

Case Study



Matchlight

OVERVIEW

Matchlight (2019-2021)

Matchlight was a Digital Risk Protection (B2B SaaS) solution that monitored for customer asset exposure across the deep, dark and open web. Differentiated by patented Fingerprinting technology, Matchlight could “find a needle in a haystack, without seeing the needle” and then alert customers.

Role: Principal Designer. Design team of one, in close collaboration with Director of Engineering and VP of Product.

Deliverables: Discovery, Competitive Analysis, Interviews, Surveys, Personas, Requirements, User Stories, Card Sorting, User Flows, Wireframes, Mock-ups, Prototypes, Usability Testing, Visual Design, Data Visualization, Animation

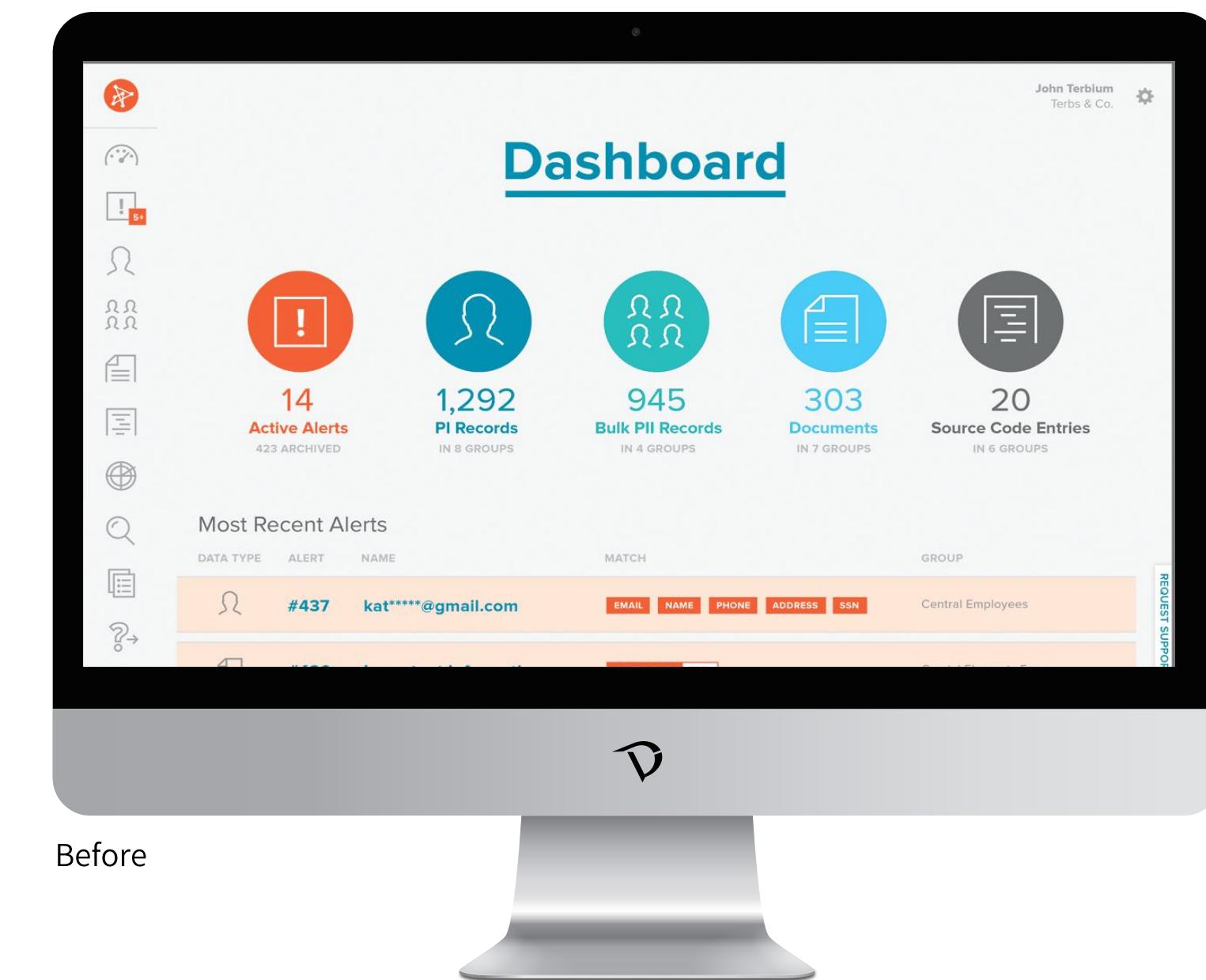


THE PROBLEM

The original product focused solely on **dark web data intelligence** and though Terbium Labs was one of the pioneers in the field, there were an increasing number of competitors with broader scope and newer, easier-to-use products.

The issues:

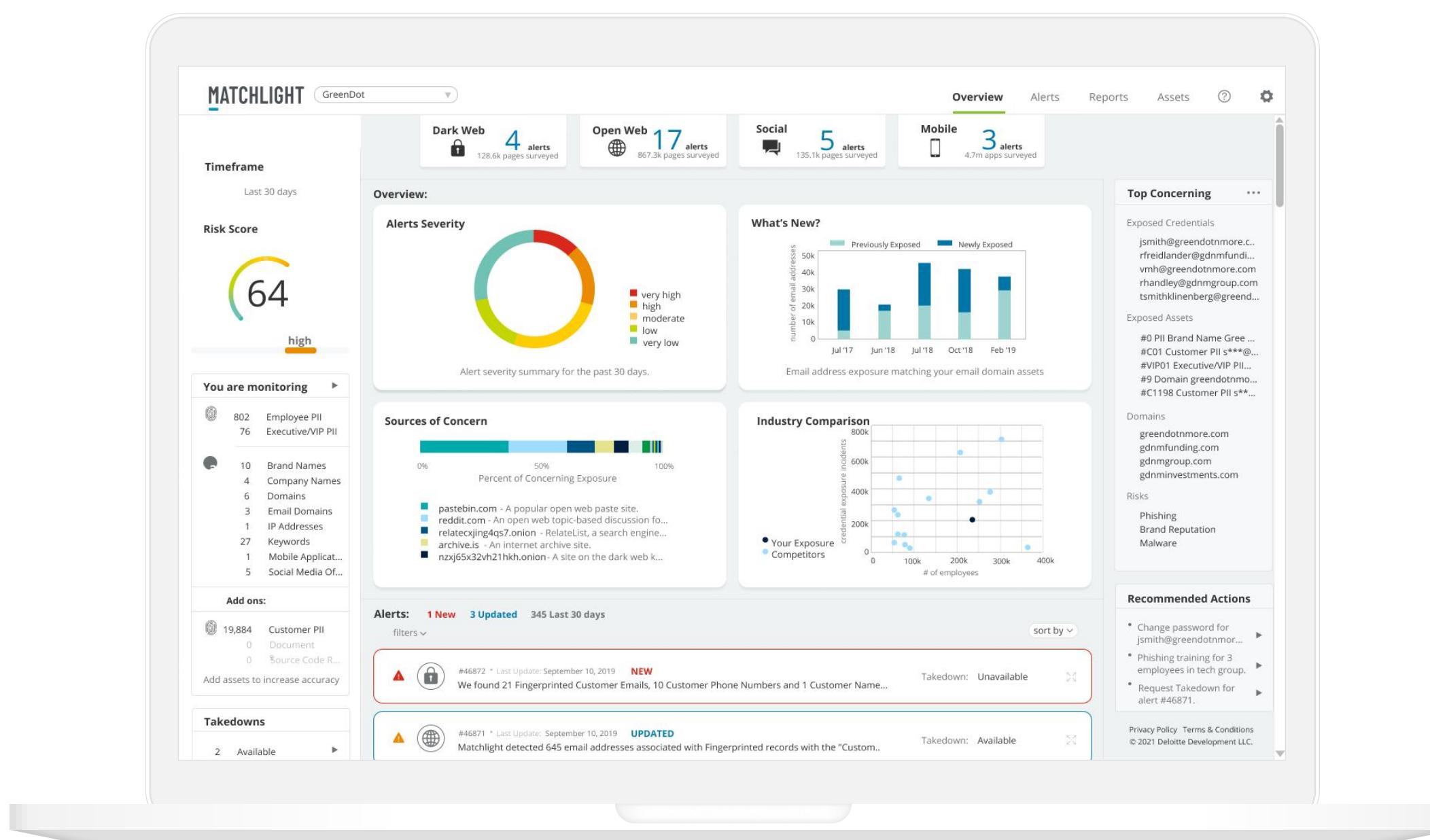
1. Customers did not seem to understand the key **differentiator**, the fingerprinting process, and were not utilizing this option optimally.
2. Customer **retention** for the original version was low.
3. Customers they had retained, relied heavily on human analysts for alerting and reporting, rather than utilizing the portal. Accordingly, costs were high and **scalability was limited**.
4. The User Interface (**UI**) did not look modern.



Before

THE SOLUTION

A completely redesigned (and rebuilt) **Matchlight!**

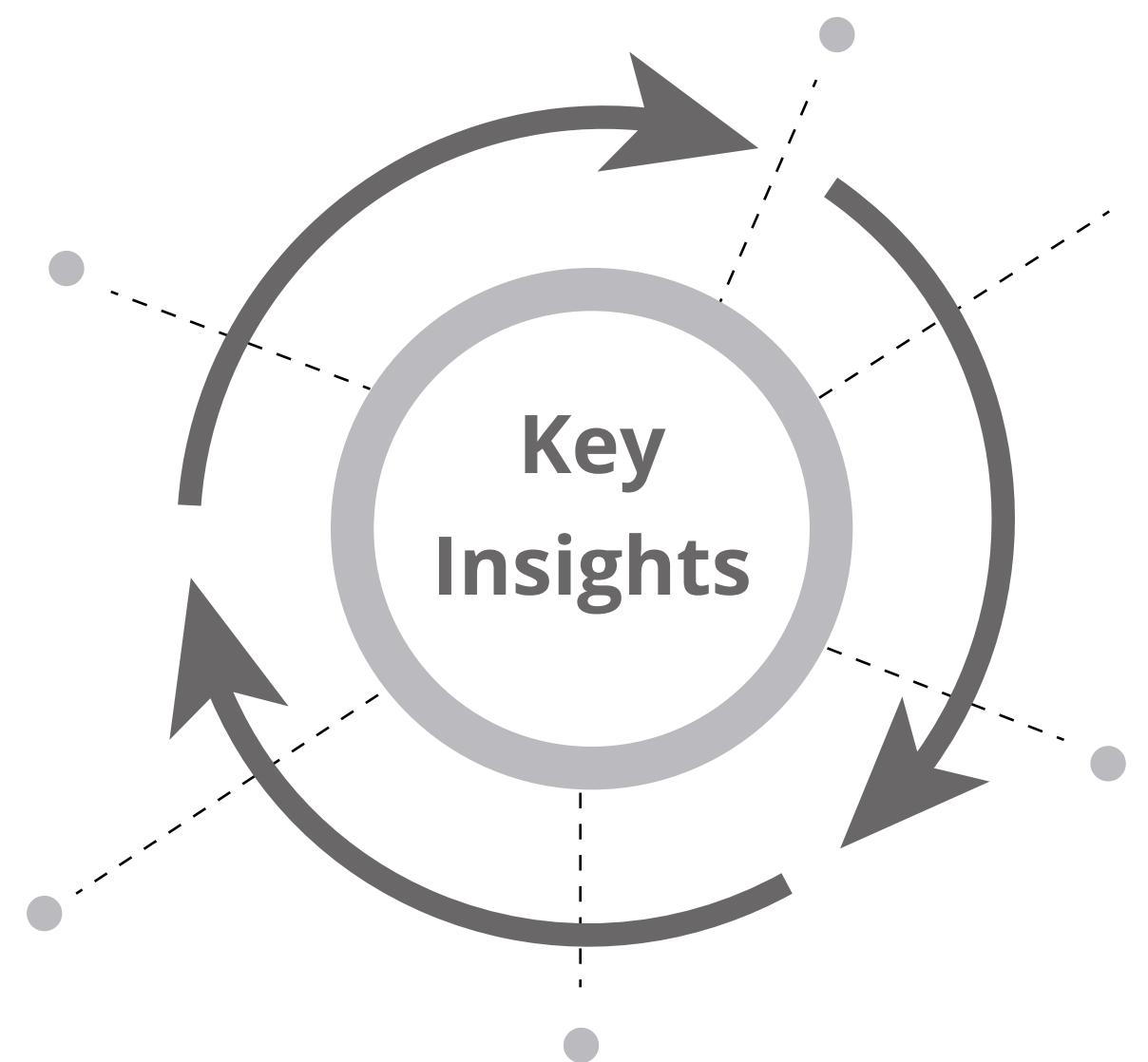


Featuring:

- ✓ A streamlined, "**social media**" inspired layout.
- ✓ A feed of **curated** alerts anchored by data visualizations that quickly tell the story of "who, what, when, where and how?"
- ✓ Combined **alerting** for all asset types in a single feed, featuring always visible, "lay of the land" insights.
- ✓ A focus on simplicity, visibility, ease of use and reducing **noise**.

RESEARCH

I had 6 weeks to conduct research, write user stores and build a prototype. For research, I focused on **interviews, personas, usability testing, story mapping and competitive analysis**. My initial insights:

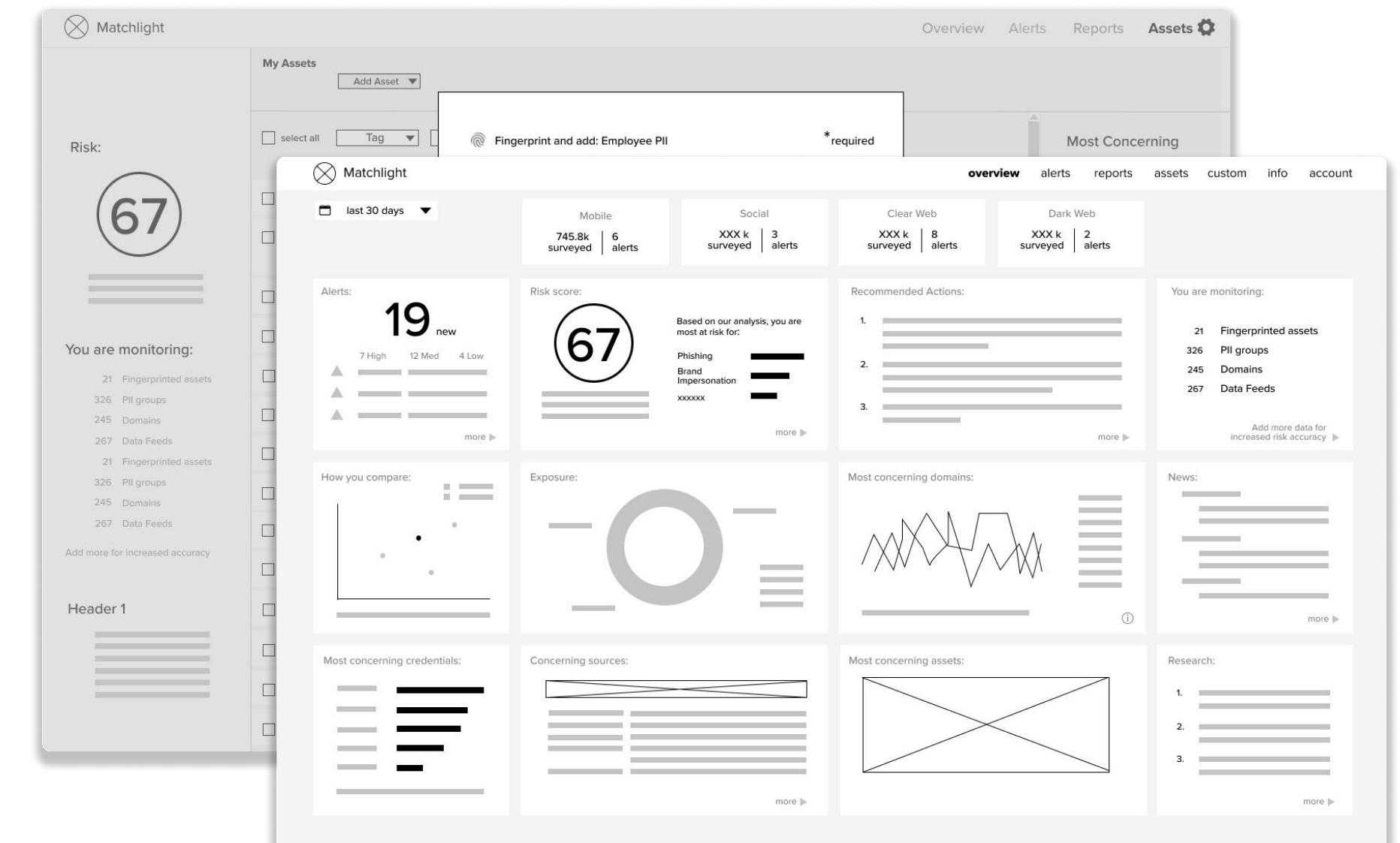


- It was originally believed that users wanted depth of information, but it turned out they really wanted to **streamline** and cut noise.
- Users found the **data visualization** charts and graphs confusing, color palettes were not optimized or differentiated.
- Competitors' dashboards were more modern looking and **easier to navigate**. Customers preferred Recorded Future and ZeroFox.
- Once we created a streamlined alerting system, we were surprised to find some customers wanted to use our system in conjunction with Recorded Future. This opened up an unanticipated **market!**

EARLY WIREFRAMES

First step involved **low fidelity wireframes**. We tested many arrangements of cards on the landing page to see which told the right story. Some of the decisions made by these early iterations included:

1. Introduced “**Risk Score**” on both the account level and alert level.
2. Collaborated with Data Science team on **algorithms** for risk scoring and how alert score would “roll-up” to account score.
3. Included a list and categorization of which assets were being **monitored** at the beginning of the story, to “set the stage.”
4. Grouped “**Top Concerning**” and recommended action lists together on the right side of the screen as the finale.
5. Leveraged a **Social Media** inspired layout, with a feed of posts in the middle, that aggregated alerts and summarized findings.



HIGH FIDELITY DESIGNS



- ★ We kept everything clean and “**minimal**” so the data visualizations stood out, without feeling cluttered.
- ★ 3 complimentary color palettes:
 - Traffic light for **hierarchical** data.
 - Equal weight, but distinct hues for **categorical** data, that did not include the traffic light colors.
 - Gradients for **relational** data.
- ★ Tested charts for **accessibility** and vision differences, especially when presented as thin lines and dots.
- ★ Introduced **icons** for key concepts.

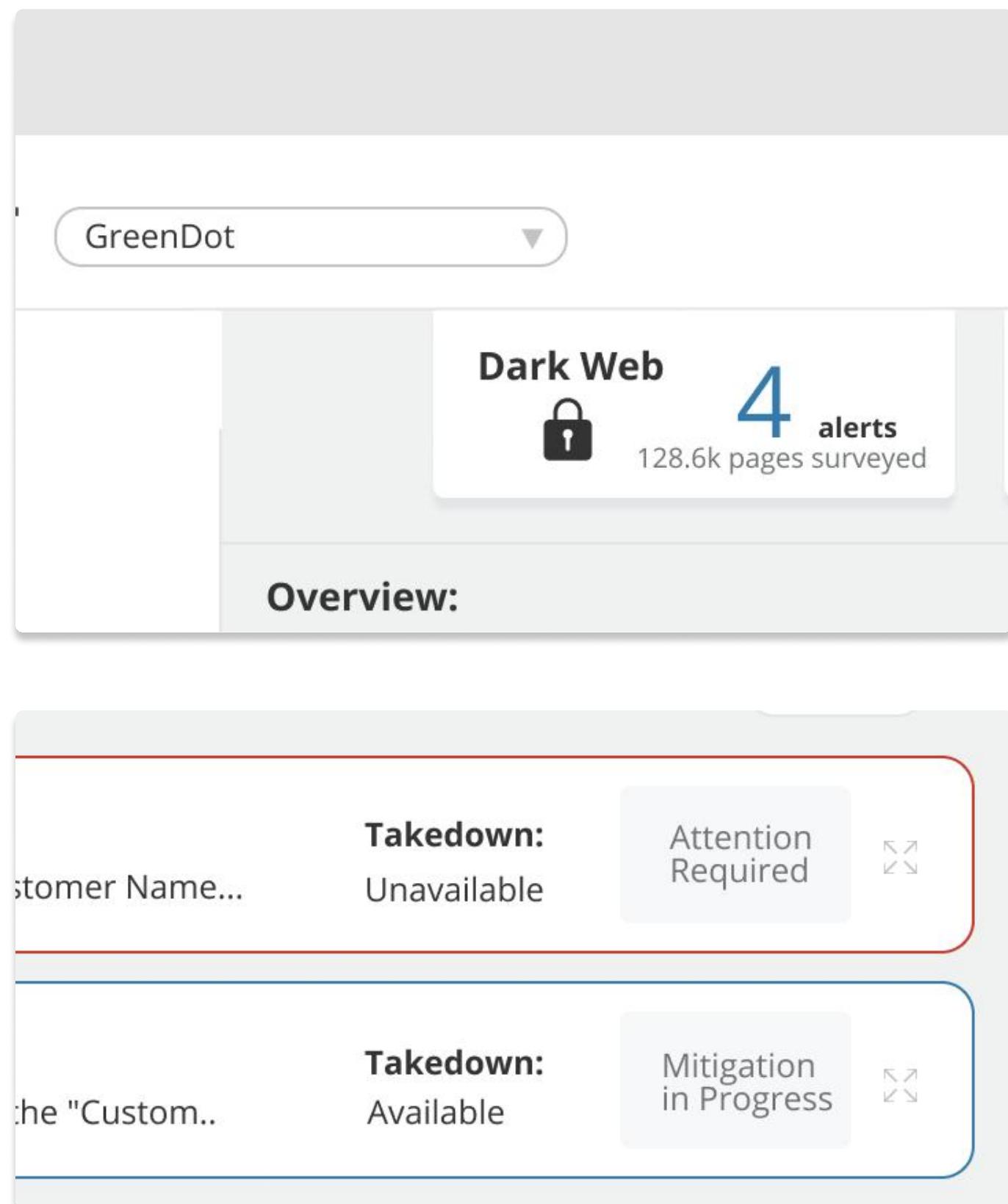
MORE USABILITY TESTING

Once the prototype was built, **usability tests** offered more insights:



- Analysts needed an easy way to easily **switch** between the analyst portal and a client view (without having to login separately.)
- Analysts were frustrated **drilling** into layered details and leaving the original page. They liked the “Recorded Future” style of opening layered modals that they could move and close.
- Analysts wanted **status** of which alerts were already seen.
- Users wanted **in-app messaging**.
- Users wanted **image search**.

IMPROVEMENTS BEFORE MVP

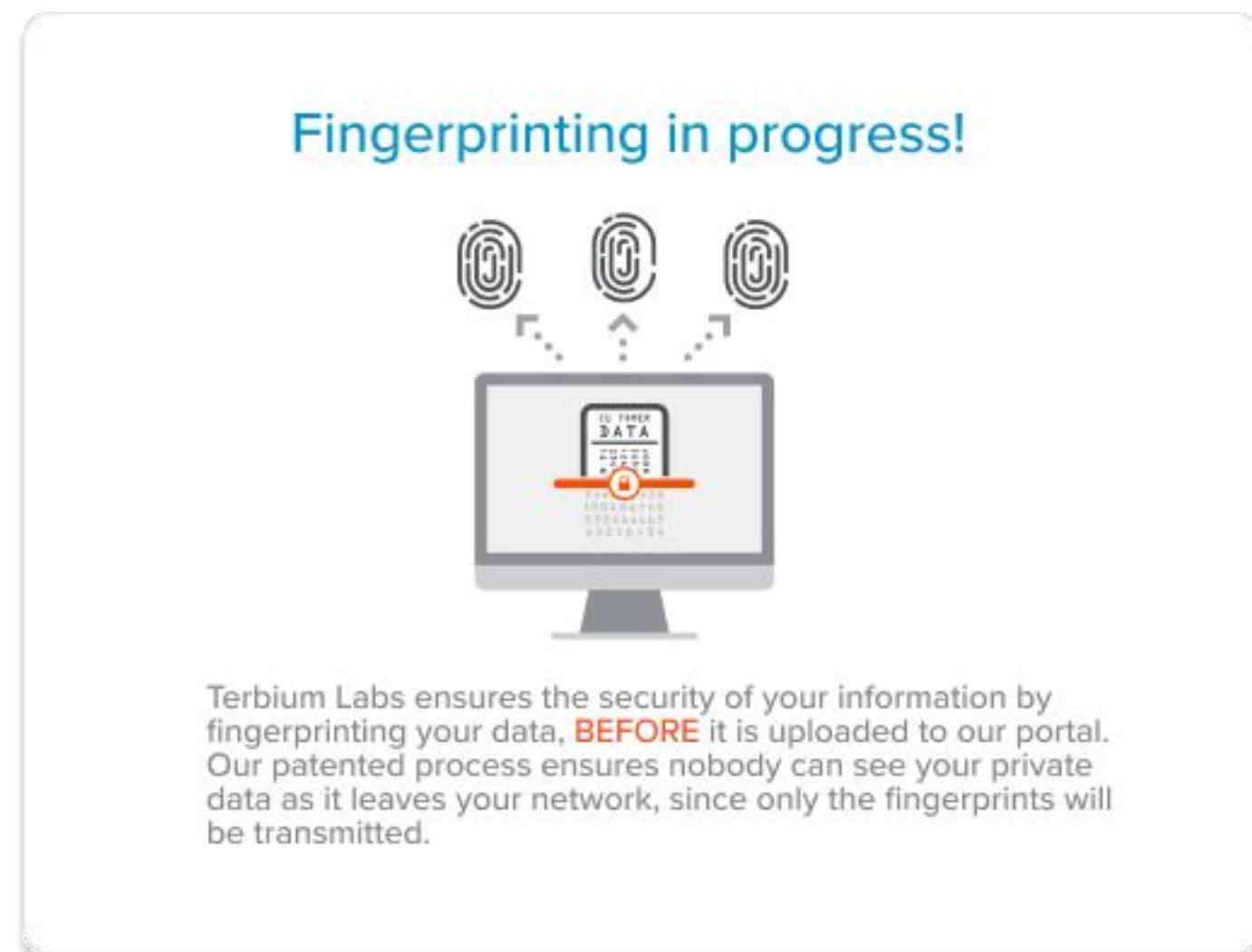


Some features we included in response to initial usability tests:

- ★ A drop-down option to **switch views** between admin portal and client view.
- ★ Alerts opened in **modals** for quick review, comparison and closing.
- ★ Two different kinds of **status**.
 - System generated. We called state.
 - User generated. We called status.
- ★ We introduced a **commenting** feature on alerts, and also included a change log.

ONGOING IMPROVEMENTS

Over the **two years** following our initial release, we introduced many new features based on user feedback and testing. Some updates included:



- Leveraged more opportunities to educate users about “**Fingerprinting**”
- Introduced pre-populated alert **templates**, to streamline analyst input.
- Added a **library** of found sites for automation of alert population
- Developed a system for bypassing **captcha** on dark web sites.
- Capability to identify and merge **mirror sites**, for streamlined reporting.
- Introduced **workflow** capabilities to assign alerts and offer increased status visibility.
- Incorporated dark web **snapshots** to minimize users’ need to access the dark web.

IMPACT



- Customer retention increased **500%** in the first year.
- Analysts were able to increase the number of accounts they could service by **a factor of 5** within one year.
- Sales to new customers increased by a factor of 4 **within 6 months**.
- Customers routinely commented on how easy and **intuitive** the tool was to use.
- Matchlight received **5 stars** on reviews via Gartner.
- Within two years, the product was **acquired by Deloitte**.