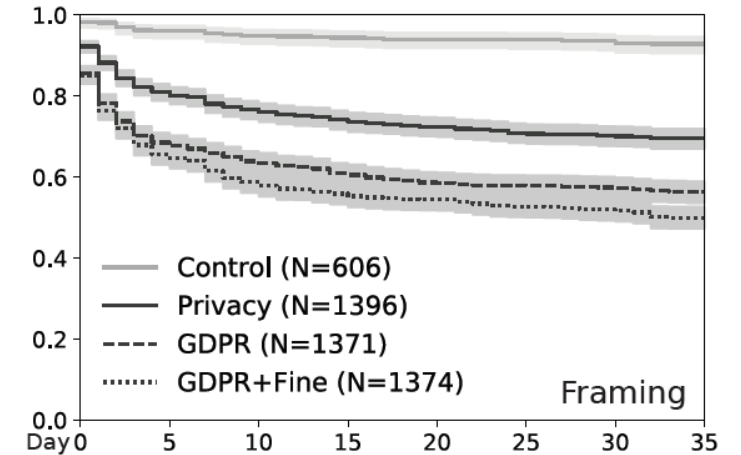
Effect of Initial Notification



Letter: 55.6%] $p < 0.0001$
 Email: 66.3%] $p < 0.0001$
 Control: 93.0%



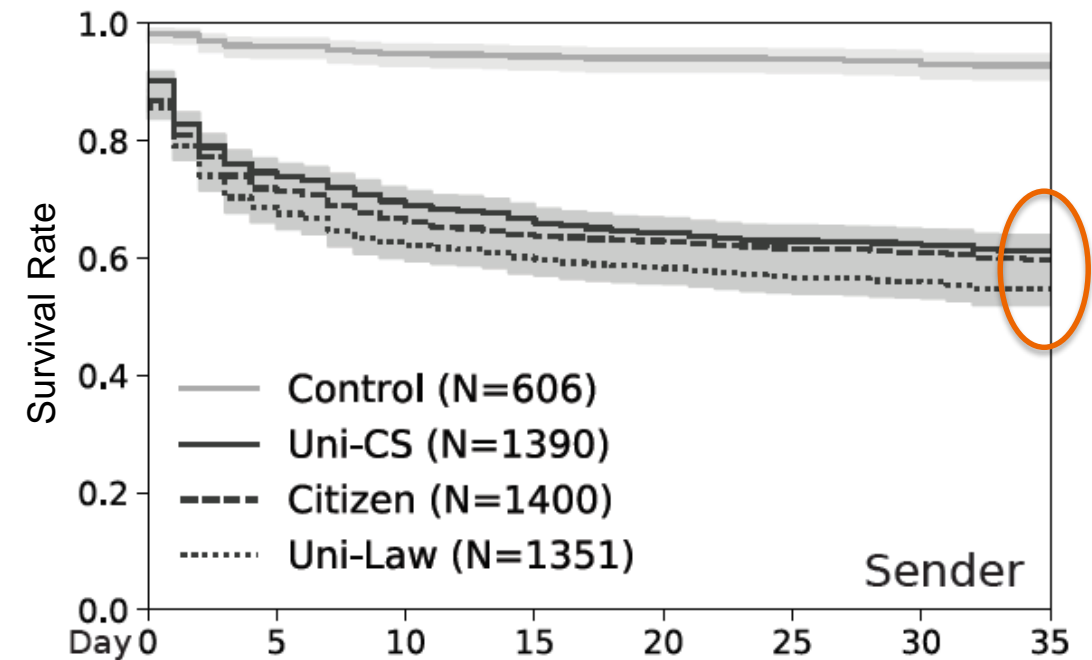
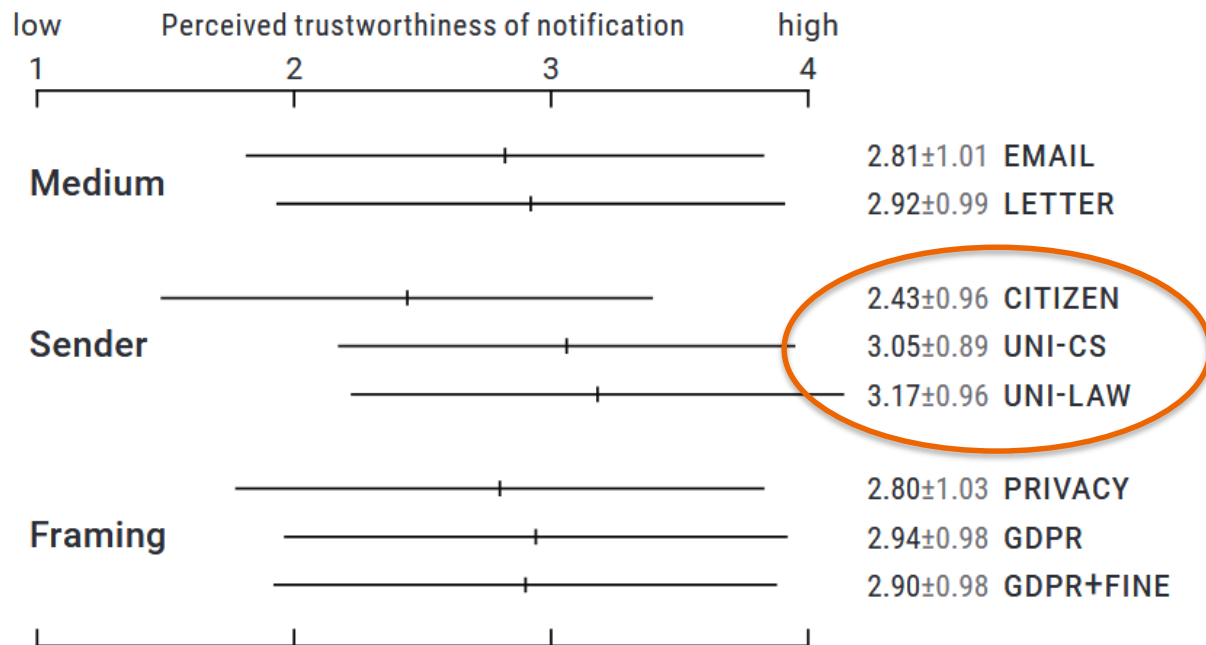
Uni-Law: 55.0%] $p = 0.088$
 Citizen: 59.9%] $p = 1.0$
 Uni-CS: 61.4%



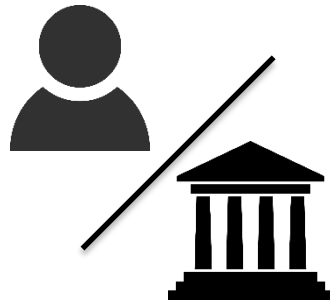
GDPR+Fine: 50.1%] $p < 0.05$
 GDPR: 56.6%] $p < 0.0001$
 Privacy: 69.6%

Email – Uni-CS – Privacy: 82.0%
 Letter – Uni-Law – GDPR+Fine: 39.4%

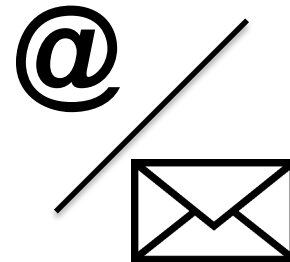
Survey (N=477)



Conclusions and Future Work



Sender has an
influence
(but is it really due to
name recognition?)



Letters increase
remediation
(but are they cost-
effective?)



Legal framing
is effective
(but does it cause too
much stress?)

Thanks + Questions

Thank you for your attention.

Find the paper and dataset at:

<https://maass.xyz/publication/maass-2021/>

Contact me in the conference chat or at:

mmaass@seemoo.tu-darmstadt.de

(or send me a letter 😊)

