

# Clean Insights

*A safe, sustainable, and secure way to handle data*



Berkman Klein Assembly 2017

**Most companies treat data like gold...**



**... but we believe it is a more toxic element!**





# Solutions do exist...



## RAPPOR: Randomized Aggregatable Privacy-Preserving Ordinal Response

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**WIRED**

ANDY GREENBERG SECURITY 06.13.16 7:02 PM

**APPLE'S 'DIFFERENTIAL  
PRIVACY' IS ABOUT COLLECTING  
YOUR DATA—BUT NOT YOUR  
DATA**

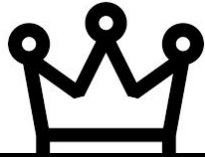


# ...but are not readily available to most

# Data



Clean Insights  
Process

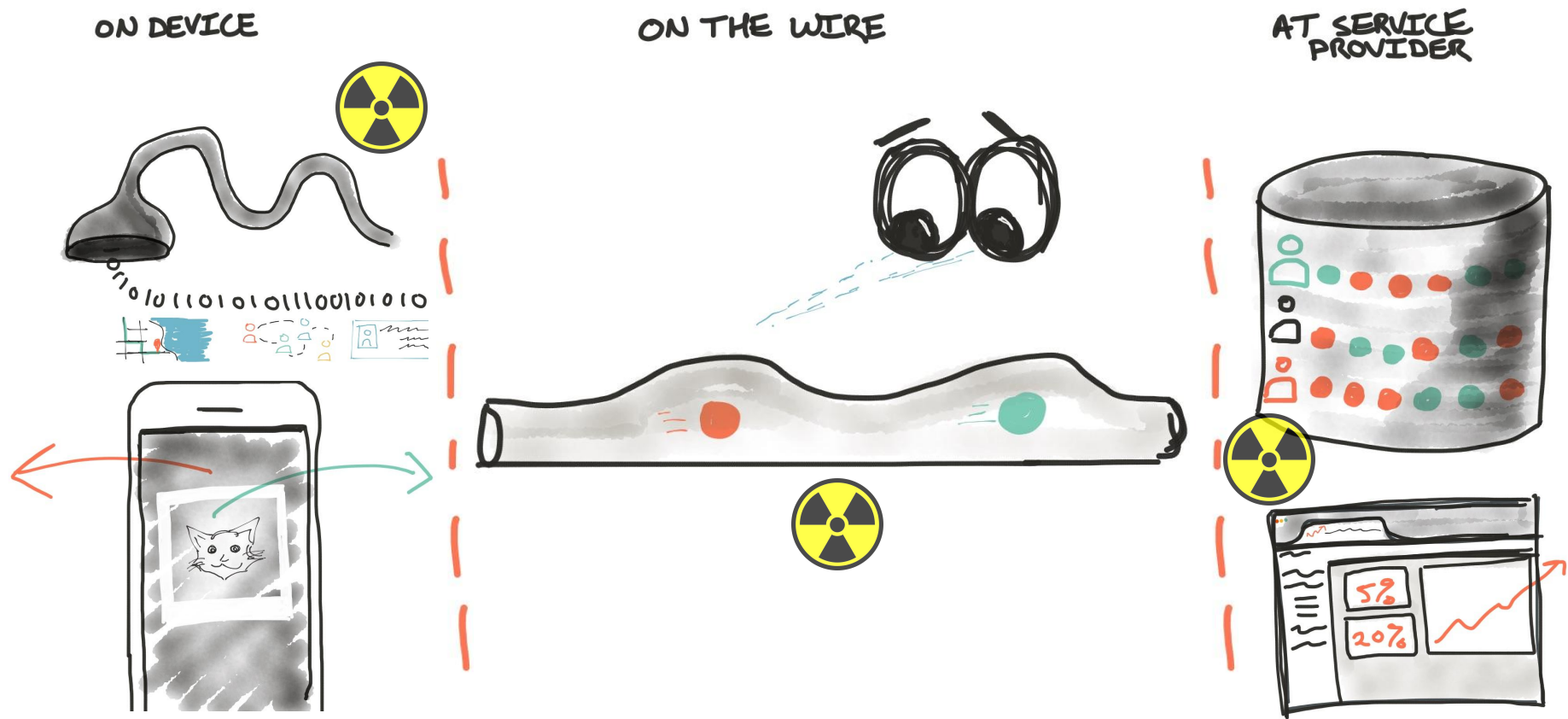


Knowledge  
and Privacy!



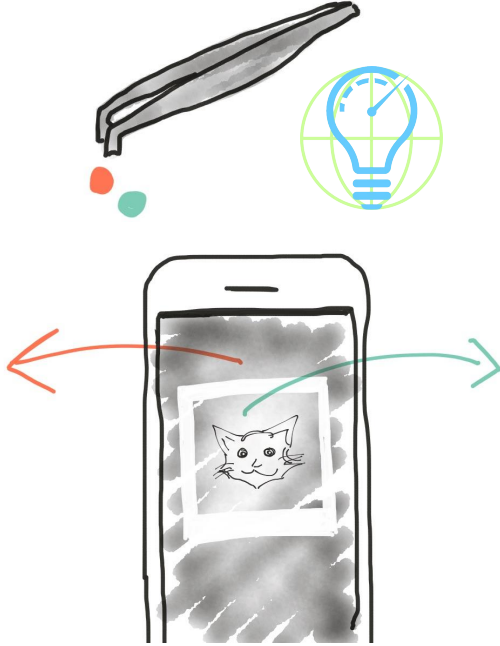
Toxic Data and  
Liability



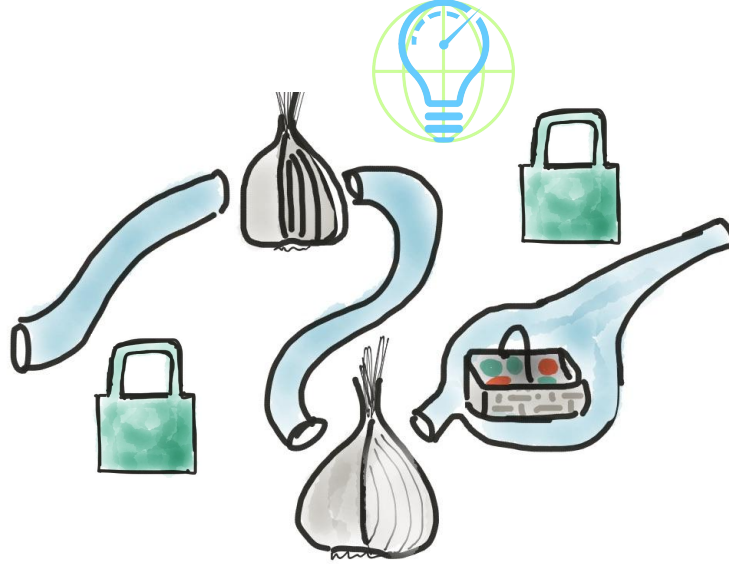


Typical analytics services vacuum up every interaction, transmitting the raw data to a centralized cloud data warehouse, often in an insecure manner.

ON DEVICE



ON THE WIRE



AT SERVICE  
PROVIDER



**Clean Insights** pushes data processing to the edge, selectively collecting and sharing through secure channels, to a self-hosted backend server.

# Three Tenets of Clean Insights



## Hardened Security

Certificate Pinning  
TLS Best Practices  
Onion Routing



## Powerful Privacy Toolbox

Data Batching  
Smart Thresholds  
No Perma Cookies



## Advanced Anonymity

Differential Privacy  
Randomized Response  
Machine Learning



# Why we care

Developers want to understand their products and their users.

**This must not come at the cost of privacy, security and trust.**



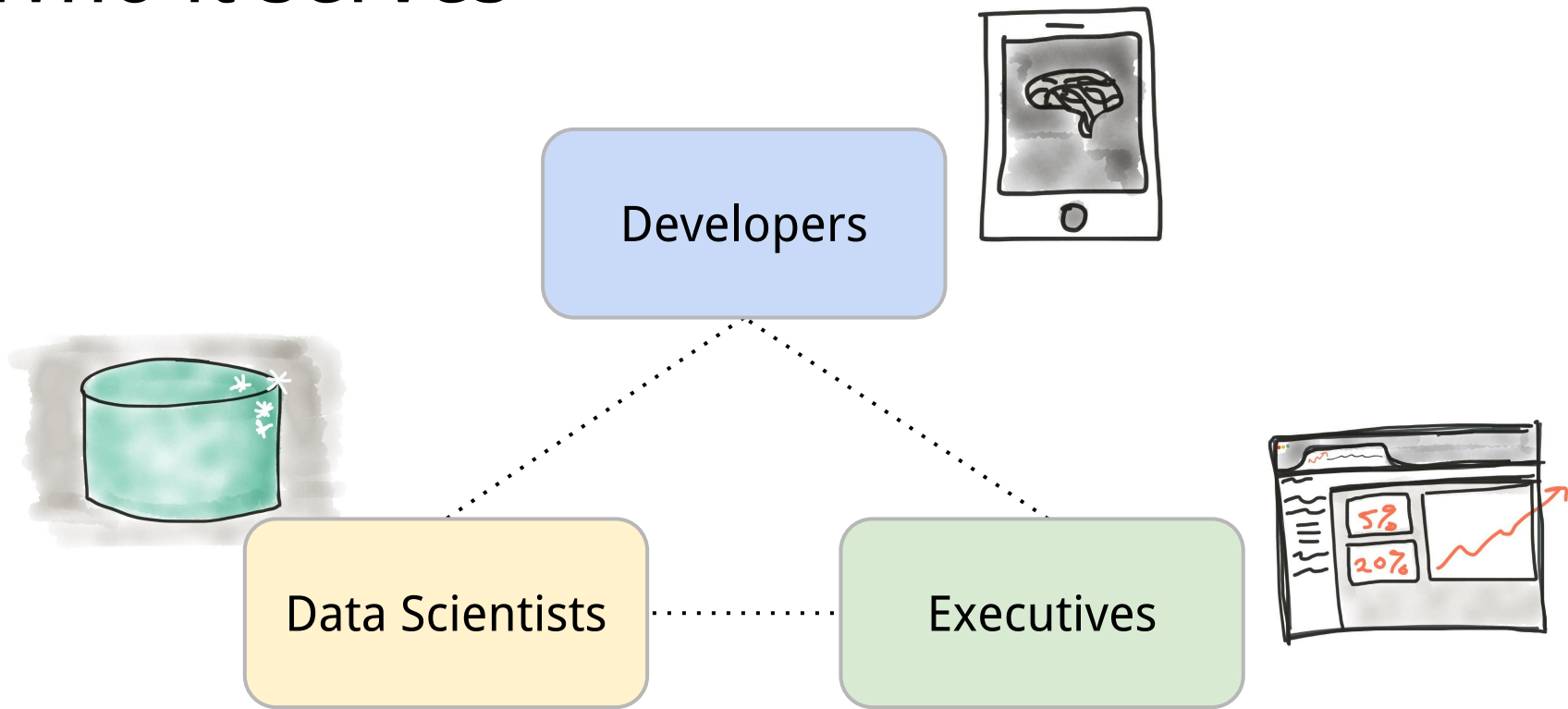
**GUARDIAN  
PROJECT**  
<https://guardianproject.info>



**SEE IT  
FILM IT  
CHANGE IT**



# Who it serves



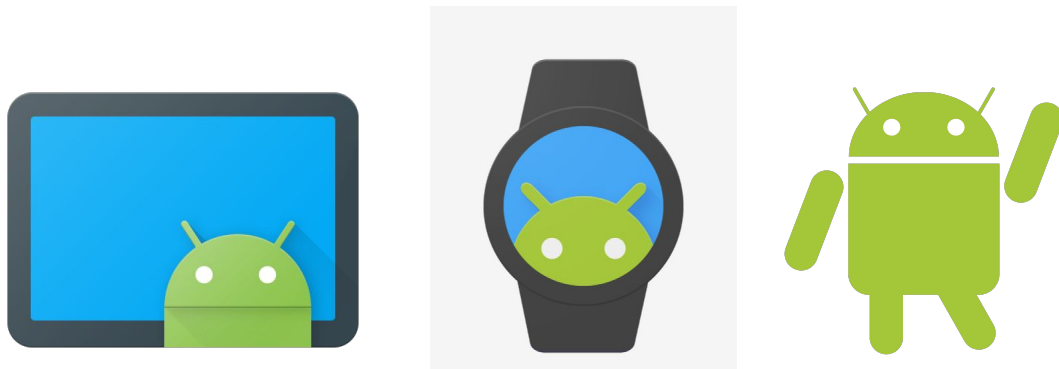
# What does this mean for YOU, the user?



# Available now -- free and open source

Clean Insights SDK for Android (*Preview Release!*)

<https://github.com/cleaninsights>



androidthings

And one more thing...our first partner implementation!

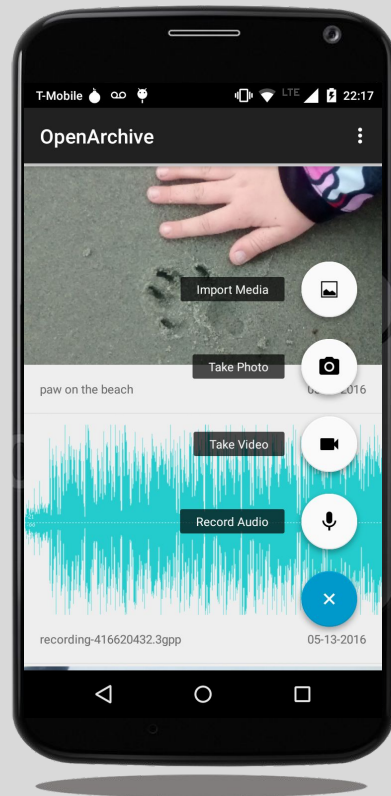
# OpenArchive

Preserving Mobilized Culture



Powered by  
Clean Insights

Now measuring media type popularity, offline sharing,  
network diagnostics, battery usage and more....





# Clean Insights

*cleaninsights.io*

*@dataistoxic #dataaretoxic*



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