



# CLEAN INSIGHTS IMPACT REPORT

SUSTAIN Project 2023/2024

By Guardian Project



# PROJECT INTRODUCTION

Clean Insights is like a secret agent for projects, sneaking a peek into user behavior while guarding their privacy like a pro! This quick rundown spills the beans on how Clean Insights teams up with various projects. This summary covers the use of Clean Insights by different projects under SUSTAIN.



**"WE DON'T  
HAVE ENOUGH  
TIME TO  
IMPLEMENT"**

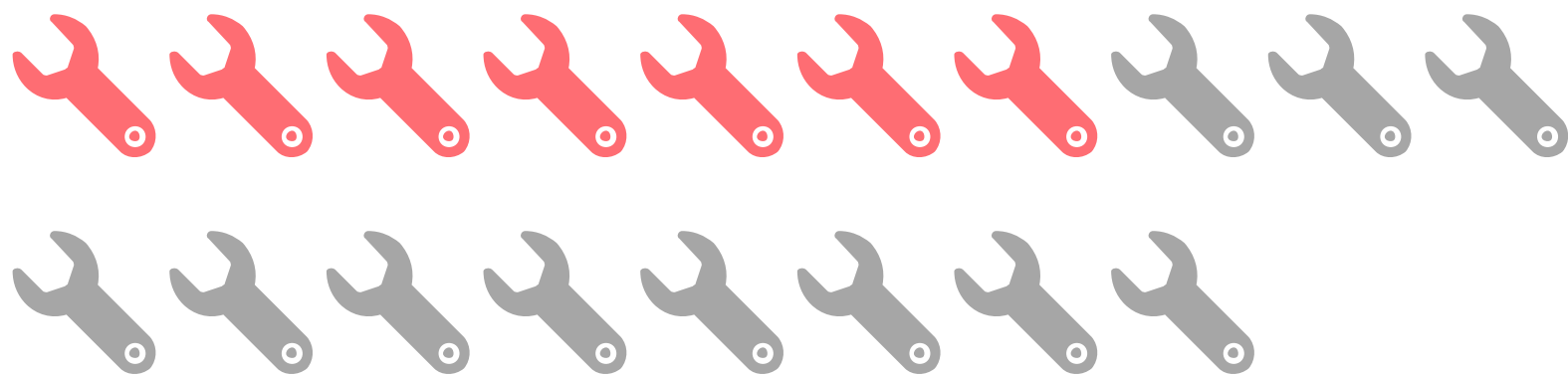


# WHAT IF...

“... **what if** you had just **a few more points of data**, how much time would be saving in your decision-making process? We spoke to A LOT of people, but taking a step toward implementing was the most challenging part for them.

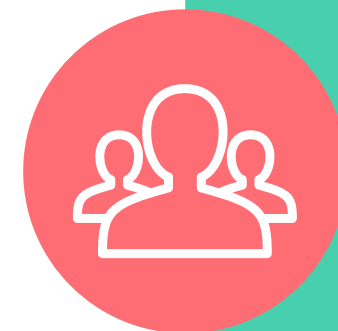
Teams felt like they didn't have time to implement.”

**John Hess, Clean Insights Developer**



**7 OUT OF 18**

**Tool teams implemented**

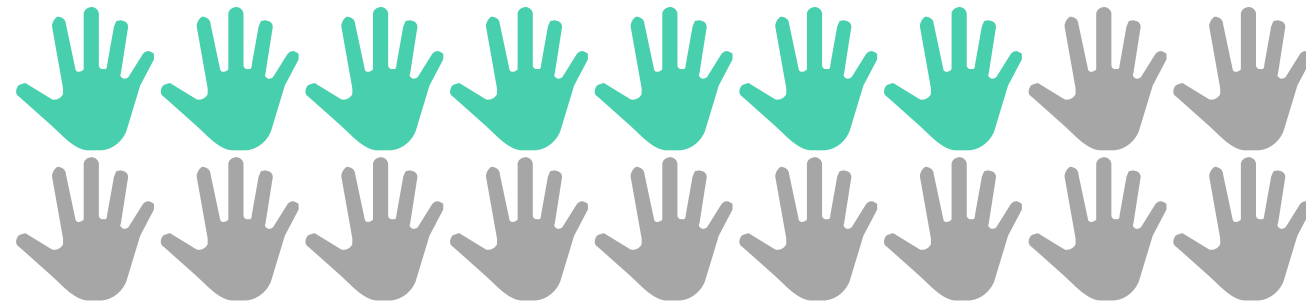


*“Going through this process has been really useful and I hope to collect more data gradually over time”*

Federico, OpenWisp Founder

# IMPLEMENTATIONS

Clean Insights is open source, which means you have the option to allow Guardian Project to help you implement your measurement campaign and SDK or you can take the code and go on your own. We were pleased that 3 teams decided to do it by themselves.



**7 OUT OF 18**

Tool teams implemented Clean Insights



**3 OUT OF 7**

Implemented on their own without Guardian Project's help

# STEPS IN A CLEAN INSIGHTS CAMPAIGN

## Consent

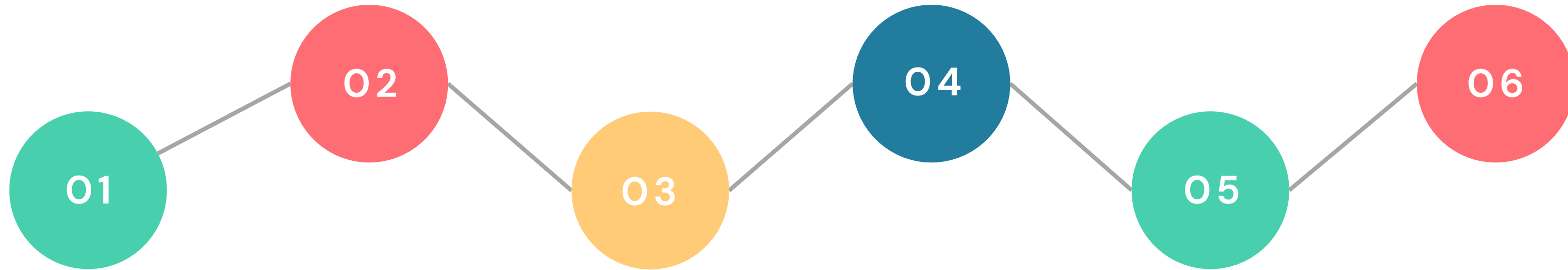
Digital consent involves seeking permission for actions, prioritizing user rights and interests. Clean insights focus on integrating consent into analytics to enhance user experience by reducing friction and annoyance.

## Implement

Getting things rolling is a breeze! Simply pick the perfect SDK for your project, set up your measurement events and ta-da! Dive into the data right away.

## Analyze & Learn

It's time to delve into those results and insights. Matomo offers visualizations to kickstart this analysis. After gaining valuable insights, you can enhance your product using data-driven metrics.



## Consider Your Questions

What are your learning goals? Which data points will be crucial for making well-informed decisions regarding future design or development projects? How many data points are you aiming to collect?

## Design Campaign

When designing your campaign, consider when to ask for consent, how long to collect data, frequency of data collection, opt-out options for users, and the setup of a dashboard console to receive data.

## Record & Iterate

Relax and observe as the data comes in. It's beneficial to conduct a testing phase during development before launching the campaign to users. This gives you the opportunity to refine your implementation before engaging with users.





# WHY CLEAN INSIGHTS

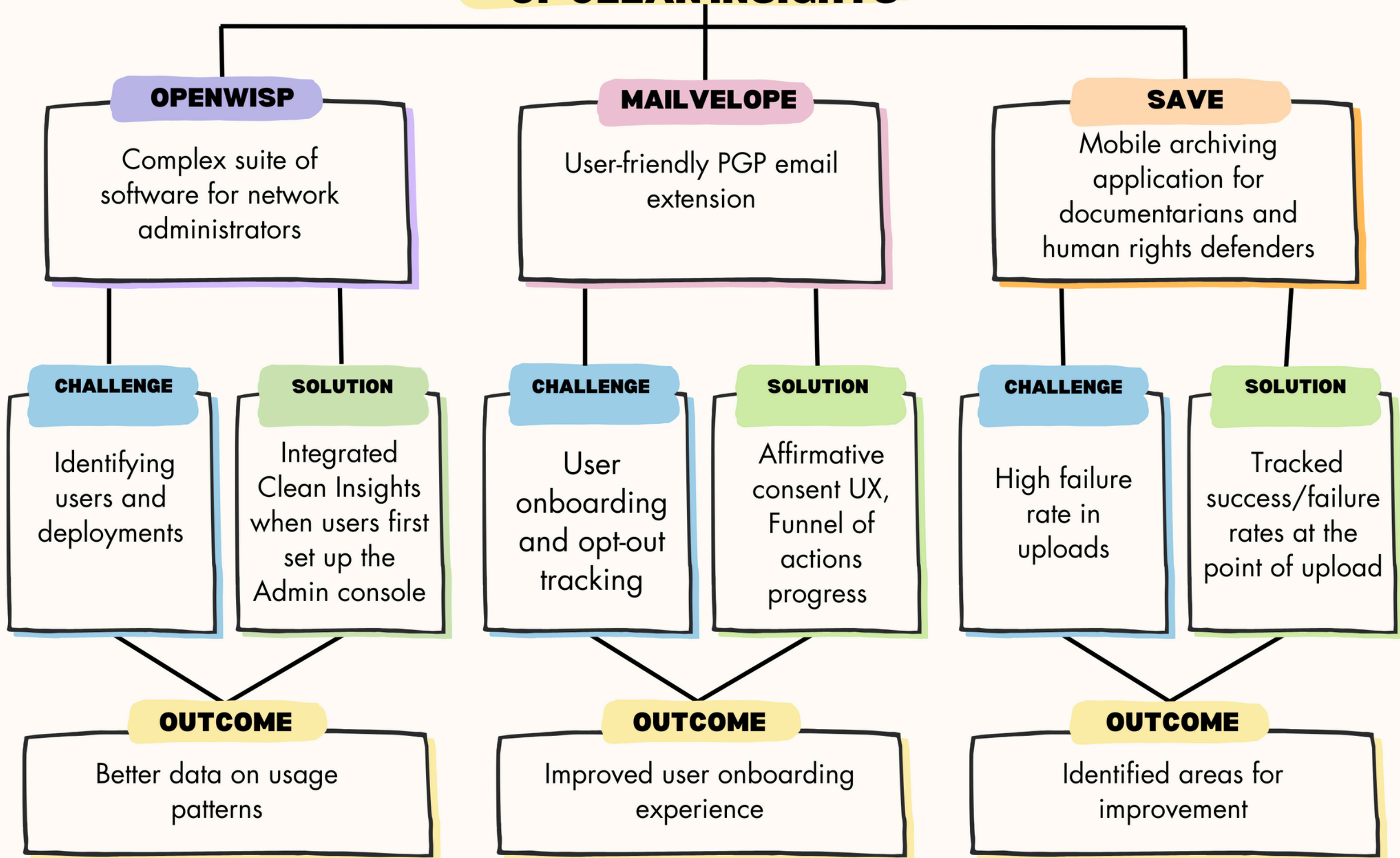
Privacy-Preserving Measurement For All!  
CLEAN INSIGHTS HELPS YOU BETTER SERVE YOUR USERS,  
WITHOUT SPYING ON THEM



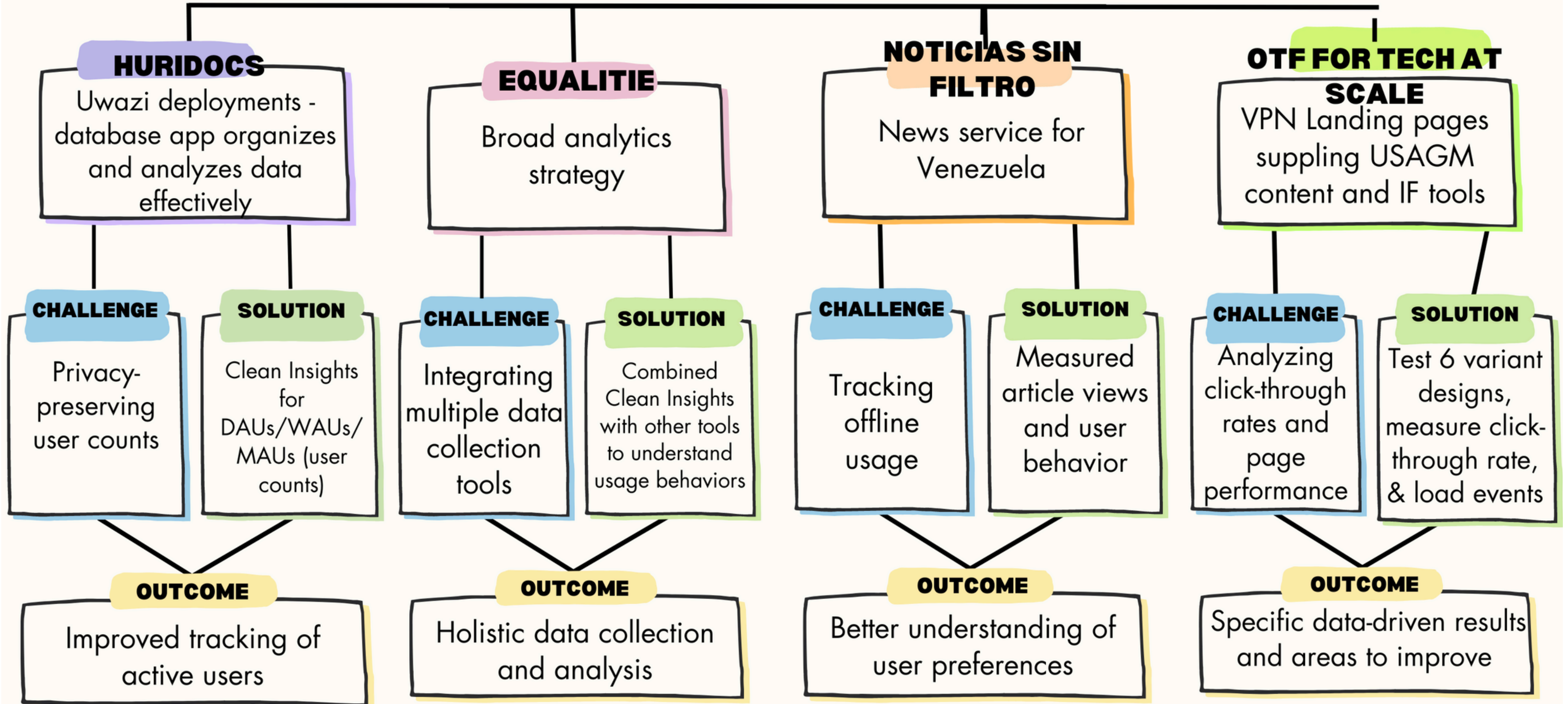


**JUST A LITTLE  
BIT OF DATA  
GOES A LONG WAY**

# INSIGHTS SUMMARY: THE IMPACT OF CLEAN INSIGHTS



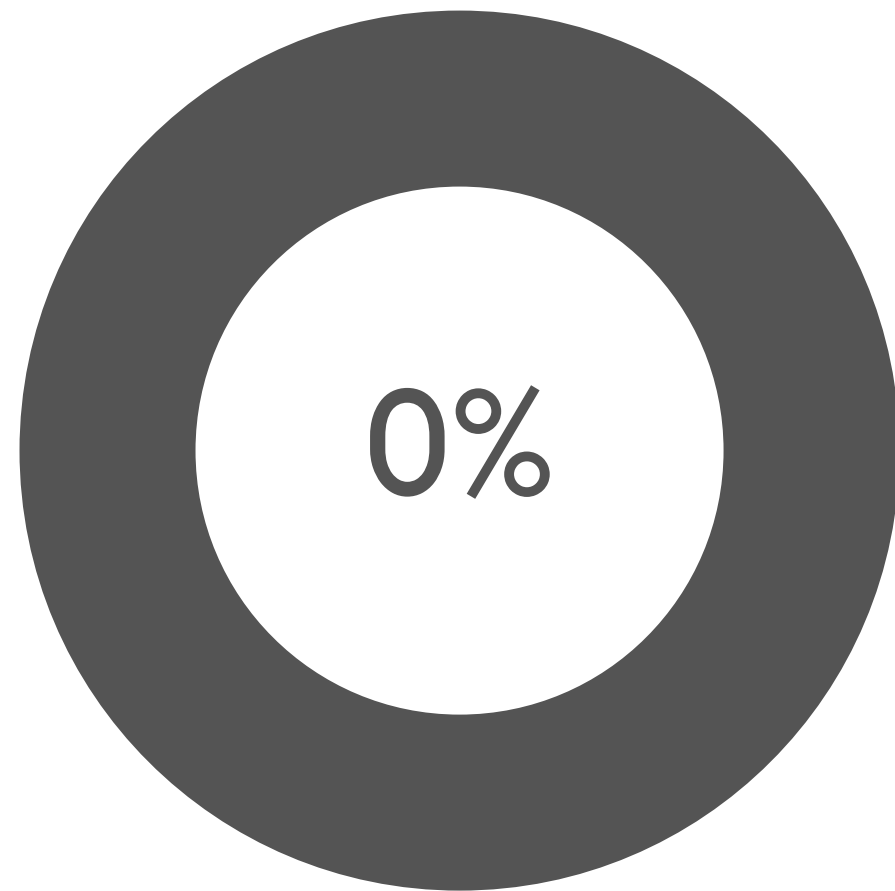
# INSIGHTS SUMMARY: THE IMPACT OF CLEAN INSIGHTS CONTINUED



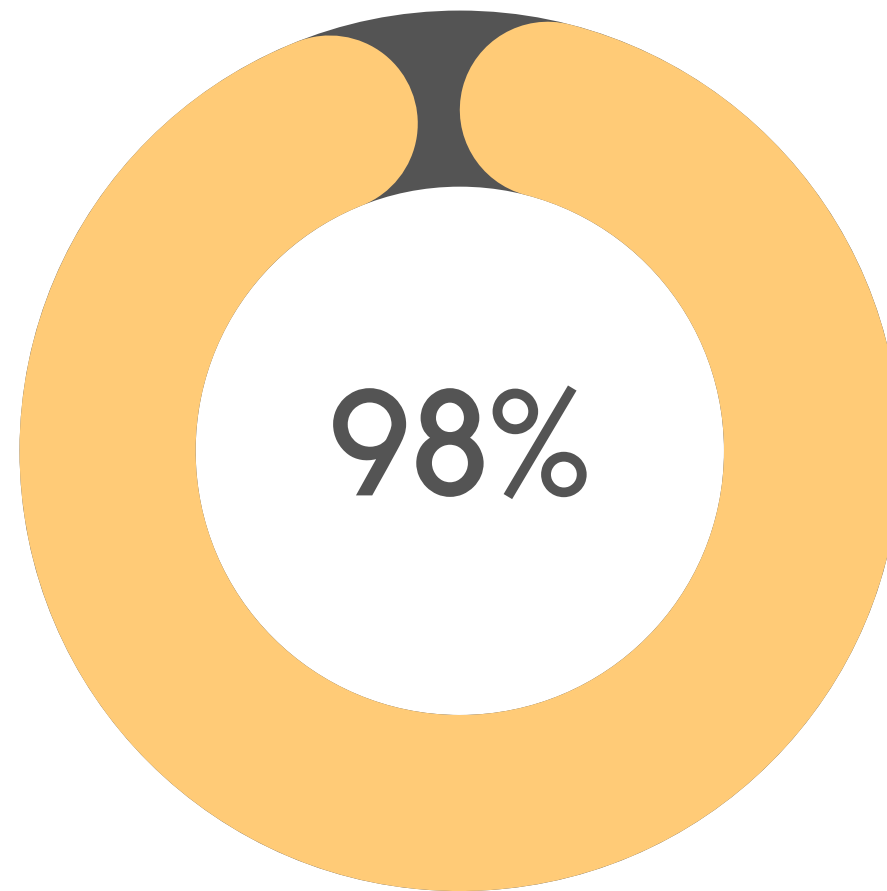


# SO HOW'S IT GOING?

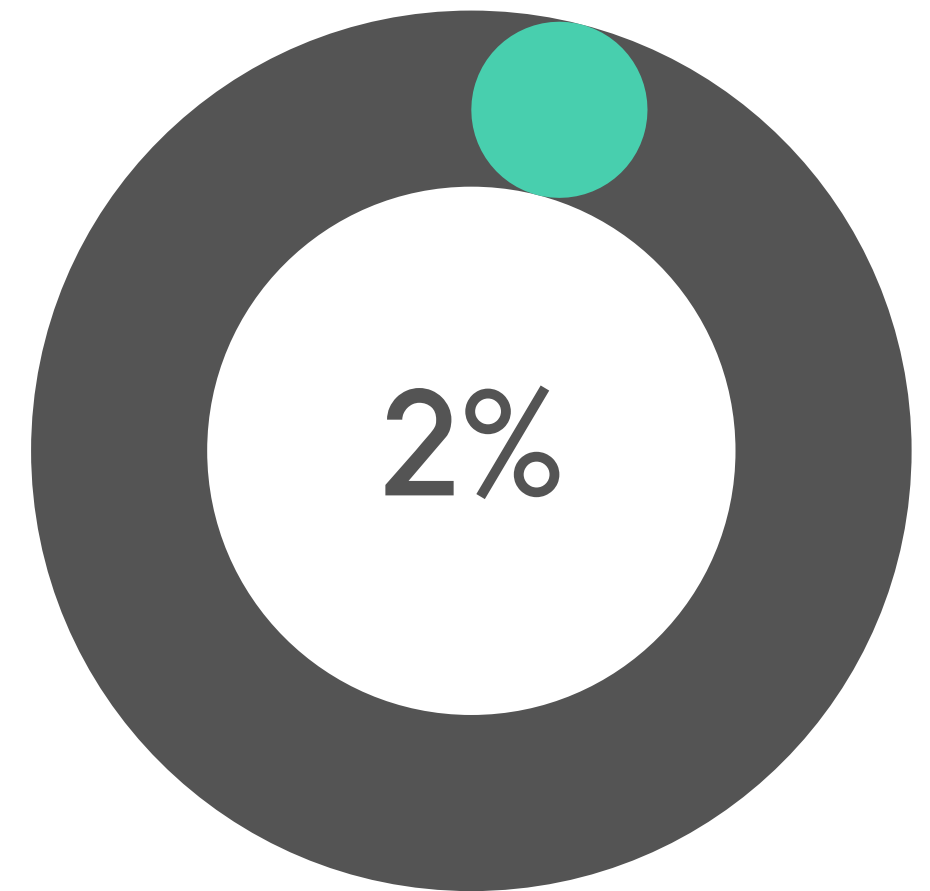
Of the 7 teams who implemented here's a look at where they are in the process



**CONSULTATIONS &  
IMPLEMENTING**



**IN DEVELOPMENT &  
TESTING**



**IN PRODUCTION &  
GATHERING INSIGHTS**



2

**RETURNING  
CLIENTS**



# DIVING DEEPER

Template by [www.reallygreatsite.com](http://www.reallygreatsite.com)

## OPENWISP

Without knowing who is using the software and how it's being used, it's tough to figure out how to generate sustainable income for the project. This is particularly true for OpenWISP, which struggles to determine how many deployments are out there and what versions are being used.

## MAILVELOPE

Developed a "Funnel" to track user progress through key steps: installation, first launch, key generation/importing, and message encryption/decryption. This helps identify and improve any problematic onboarding steps.

## SAVE BY OPENARCHIVE

SAVE aimed to track the setup and usage success or failure of various backends.

# OPENWISP



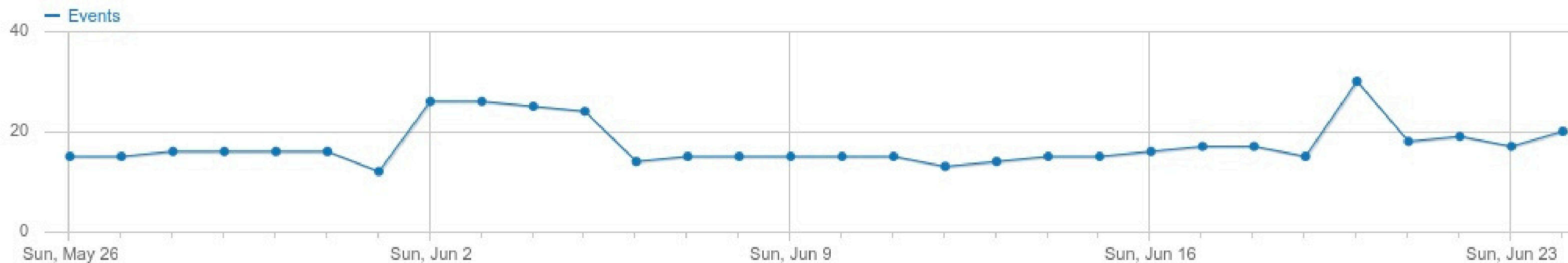
## WHAT WAS MEASURED?

- How many people deploy our software?
- How many of those deployments survive over time (how many users give up)?
- How many people keep it up to date over time?

## HOW DID THEY MEASURE?

- Data is collected at three points in the user's process:
- **Install:** when OpenWISP is installed the first time
  - **Upgrade:** when any OpenWISP module is upgraded
  - **Heartbeat:** once every 24 hours (heartbeats tell us if an OpenWISP instance is alive. They are used to gauge the number of living OpenWISP instances)

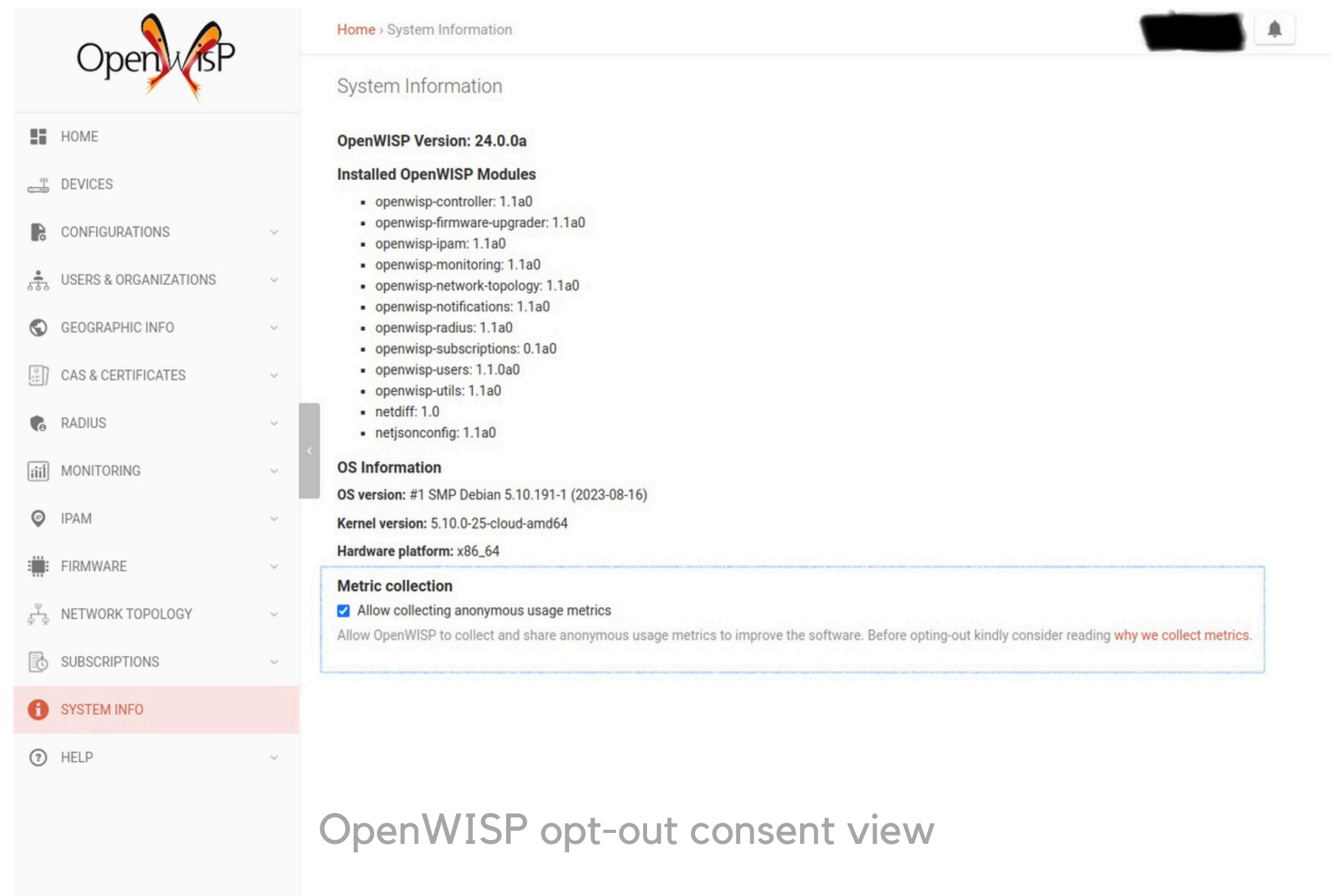
Heartbeat - OpenWISP Version





# CRITICAL DESIGN DECISION: OPT-OUT AT ANYTIME CONSENT EXPERIENCE

You can opt-out from sharing data any time from the “System Info” page. OpenWISP believes it is very important to allow superusers to opt-out of the measurement campaign at anytime. Therefore, they’ve tried to make the option to opt-out accessible and easy to access at anytime.



The screenshot displays the OpenWISP web interface. On the left is a navigation sidebar with the OpenWISP logo and menu items: HOME, DEVICES, CONFIGURATIONS, USERS & ORGANIZATIONS, GEOGRAPHIC INFO, CAS & CERTIFICATES, RADIUS, MONITORING, IPAM, FIRMWARE, NETWORK TOPOLOGY, SUBSCRIPTIONS, SYSTEM INFO (highlighted in red), and HELP. The main content area is titled 'System Information' and shows the following details:

- OpenWISP Version: 24.0.0a
- Installed OpenWISP Modules:
  - openwisp-controller: 1.1a0
  - openwisp-firmware-upgrader: 1.1a0
  - openwisp-ipam: 1.1a0
  - openwisp-monitoring: 1.1a0
  - openwisp-network-topology: 1.1a0
  - openwisp-notifications: 1.1a0
  - openwisp-radius: 1.1a0
  - openwisp-subscriptions: 0.1a0
  - openwisp-users: 1.1.0a0
  - openwisp-utils: 1.1a0
  - netdiff: 1.0
  - netjsonconfig: 1.1a0
- OS Information:
  - OS version: #1 SMP Debian 5.10.191-1 (2023-08-16)
  - Kernel version: 5.10.0-25-cloud-amd64
  - Hardware platform: x86\_64
- Metric collection:
  - Allow collecting anonymous usage metrics
  - Allow OpenWISP to collect and share anonymous usage metrics to improve the software. Before opting-out kindly consider reading [why we collect metrics](#).

OpenWISP opt-out consent view

# MAILVELOPE



## WHAT WAS MEASURED?

The installation and onboarding process.

## HOW DID THEY MEASURE?

Created a "Funnel" to track user progression through installation, first launch, key generation, and message decryption & encryption.

If there is substantial falloff between any two adjacent steps, that'll indicate an area to improve the onboarding experience.

## A NEW CHALLENGE

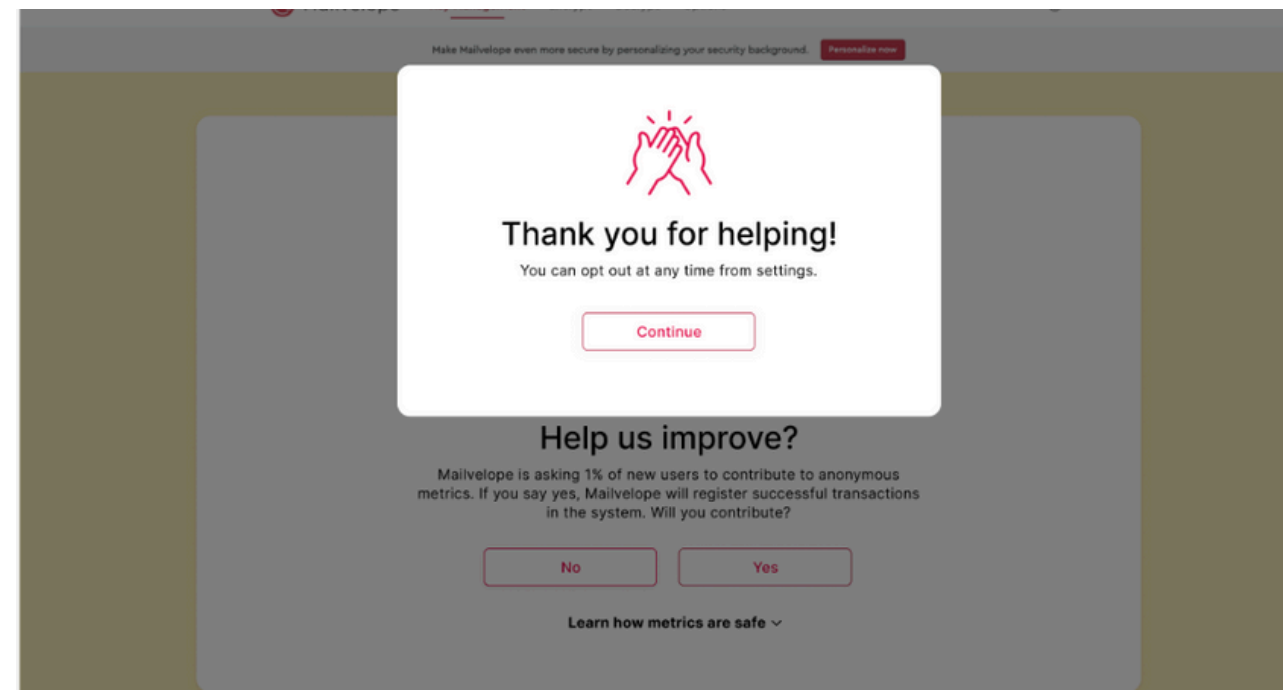
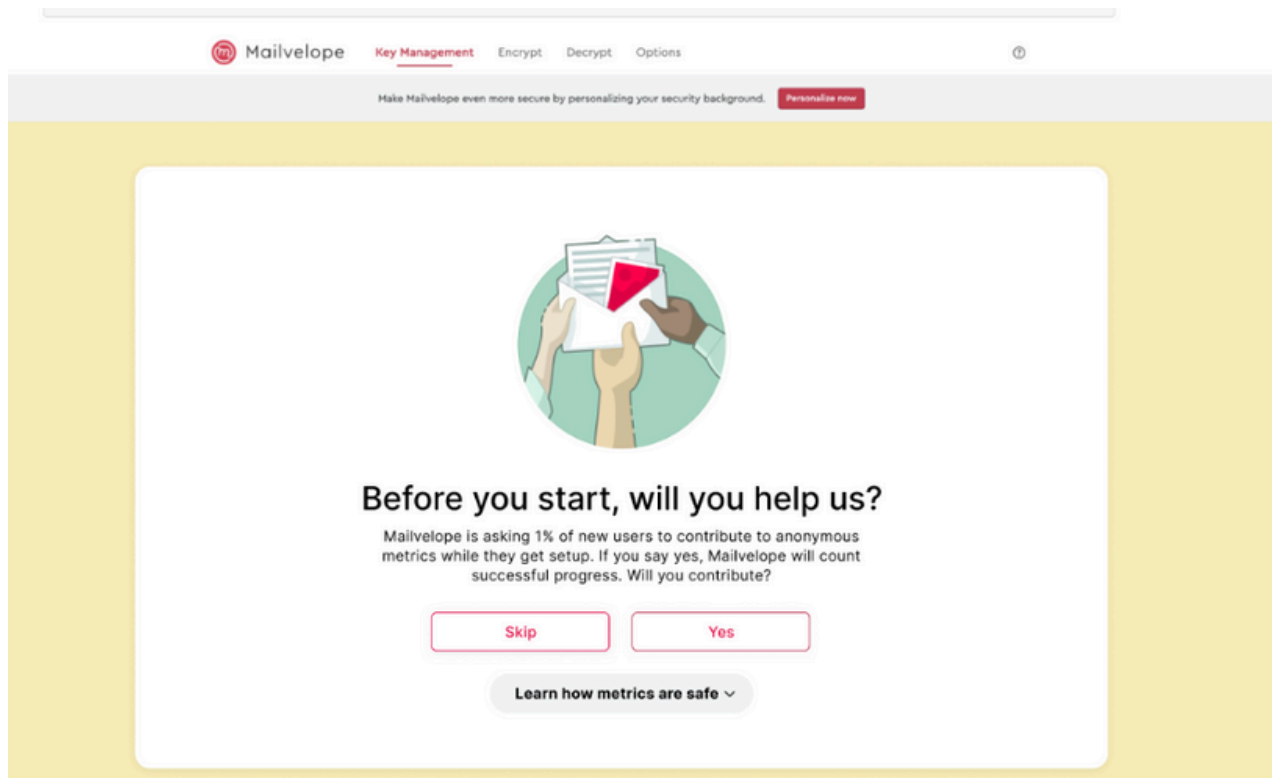
Supporting longtime users in the wild will take ongoing work after the implementation. Google Chrome is soon planning to change the way extensions work. In order to keep supporting Mailvelope, Clean Insights will need to enhance our SDK to meet Google's new requirements, and Mailvelope will have to integrate it.





# CRITICAL DESIGN DECISION: AFFIRMATIVE CONSENT EXPERIENCE

Upon receiving user feedback about the initial campaign's consent, where users could opt-out by default, they opted to create a new consent process that clearly explains the rationale behind supporting Mailvelope through this type of data donation.



## Before you start, will you help us?

Mailvelope is asking 1% of new users to contribute to anonymous metrics while they get setup. If you say yes, Mailvelope will count successful progress. Will you contribute?

Skip

Yes

[Learn how metrics are safe](#)



### We Collect Minimal Data

Mailvelope counts the steps that get you closer to using it with your email service. It does not record every move you make.



### We Respect your Choice

If you choose not to contribute, nothing is recorded. If you choose to contribute, you can change your mind at any time by opting out in settings.



### Your Privacy is Preserved

Mailvelope uses [Clean Insights](#) which securely stores data without connecting it to identifiable information. Further, your IP address is not recorded or processed.



Read more about Mailvelope metrics in our FAQ.

[Learn More](#)

Mailvelope's new affirmative consent mockups



# SAVE BY OPENARCHIVE

## WHAT DID THEY MEASURE?

Understand the setup and usage success or failure of various backends.

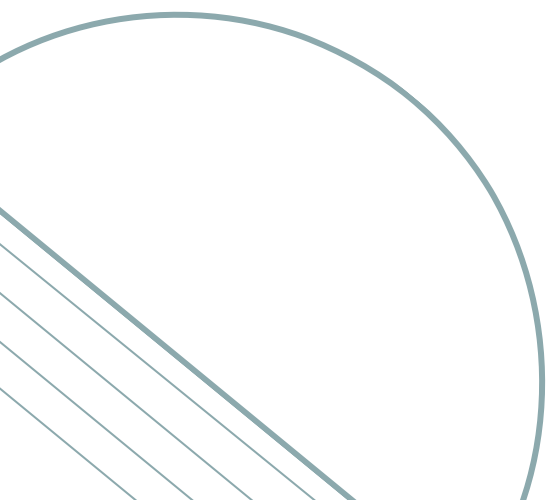
## HOW DID THEY MEASURE?

During the setup phase and when encountering failures.

- Thousands of upload attempts were recorded, with more than a quarter resulting in failures.

## WHAT WAS LEARNED?

The implications for SAVE are yet to unfold. Depending on the nature of the failures, SAVE might consider implementing new features to address connectivity issues, partnering with local organizations to enhance upload processes, or resolving any bugs that may arise.





# SUMMARY

Implementing Clean Insights is like turning on a spotlight to unveil how people use things, uncover pain points, and spot areas for upgrades. Figuring out what questions to ask and nailing down how to get people's permission are key puzzle pieces. While lots of teams can tackle Clean Insights solo, many opt to bring in the pros like Guardian Project to work their magic.



# RESOURCES

**Clean Insights  
Website**

[Cleaninsights.org](https://cleaninsights.org)

**Documentation Site**

[docs.cleaninsights.org](https://docs.cleaninsights.org)

**Free Toxic Asset  
Audits (TA<sup>2</sup>)**

[cleaninsights.org/toxic](https://cleaninsights.org/toxic)

