

Close Enough: Simple Techniques for Estimating Call Deflection

Measuring call deflection is the elephant that simply won't leave the room. It's not possible to measure precisely, but executives want credible numbers anyhow. This article presents a few practical techniques for estimating a call deflection number that passes the sniff test.

As a side note, we write "call deflection" because it's the phrase that is most often used, but there's nothing telephone-specific about it. For the purposes of this article, call deflection also means avoided chat sessions, emails, online case submissions—any contact that requires human attention.



Deflection Is Only Part of It

Call deflection is just one benefit of self-service—and not even the most important. Our research indicates that every time self-service deflects a contact, it also helps ten or more additional customers who never would have called. If you believe as we do that the primary objective of customer service is customer success, this is fantastic news.

Customers who run into barriers using their products become frustrated. Frustrated customers don't buy more from us, don't recommend us, don't expand their deployments, and don't renew profitable maintenance and support contracts. They might even defect to a competitor.

If the issue is mission critical—if email is down, or payroll processing is stuck—they will call to get the help they need. But if their issue is just a frustration, they won't call—even if the overall system is mission critical. Few customers actually enjoy calling support, but if they don't, they will remain frustrated.

Unless...if we have content that they can find easily, and if that content is published quickly, kept up-to-date, and if they can understand and implement its guidance, then we can turn frustration into excitement. Calling the support center makes many technical people feel stupid, but effective self-service makes them feel smart. Customers who feel smart and confident engage more with the product, receive more value, and become increasingly loyal advocates and purchasers.

Nonetheless, support executives need defensible numbers to bring to the CFO. Increasing loyalty is real, but it's nearly impossible to measure. Call deflection is hard to measure, too, but it equates directly to dollars and cents. To continue to invest in our self-service and knowledge strategies, executives must see solid call deflection numbers.



Avoiding the Big Mistakes

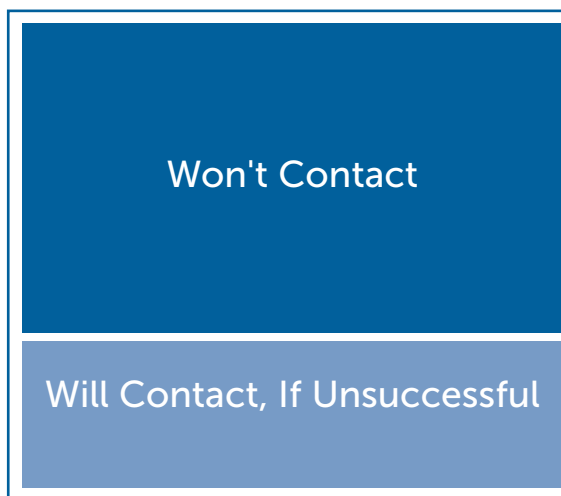
Before diving into the details of measuring call deflection, let us dispel a few myths that we still hear:

- **A document view equals a successful self-service session.** The converse is true: sessions in which no document is opened are almost certainly unsuccessful. However, there are many times that users open documents that seem promising, but don't deliver the goods.
- **Document survey results can be applied across all sessions.** If you're fortunate enough to have three times as many people say "yes, this document helped me," as "no, this document didn't resolve my issue," it's tempting to assume that all self-service sessions with opened documents are 3 out of 4 (75%) successful. Unfortunately, such a small fraction of users complete the surveys that we can't know what the silent majority thinks: our survey suffers from t bias, or the fact that only people who really care take the time to respond. Responders are probably not typical of the population at large.
- **All successful self-service sessions deflect contacts.** As we discussed above, the overwhelming majority of self-service users wouldn't have called, so there's nothing to deflect.

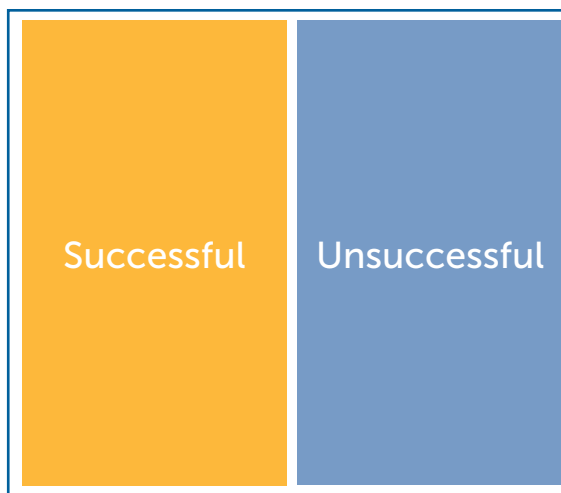


What Is Deflection, Anyhow?

These myths point out the importance of defining what deflection is before we try to measure it. Call deflection is not just successful self-service, but successful self-service when a lack of success would result in a contact. Here's a way to think of it graphically: if the rectangle below is the community of all users who start a self-service session, some fraction have an issue that's so important that they'll continue on to open a case if they don't get satisfaction.



Looking at the same community a different way, some fraction will be successful in self-service, while others won't. Industry success rates run a bit under 50%, according to SSPA Benchmark data and other sources.





Putting these two pictures together gives us a more complete view of what's happening:



In other words, to successfully calculate deflections, we need to estimate both the percentage of users who are successful with self-service and the percentage that would have opened a case. The product of those two percentages gives us our deflection percentage.¹



Estimating Success and Escalation with Surveys

As we said above, we just don't have enough document survey responses to apply them to the whole community of self-service users. So, what can we do to estimate success more reliably?

We can *proactively* survey website users. If entitlement is required to access self-service on your site, then you know who your users are; otherwise you'll have to contact a broad sample of your users population and ask them if they've used self-service search (defining it in terms they will understand) in the last thirty or sixty days.

Because non-response bias is so pervasive, we recommend a phone-based survey, ideally to connect to 200 or so users. This sounds daunting, but it's not bad. Even if you have an intern or survey vendor to help you, make a few calls yourself: it's a good thing to talk to your customers!

Ask your self-service users three simple questions:

- **Thinking about the last time you came to our site, and thinking about the reason you came there, were you successful in accomplishing your goal?**
 - (If yes) If you hadn't been successful, are you entitled to open a case with us, and would you have done so?
 - (If no) Did you eventually open a case with us for that same reason?
- **Is there anything else you'd like to tell us about your self-service experience with us?ⁱⁱ**

There are privacy and marketing considerations involved with surveying customers, so check to make sure you're doing things in accordance with company policy.

You can also check the escalation rate by surveying customers who open cases and asking them if they tried self-service first. The escalation rate should equal the percentage of people who tried self-service first, times the total number of cases, divided by the number of unsuccessful self-service sessions.ⁱⁱⁱ



Estimating Success and Escalation with Clickstream Data

A number of knowledgebase vendors use clickstream analysis to estimate success rates, sometimes using proprietary algorithms, and sometimes using formulas that users can inspect and adjust. They do this by assigning a probability of success to different patterns of behavior. For example, a search with no results presented or clicked might have a zero probability of being successful, where a search with one or two clicks to results, followed by leaving the site, might be 75% likely successful. Especially if this analysis correlates well with survey data, it's useful for seeing changes in success over time.

Even if your technology doesn't do this out of the box, it's possible to write post-processing programs for log files that can perform the same function.

Also, if your support site makes it easy to escalate a self-service session into a case (perhaps through a chat session), those escalations can be counted precisely.

Finally, if your online case opening mechanism provides self-service content during the case submission process, users who stop case submission after looking at self-service content are very likely deflections.

Turning Deflection Into Dollars

We now have a deflection percentage, the success rate times the escalation rate. Applying this rate to the entire number of self-service sessions^{iv} provides the total number of deflections.^v

It's tempting to multiply this number by the average cost of a support incident, but that's not quite fair. Because self-service can only solve known issues, it's best to assume that the cost that was avoided was the cost of a case closed at Tier 1.

We've seen more complex analyses of marginal cost per case; business analysts in your organization can let you know if this is required for you.



Talking About Estimates

Measuring call deflection is the art of measuring something that didn't happen. Accordingly, absolute precision isn't possible. But an estimate that is plausible, reflects increases in self-service adoption or self-service success, and provides a way of thinking about ROI is a giant step forward in giving your leadership chain the tools they need to fight the good fight for your initiative—and your customers.

About DB Kay & Associates

DB Kay & Associates, Inc., helps high-tech support organizations with self-service, knowledge management, social support, and KCS. Customers include IBM, NetApp, Sage, Intuit, Dell, Riverbed, and Oracle. David Kay, its principal, is co-author of the first book on knowledge management for support, *Collective Wisdom: Transforming Support with Knowledge*. He's a certified as a KCS practitioner, coach, and trainer, is a frequent speaker at industry events, and holds five patents in KM for technical support.

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i An assumption baked into this model is that those two factors are independent—in other words, that issues that would be escalated aren't so much harder than the others that their success rate is much lower, for example. We have not seen evidence that these factors are connected in any of the cases we've examined, but it's a good assumption to expose and, perhaps, test.

ii The last question isn't strictly needed to get the information we need, but how can you pass up the opportunity to ask?

iii

$$R_E = \frac{V_C \cdot R_{SSF}}{V_{SS} \cdot (1 - R_S)}, \text{ where}$$

RE = The percentage of people who would escalate from self-service

RSSF = The percentage of people in the support center who tried self-service first

RS = The percentage of people who were successful in self-service

VC = Total cases opened

VSS = Total self-service sessions

This is derived from two straightforward observations: the number of cases that escalate from self-service to the support center is the number of cases in the call center where self-service was tried first

$$\text{Escalations} = V_C \cdot R_{SSF}$$

and (thinking about the rectangle picture) it's also the number of unsuccessful self-service sessions where the user intended to escalate.

$$\text{Escalations} = V_C \cdot R_{SSF} \cdot (1 - R_S)$$



^{iv} The number of self-service sessions can be tricky to calculate if your technology doesn't report on it, or if Google and other Internet search engines are a common way of delivering your support content. If you don't have access to the number of self-service sessions, use the second formula in the footnote below. Generally, we say that a customer who comes to the self-service site or the Internet search site, issues one or more searches, and then leaves, has engaged in one session.

^v If the escalation rate and self-service sessions are known,

$$\text{Deflection} = V_{SS} \cdot R_S \cdot R_E$$

If only the answer to the "Did you try self-service first" in the support center is known,

$$\text{Deflection} = \frac{V_C \cdot R_{SSF} \cdot R_S}{(1 - R_S)}$$