

Reporting Overhaul

UX Case Study By Leann Manning

My Role

This project was a strategic for the company. Due to the size and scale of the project, we knew the initiative would span several teams.

As Director of UX, I was responsible for the success of the user experience. In this case, I assigned myself as the lead UX on the project. I conducted the research, created the UI, ran workshops, attended customer calls, and occasionally acted as PM of the project.

Some existing research and a proof of concept were started by another team in my division and shelved in favor of another initiative. I used some of this research to start this new initiative.

Evidence of the problem

Retention

We had a significant amount of customer feedback indicating that the reporting aspect of the product was challenging to use, disjointed from the experience, overly complicated, and not real-time.

A reporting-specific NPS poll showed a rating of -6.

Competition

Competitors in our space were moving to a more real-time data approach.

Tech Debt

We were using a third-party data tool to create dashboards for our product.

This tool was expensive and the company was eager to move away from using it.

The tool was also not meeting our needs from a usability perspective.

Goals and Success Metrics

Goals

Primary Goal:

 Provide administrators with the real-time data they need to decide subsequent actions in a location where the data relevant.

Secondary Goal:

 Move reports off third-party data tool before the renewal date

Success Metrics

- Customer satisfaction on the new reports should be at least a 3.5 out of 5 rating.
- Usage of the new reports should be 25% or higher than the comparable old report within a quarter.
- Usage of the old reports should decrease by 25% or more within a quarter.
- We should see less than 1% of customer losses attributed to the reporting changes.

Discovery Process

Facts, assumptions, questions



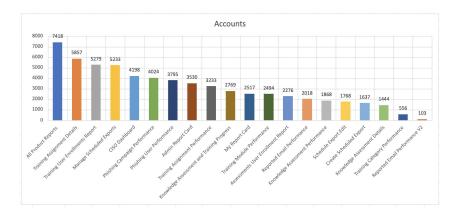
What we know

I had a repository of previous research and customer feedback about reporting. I took that feedback and began tagging customer comments by their mentioned problems. I ended up with a categorized list and feedback count about each issue. This list allowed me to identify the top concerns around reports guickly.

I had usage data for the various reports we wanted to retire. The PM and I quickly identified one report with extremely low usage and decided to try to hide that report and see if we got any customer feedback. We were ready to turn it back on for any customers that complained. We had no complaints, which showed us we likely have a lot of unused data points we could eliminate.

I had a proof of concept for our first real-time report that a previous team had worked on and then shelved. I decided to take that report and provide a beta link to access it from the application to get customer feedback on our direction.

Tags	Simulated Phishin	PhishAlan	Assessmer	Training	Conten	t Reporting	Administration	Total	Tag Definition
Reporting	2	1	. 0		3 (59	0	6	5 User mentioned an issue with reporting
Role-based	0	0	0	() 4	4 0	0		4 User mentioned role-based content
Safelist	0	1	. 0) (0 0	0		1 User wants safelisting abilities
Scenario Based	0	0	0	() 1	1 0	0		1 User mentioned scenario-based content
Scheduled Reports	0	0	0	() (9 4	0		4 User mentioned scheduling reports
SCORM	0	0	0	10) (0 0	0	1	0 User mentioned SCORM
Security Concern	0	C	0	() (0 0	2		2 User has a concern with security around something in the product
Share with Stakeholder	13	0	1	18	3 1	1 31	0	6	4 User mentioned needing an easier way to share some infomation with a stakeholder
SIEM	0	0	0	() (0 0	1		1 User mentioned an integration with SIEM
Simple Report	0	0	0	10) (28	0	3	8 User wants some very basic report metrics. (Ex: who did not complete training)
SMS	0	1	. 0	() (0 0	0		1 User mentioned SMishing
Teachable Moment									
Improvement	1	0	0		0	0 0	0		1 User mentioned teachable momements
Time Zones	0	0	0	() (3	1		4 User mentioned timezones
Timeline	1	C	0) (0 0	0		1 User wants a timeline of information
UI/UX	8	C	0	- 7	7 (47	6	6	8 User mentiioned an issue with the UI, an interaction, or finds something difficult to us
UMA Issue	0	C	0	() (2	0		2 User mentioned an issue with UMA
USB	3	C	0) (0 0	0		3 User mentioned USB simulations
User Fails	29	0	0) (0 6	0	3	5 User wants to see a total fails by user
User Information	6	C	0	12	2 (10	2	3	User mentioned wanting information about users
	_								The second of th



What we don't know

The team realized early on that ripping out a third-party data tool and replacing it with our in-house reports could not be a 1:1 match with data due to performance concerns. The tool allowed some data calculations that we could not achieve on our own.

I had plenty of general feedback that reports needed to be simplified and to highlight specific use cases. However, I needed to discover which particular data points administrators found most critical and determine how they preferred the data to be displayed visually.



Exploring Process

Research and concepts



Research

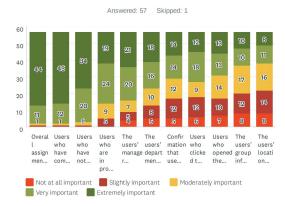
I created several surveys to define specific must-have data for each report type. In the surveys, we asked administrators to rate the importance of various reporting issues and rank particular kinds of data that were most important to them.

These surveys provided a ranked list of data we would need to carry over from each report as well as job stories regarding users reporting needs.

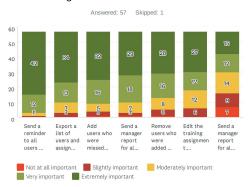
I reviewed secret shopper competitor research to determine what data was needed to compete within the market and what data we had that could make us a differentiator.



Q5 Rate the importance of the following training assignment INFORMATION for an assignment that is IN PROGRESS.



Q6 Rate the importance of the following training assignment ACTIONS for an assignment that is IN PROGRESS.

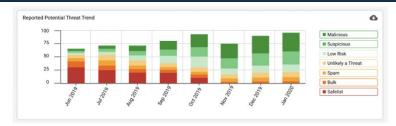


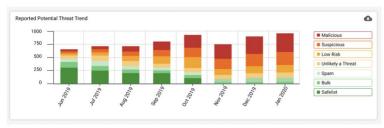
Concepts

I created concept reports based on customer feedback, usage, and survey data and set up customer interviews to review the concepts and gather additional feedback.

I conducted user tests on the various reports to understand if the data we displayed was most important to customers and if the charts and graphs were clear, easy to understand, and shareable with their stakeholders.

I created charting components for our style system for report consistency and for development use.





Questions	P1	P2	P4	P5	P6	Totals
Training						
Training- IN PROGRESS information. On a scale of 1 to 5, 1 being						
not at all easy and 5 being extremely easy, how easy was it to	4					
find that information on the PSAT platform?						2.8
Training - COMPLETED information. On a scale of 1 to 5, 1 being						
not at all easy and 5 being extremely easy, how easy was it to	4					
find that information on the PSAT platform?						2.8
Training - STAKEHOLDER information. On a scale of 1 to 5, 1						
being not at all easy and 5 being extremely easy, how easy was it	2					
to share that information on the PSAT platform?						3.0
User attributes needed:						
Manager Email						
Department						
Location						
Country						
Worker type (Full time, Contractor, Executive)						
Language						
Hire Date						
Users on Leave						
Line of Business						

Align & Decide

Team alignment and scoping



Team Alignment

The team leads gathered and discussed our evidence and the available resources.

We created a hypothesis that we could go from 11 reports down to 4 or 5 real-time reports and still capture the majority of data administrators needed.

Any additional data would be acceptable to deliver to customers within 24 hours and via export only.

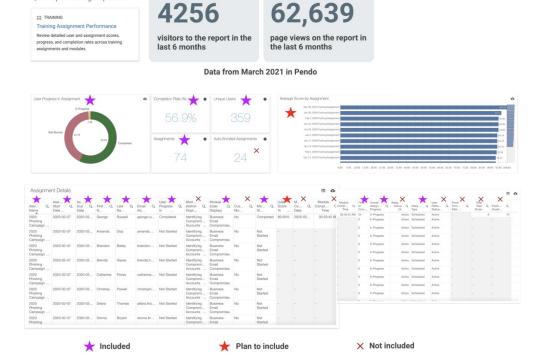


Team Alignment

The team began to discuss which data we believed we could reasonably get to real-time.

We identified various data points that could convert easily to real-time. Some data points could eventually be converted with more database and stored procedure refactoring.

Any other important data was moved to an export-only report which would update every 24 hours.



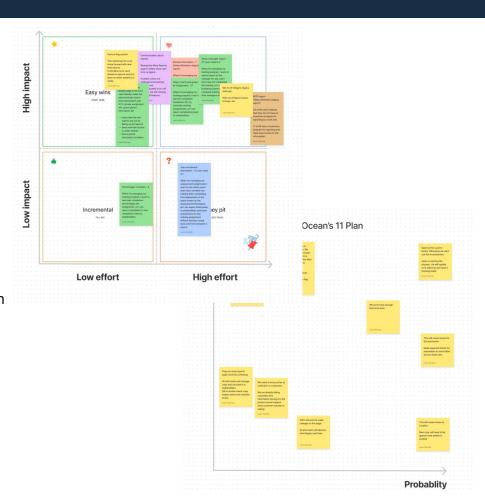
Qlik Report Being Replaced

Scoping

I conducted a series of workshops with the team to prioritize the data and reporting features we planned to include.

We went through an impact vs. effort activity to determine how to build out our reporting roadmap in the time we had.

Using the items identified in the impact vs. effort activity, we went through an impact vs. probability risk assessment activity to identify areas with customer satisfaction risks, technical performance risks, and technical unknowns. This activity allowed us to create mitigation plans for the riskiest issues.



Customer and Internal Alignment

Given the time crunch to turn off the old reports, we decided to be more drastic in messaging customers about the future shift.

We began adding notifications to the product, letting customers know specific old reports would go away and be replaced with new reports. This messaging contained options to leave us feedback.

We also set up various meetings with internal customer-facing teams to prepare them for questions and ask to be included in any customer calls about this topic.

This tactic provided us with two steady streams of customer feedback regarding the switch and any crucial data points or features we missed.

Report Updates

Last Updated: 06/01/2022

Now Available: Custom Properties on Real Time Reports

HIDE -

The following properties are now available on all real-time reports:

- Manager
- · Manager Email Address
- Department
- Location
- · Business Unit.

To add these properties to a real-time report, click "Columns" on the left hand side, under the table and turn on the columns.

All custom properties are now available when you export the real-time Training and Knowledge Assessment Reports. After clicking "Export," choose the columns to include the custom user properties from User Management.

Now Available: Module level data on Assignments

HIDE Y

The Assignment details now shows the modules and the average score of all users on each module. When clicking the module, a panel will open to show how all users in that assignment scored on that module in addition to details of the module itself.

You can export this data and include custom properties, though the five first-class properties are not yet available inside the platform.

Now Available: UPDATED PhishAlarm Analyzer

HIDE ~

The PhishAlarm Analyzer Dasboard now includes more data on reported emails, including:

- Information about the user reporting an email
- · Reported Simulated Threats
- Emails classified as Simulated, Malicious, Suspicious, Low Risk, Unlikely, Spam and Bulk

More information, including trend graphs, is coming soon, so that PhishAlarm Analyzer will have similar information to the legacy Reported Email Performance Report.

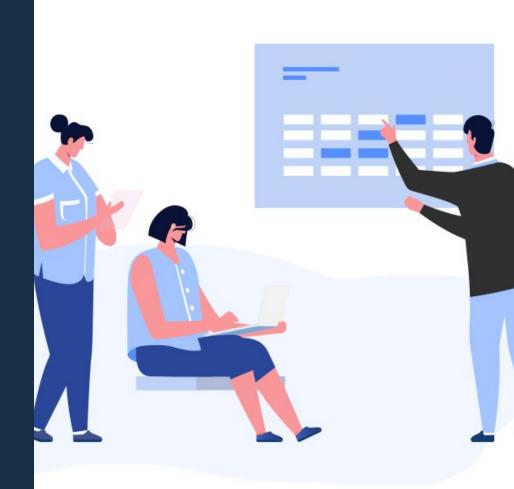
The data for this report will be near real-time and go back two years. Historical data is available exporting.

Now Available: Export-Only Simulated Phishing Reports

HIDE ~

Test & Learn

Test hypothesis and iterate

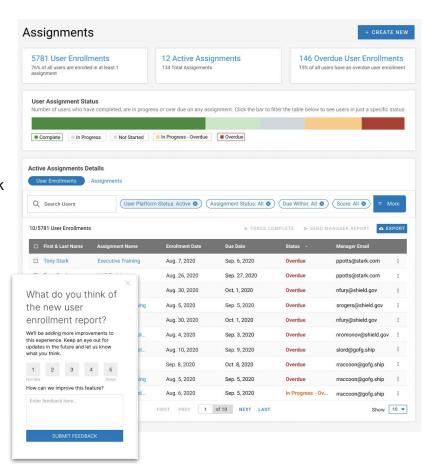


Testing

We began with the first beta report and added additional data and features to take it to general availability. Once the team completed the report, we added customer satisfaction guides to the page and redirected the old report to the new one. We allowed customers to access the old report through a link in the top banner. This feedback banner gave us more customer feedback and any critical escalations from hiding the old report.

We also began converting the old report data to export-only spreadsheets and making those available for the customers who needed 1 or 2 data points we could not provide in the real-time reports.

We repeated these steps for the following three reports, each time tracking usage, customer satisfaction, and any customer loss attributed to reports. We identified various features that needed to be added to the reports at each stage to increase usage and satisfaction and decrease any risk of attrition.



Learning

We did discover some misses with the project. We learned that there were several high-value customers using reports via APIs that did not frequently log into our product. As a result of their infrequent log-ins, we missed much of their feedback and API requirements, which we had to address after the switch.

We also learned that the one report that failed to hit the customer satisfaction and usage goals was not only our least-used product area but also a product area with many customer concerns. We believe this attributed to the failure of this particular report. After the reporting switch, we added new functionality and corresponding reports to this product area.

Now that users had an opportunity to interact with the new reports we discovered some additional features, functionality and data points we needed to explore in follow up releases.

Feature	Approx. Count	Status	Squad
Assignment Actions			
Re-enroll users	7	Partially Designed	
Complete Assignment - User Incomplete	17	In progress	
Force Complete Users	6	In progress	
Archive Assignments	3	In progress	
Exporting Data			
Export Data	2	Done	START
Export Type XLSX	6		PLAM
Export Historical Data	5	Done	PLAM
Export Multiple Assignments Data	2	Done	PLAM
Export to PDF or Word	2		
Export to PowerBI	1		
Export with sort included	1		
Scheduled Exports	17	In Progress	PLAM
Missing Data			
Assignment/Module Scores	30	In progress	Analytics
Module Multiple Attempts	3	Feasibility Concern	
Data By Group	9	Feasibility Concern	
Completion Rate Trend	18	Done	START
Customized Module Column	1		
Force Complete Information	1	In progress	
Module Information	7	Done	START
Non active user information	4		
Percentages in graphs	4	Done	START
Progress per user	1		
User ranking	1		
Time on training	3	In JIRA	START/ANALYTICS
Missing Data - Custom Fields			
Data By Property	138	Done	Analytics/PLAM
Department	41	Done	Analytics/PLAM
Company	21	Done	Analytics/PLAM
Manager / Manager Email	16	Done	Analytics/PLAM
Location	7	Done	Analytics/PLAM
Office	9	Done	Analytics/PLAM
Division	8	Done	Analytics/PLAM

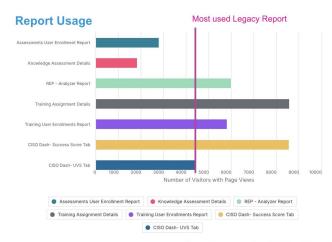
Before & After

Final results



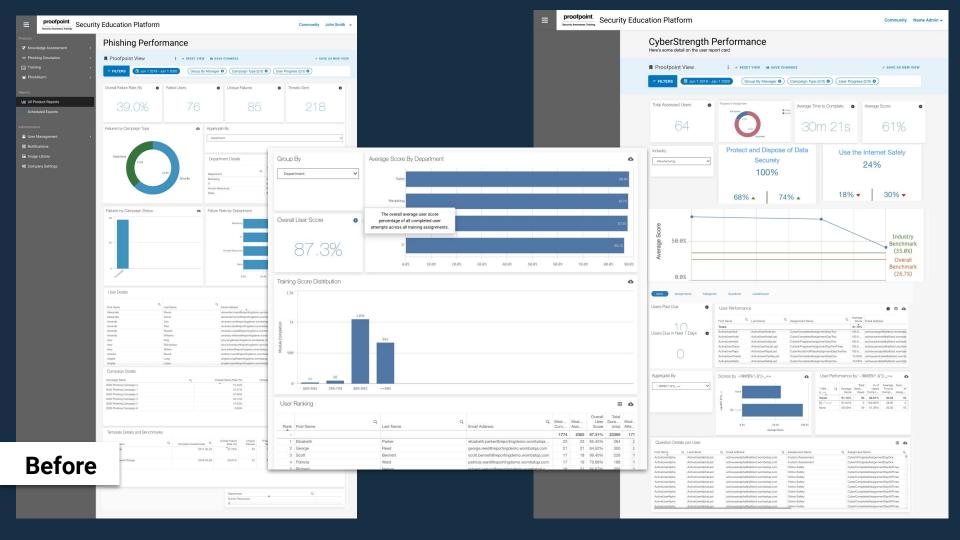
Results

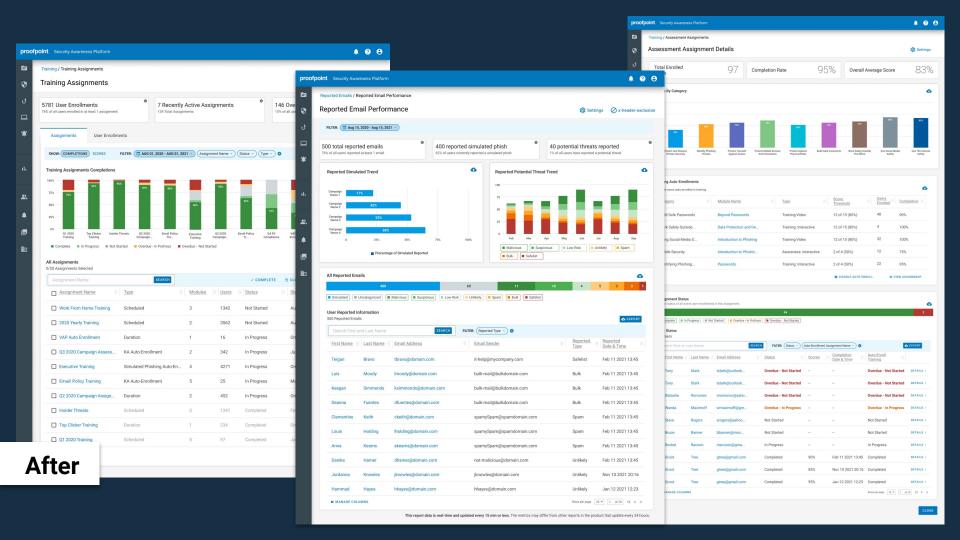
- Customer satisfaction on the new reports should be at least a 3.5 out of 5 rating.
 - All but one of the new reports achieved the satisfaction rating we expected.
- Usage of the new reports should be 25% or higher than the comparable old report within a quarter.
 - All but one of the new reports achieved higher usage than the old report.
- Usage of the old reports should decrease by 25% or more within a quarter.
 - All of the old reports decreased in usage and were deprecated.
- We should see less than 1% of customer losses attributed to the reporting changes.
 - We had no customer loss attributed to reporting during this initiative.



Customer Satisfaction (3.5 Target)

Report	H1	H2
Training User Enrollment	3.6	3.6
KA User Enrollment	3.3	3.1
CISO – Success Score	3.6	3.7
CISO – UVS Score	3.7	3.6
REP Analyzer		3.8





Summary

We succeeded in retiring the legacy reports and removing the third-party data tool.

We reduced the number of reports from 11 to 4 with a refresh rate of 15 minutes or less.

We created these dashboards on pages where users were already managing programs and taking actions versus a separate reporting area of the product.

We took reports with a -6 NPS score and replaced them with reports that mostly received a 3.5 or higher out of 5 customer satisfaction rating.

Throughout the turmoil of switching our entire reporting suite, we successfully communicated with customers and internal teams, resulting in no loss of customers due to the reporting change.

Some missed features affected specific groups of customers, but overall, we captured the majority of data and features needed for customers.