

How Human-Centered Design Can Reduce Call Center Cost

Case Study: EQRS Facility Dashboard

Overview

To measure the impact of your organization's Human Centered Design (HCD) efforts, it is important to be able to tie the results of your HCD activities to the revenue that you earn, save, or lose through the conversion funnel.

There are many ways to calculate the Return on Investment (ROI) of HCD:

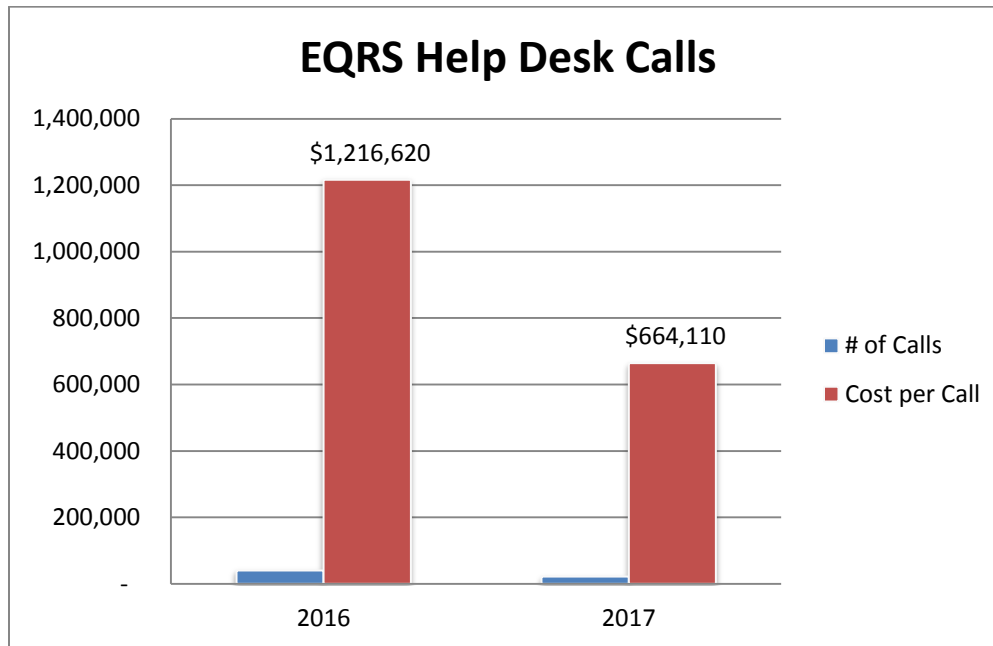
1. Increased productivity
2. **Reduced reliance on help desk**
3. Increased conversion rate
4. Reduced costs of formal training
5. Decreased drop-off rate
6. Reduced learning curve

To demonstrate the ROI of HCD for the End Stage Renal Disease Quality Reporting System (EQRS) facility dashboard design, we will focus on calculating ROI using the reduced reliance on the help desk.

EQRS Facility Dashboard Redesign

The EQRS UX team followed a standard human-centered design process for the facility dashboard redesign. It interviewed users individually and in groups. The team then began to ideate solutions based on user motivations and limitations, as well as technical constraints. The designers created a prototype of the proposed new design in wireframing software. The team tested the proposed design during usability testing, which consisted of computing quantitative data about the effectiveness of the users' ability to complete tasks without seeking help. The proposed design was 94% effective. The same tasks as measured in CROWNWeb had, by comparison, a 72% completion rate, resulting in a 22% improvement in effectiveness.

EQRS launched a new facility dashboard on June 7, 2016. Based on our review of the help desk data, the number of EQRS calls handled by the help desk dropped drastically since the release. Looking at the first full month following the release, the data showed that **the total number of help desk calls dropped by 45%**. To illustrate how the drop can reduce call center costs, we estimated the cost to be \$30 per call. Based on that estimate, the EQRS help desk cost dropped from approximately \$1,216,620 to \$665,110. This drop in cost signals a need to gather actual numbers to be able to accurately reflect and report cost savings. Additionally, it would be useful to measure the average time of each call and if the issue was resolved on the first call. These areas could potentially have cost implications associated with them based on how help desk vendors bill for their service.



	July 2016	July 2017
# of Calls	40,554	22,137
Total Cost*	\$ 1,216,620	\$ 664,110

*Cost based on a \$30 per call estimate.

Summary

The dramatic drop in the number of EQRS help desk calls after the dashboard release proves that the investment of HCD efforts paid off. Based on this success measure, we can predict that without the use of HCD, the cost associated with help desk calls, development rework, and other areas could increase. Continuing and following HCD best practices in projects helps identify challenges up front so that solutions can be found early. According to Dr. Susan Weinschenck, “up to 15% of IT projects are abandoned and at least 50% of a programmers’ time during the project is spent doing rework that is avoidable.” Measuring ROI and HCD success goes hand in hand. HCD success can also be related to measuring users’ satisfaction, since that too can be tied to direct and indirect costs. For these reasons, it is important to create a process where a measurement plan is included in every project plan, especially when the investment and impact are greater.

Implications for future projects:

- Define the types of metrics to collect from various sources e.g., call center, analytics, and user research.
- Select measurable HCD metrics & Key Performance Indicators (KPIs).
- Connect HCD metrics to organizational KPIs.
- Determine the frequency of when to measure and who is responsible for tracking and reporting results.
- Find ways to tie the metrics to product improvements.
- Create an HCD ROI playbook or measurement plan for teams to follow.
- Perform a periodic HCD audit to identify issues and opportunities for improvements.