

## CSAT at Scale: The Power of Qual-Quant Collaborations

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In 2022 I co-led a successful internal initiative to measure Customer Satisfaction (CSAT) throughout my employer's web-based Ed. Tech. product. The project, aptly named, "CSAT at Scale" was conceived and driven by my colleague – a Senior User Research Manager– and myself, a Data Science Manager. We've worked together on many projects in the past, and our experience has been that the collaboration between qual and quant disciplines is routinely successful. I elaborate below on CSAT at Scale and how a qual/quant partnership can overcome otherwise insurmountable hurdles.

CSAT is a common metric to study. Through a quick survey, organizations, researchers, and individual contributors can get quick feedback on an experience through paired quantitative (Likert scale "How satisfied are you with <x>?") and qualitative (open-ended "What can we do to improve <x>?") responses. However, few people realize the true potential of the aggregate CSAT metric. In the past, I worked on a data science team devoted *solely* to CSAT: measuring it, predicting it, and making recommendations to improve it. We had imputation models to infer CSAT when no survey response was given. We had machine learning models that would predict CSAT before a score was given. Multiple teams would collectively act upon these scores and predictions to increase Customer Satisfaction throughout the product- which was supported by a 10k+ person organization. In this sort of environment, it becomes obvious that an average CSAT of 4.3 vs. 4.6 can make or break your product experience– and maybe even your executive bonus. Further, when moving from such an environment to a smaller organization *without* a scalable CSAT operation– you realize how much you need one. Thus the beginning of my Ed. Tech. employer's "CSAT at Scale" initiative.

Initially, the CSAT situation with my new employer could be described as "ad hoc". That is, anyone who was interested in measuring CSAT would do so on a whim, at whatever scale they could manage on their own. CSAT was collected randomly, inconsistently, and excessively all at the same time. The data– even though we had a lot of it– was not actionable. In fact, it was not even documented or aggregated in a single place for others to access.

In order to improve the situation we (the User Researcher and Data Scientist pair) started by identifying all the limitations of the current situation, and identifying what would be needed to make the ideal, actionable data set. We did this by leveraging best practices from User Experience Research, Survey Design, Data Analysis, and Data Engineering. Our vision was to measure CSAT at predictable, consistent, and meaningful product milestones in a scalable and privacy-complaint manner.

Prioritization of this project was a key challenge. User Research, like Data Science, is often undervalued by key decision makers– which makes it difficult to obtain project buy-in. To get around this hurdle, we took an agile approach to achieving our vision. We broke our project up into small milestones, where each milestone achieved measurable positive impact such that the project could continue with additional grassroots stakeholder support. Ultimately, some

engineering support was required— but the required work was simple enough that the engineering team became our biggest advocate. Once engineering work was underway, the final step was to convince the ad hoc CSAT survey owners to deprecate their small-scale surveys and transition to the scalable surveys.

Today, the organization measures CSAT over time- and at numerous hierarchical levels. For example, they measure CSAT by product milestone, by course, by audience segment, and by product sub-categories. There are multiple CSAT dashboards relaying this information to internal self-serve stakeholders. They also know what CSAT scores are indicative of conversion to paid product SKUs, and have CSAT benchmarks used to maintain and improve content quality. CSAT is also an available feature in our Machine Learning models for downstream modeling and predictions.

Given these advancements, this project was highly successful. But what made the partnership “powerful”? I’ll be the first to admit that a single successful project does not imply powerhouse duo. But our collaboration enabled more effective processes by unlocking a scalable measure of satisfaction. Doing this without broad support required a clear vision, a specific internal network, and a passion for insight- all of which would be difficult to achieve without a qual/quant collaboration.

A critical piece to getting this work started was the CSAT vision itself. I expect the day-to-day work for data scientists and user researchers to be quite different— but some of the professional hazards are probably the same. For example, as many scientists have had to explain, having a lot of data is not the same as having good data. Similarly, user researchers know that randomly talking to customers is not the same as researching customer experience. So, when it came to the ad hoc CSAT data, the internal assumption was that the data was sufficient because we had a lot of it. Those in the best position to challenge that notion— and to envision something more— were the data science and user research teams.

Regarding our internal network, the main advantage my collaborator and I had was that our networks were similar but not identical. This enabled us to strategize and tag-team meetings where we both knew the stakeholder well, but to lean into the stakeholder meetings that were closer to our primary domain. In practice, this meant I would work closer with data engineering to evaluate ingestion timelines while my collaborator would meet with designers to finalize the survey experience.

The final element that made the qual/quant partnership so powerful was the shared passion for insight. The CSAT at Scale project was not a high-priority among stakeholders. However, user researchers and data scientists are data professionals. It’s our job to empower stakeholders and to advocate for the highest quality information available. But what to do when nobody is asking? The option to do nothing was present— but it would have been the more difficult option given our passion for data and user experience. For that reason, my collaborator and I were compelled to make the CSAT improvements despite the lack of leadership support. Thus is the power of qual/quant collaborations.