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# Applying Problem Analysis to Troubleshoot a Customer Complaint

## Purpose

To apply process ideas and techniques to a type of problem you routinely face.

## Introduction

Often you find that customers call up with the same type of problem, but you do not know whether the problem has ever been successfully resolved. Sometimes, you are not sure whether the problem should be escalated for consideration by management. At other times, you wonder why replacements are being sent out so frequently when the problem should be thoroughly investigated and the cause of the problem determined once and for all.

## Process Overview

The key process steps for troubleshooting a customer complaint are:

- Describing Background
- Specifying the Problem
- Routing the Complaint
- Selecting Containment Actions
- Closing Out and Documenting

## Describing Background Instructions

This is a key step in involving others in resolving and communicating your results. As a result, think through the Problem Analysis background statement to make sure it has the most appropriate links to other information.

To maximize the benefits, you have to adopt different points of view, and ask what information others might want from you.

Consider the product or service that is the focus of the complaint, and ask:

- Which products, product families, platforms, or projects could be affected?
- Which people, departments, or divisions could be affected?
- Which customers or clients could be affected?
- Which information systems could be affected?

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- Which strategic initiatives (complexity reduction, cost reduction, operational improvement) could be affected?

Then write the background as if it were a story, starting in the past and moving toward the present. Keep it simple, and keep it relevant.

There is one pitfall to avoid here: biasing the problem analysis with premature and inaccurate data about potential causes. Stick to the symptoms until you have verified the cause. In the early phases of troubleshooting the focus is on gathering the facts. Trust that the facts will lead you to the cause.

"When the going gets tough, the tough take really good notes." How many times have you solved the same problem over and over again because no one ever told you they had dealt with it last week? Complaints grow tentacles that reach deep into the organization. Use the background section to communicate the problems to others involved.

## Specifying the Problem

Problem Analysis begins with the first phone call, e-mail, or fax that comes in about the problem. Every question you ask should be tied to WHAT, WHERE, WHEN, and EXTENT. Your Problem Analysis efforts may be delayed to contain the problem, but sooner or later you have to ascertain the cause.

A note on timing: you may be deciding on what the routing is and what the containment actions should be while you are still engaged in the Problem Analysis. These are parallel tasks in handling a complaint. But the data in the Problem Specification is what will drive the decisions on escalation and containment and attention should be paid to getting it right.

Follow these key points to get the process off to a good start:

- Beware the effects of the "triage culture"  
*One function of a Help Desk or Call Center of any kind is to gather data to assess the causes of new problems. Another function is to gather data to confirm the causes of existing problems. These two objectives of calm, sober analysis and under-the-gun triage can conflict. This can be accentuated even more by "the experience trap," in which personnel who do nothing but handle problems all day can jump to cause prematurely because "we see this one every day." It is crucial to separate whether each call is "a new problem" or "another instance of Problem X." A close questioning of the IS NOTs can help avoid this.*
- Get a good Problem Statement  
*Having the correct object and accurate deviation is crucial to the process. "Device is dead" or "Device doesn't work" does not add much to our knowledge. A wrong statement can lead you far astray. Focus on clear facts, on functionality, and rule out other possible symptoms and their causes with the IS NOTs.*

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- Pay particular attention to the meaning of "WHERE...geographically"  
*Sometimes what is relevant is WHERE the product or service was acquired; this can suggest causes in the distribution chain, like shipping, handling, storage, or display. Sometimes it is WHERE it is being used; this can be associated with environmental factors.*
  - Pay particular attention to "WHEN...first observed"  
*Answers to this question can rule out many false causes. Customers' answers may need some "sharpening." For example, WHEN they bought it may be different from the WHEN they first tried to use it.*
  - Pay particular attention to "WHEN...in the life cycle"  
*This question can get at important data about cause by narrowing your search to certain parts of the production or distribution process. For the IS NOTs, be creative in asking: "Where might someone have spotted this deviation at another part of the process?" to rule out other possible causes.*
  - Initial EXTENT data may be spotty. Be cautious of over generalizing based on this, and make sure to plan to capture all the data.  
*At some point in the data gathering process, you may have to switch from passive data collecting to active information seeking. This can include calling key customers and having them test or examine products, having the factory check their production records or QA logs, or having distributors dig through their records. Make sure you have a plan for gathering data that is missing, and a way of keeping the data you are working on up-to-date.*

Everything else that is done in handling a complaint builds upon an accurate and complete specification of the problem. Many Help Desks or Call Centers have a built-in "triage culture" that may get in the way of sound problem analysis.

## Routing the Complaint

In any business, there are "low-level" complaints, problems for which you already know the cause, problems for which a fix has already been decided; problems that are one-time random occurrences of little seriousness. And then there are the "red alerts," where a key product is experiencing a damaging failure in increasing numbers. This is when you "escalate" the problem, call in the experts, and convene management.

The chaotic moment when the calls are swamping the board is not the time to calmly decide on what criteria ought to determine whether a problem gets "escalated" or not. These criteria should be agreed upon in advance, before the product was even launched, as part of a Potential Problem Analysis. They are the "triggers" that kick off contingent actions like refunds, repairs, or recalls.

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Some key factors in selecting the criteria for escalation include:

- To what degree is safety involved?  
*Escalation is a MUST if our product or service is associated with injuries.*
- How strategic is the product or service receiving the complaint?  
*A minor defect in a product we are discontinuing is less threatening than a problem with the first generation of a whole new platform of products. Overall impact is partly a numbers game—the greater the number of products out there with the problem the higher the costs can soar.*
- How disabling is the defect?  
*Has the defect impacted the product's ability to function as it was designed to? Or is the defect cosmetic only, and not functional? Can customers live with it, and be compensated somehow, or will they have to send them all back?*
- What are the trends associated with both the object and the defect?  
*Is the return rate increasing? Is the number of defects on each problem object mounting? If either is happening, do you know why? Even if you do, a negative trend in either element can be a sign of a problem running out of control.*
- How embarrassing is the problem?  
*Some problems don't have much direct impact on people or profits, but can become a public relations nightmare. If it strikes at your basic beliefs or mocks your core competencies, it may need special attention.*

There should be no more than three to five criteria for escalation, and they should be set at measurable levels for each product or service and made visible in the Help System and all its systems.

Once you have decided on whether to escalate the problem, you have to clarify who ought to be involved in its resolution:

Which functions/teams/people have information about the cause of the problem?

What can we tell them so far?

What do we need to know from them on the problem specification? By when?

Which functions/teams/people could help validate the cause of the problem?

What testing will we need done?

What resources would be required?

What lead-time/prep-time is required?

Which functions/teams/people are affected by any containment action?

What can we tell them so far?

What do we need to know from them? By when?

*How can they contribute to clarifying objectives or evaluating alternatives?*

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Which functions/teams/people are responsible for implementing containment actions? How can we keep them informed?

What do we need to know from them? By when?

How can they contribute to clarifying objectives or evaluating alternatives?

Then, decide how to involve these people.

Can they participate via phone, e-mail, video-conferencing?

Do they have to be physically present to help?

What are our time-constraints?

## Selecting Containment Actions

This is a Decision Analysis, and there is a wide range of possible alternative courses of action from watchful waiting to total recall. The situation—specifically, the data in the Problem Specification—should drive this.

If you've pre-set escalation criteria, you have probably also planned your potential containment actions. Then again, sometimes things happen that nobody could be expected to predict: we all remember the Challenger Space Shuttle and the Tylenol scare. Things will go wrong.

If you need to decide under time pressure, stick to simple strategic criteria and alternatives with which you have had successful experience. Most businesses report that they wish they had taken the time to get it done right, at the start. It may help to open a Decision Analysis template, convene an e-meeting, and thrash it through.

Some points to consider:

- Make sure you know what the problem is  
*There is a common error of misdiagnosing the problem, and then mis-prescribing for it. You may have to decide to do something, or at least say something, before you fully understand the cause. But know what it is that you do know about it, and know if that's enough to take action. There are situations in which this is "mission critical"—Is that a phalanx of unfriendly ICBMs coming over the Pole or is it a flock of geese?—but there are few situations where this is trivial.*
- You're not selecting an action but a "course of action"  
*Here's where good trend data can have an effect. Your first response, second response, and third response should fit together into a strategy, and should be triggered by specific trends or thresholds in the data. Consider whether each containment action is reversible, whether it can be over-ridden, and how. Do they build seamlessly, or do they make you appear as if you are thrashing around, trying things out?*

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- Beware the “solution-caused problem”  
*Do not implement until you have asked “What might go wrong?” Does the containment action really contain the problem? Is there any way it could promote it? A full use of Potential Problem Analysis can help here.*
  - Consider the “up-side”  
*Just as the Chinese define a “problem” as “opportunity riding a dangerous wind,” so too can you redefine the issue. Are there any positive consequences that could arise from this? How could we promote them? A quick Potential Opportunity Analysis might pinpoint some ways to make your containment actions more palatable, or might unearth some alternatives you had not considered.*

## Closing Out and Documenting

The complaint isn't fully “closed out” until you have verified the cause and resolved the complaint to the customer's satisfaction, but you do need to close out your own session with the problem so that others—other shifts, other departments, management—can take it from here.

Some key points to consider include:

- Be clear about what you know and what data is still missing  
*Others cannot know what to look for without details specifying what's missing. Ask who can get this data, and who needs to supervise them, then copy both.*
- Be clear about the state of the investigation  
*It's tempting to say, “Sure, we know what this one's all about.” But if the cause turns out to be different from what you suspected, you haven't advanced the cause. Indeed, crucial time can be lost to false hopes for a quick resolution. Remember that it takes no time at all to get the wrong cause.*
- Make the problem “visible”  
*Different organizations have different ways of doing this, but, for a problem that is growing in impact, it's important to “make it stand out above the clutter.” Clarify the costs and less tangible impacts in a way that helps others set priority.*
- The containment action needs follow-up, too  
*What should we monitor to know that the containment action is actually containing the problem? What could go wrong, and how will we know that it's starting to? These steps need to be put in place and communicated to others who are involved.*
- Decide on message and status  
*What, if anything, do we need to communicate to the “wider world”? What is our message? Do customers or others require status updates? By when?*

A complaint is a relay race, and relay races are won or lost in the hand-offs.

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## Instructions

1. As you begin to handle a complaint, consider:

- Who should be involved in analyzing the cause of this complaint?
- Who should be involved in deciding on the containment actions for this complaint?
- How do you involve them?
- What other references could you consult?

Describe the complaint background.

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2. As you dig into the cause of the complaint, consider:

- What kinds of factors drive getting a good Problem Specification?
- What would a good initial specification look like?
- What other references could you consult?

Complete a Problem Specification for the complaint. Use the Problem Analysis process card to help you complete the specification.

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3. As data comes in about the symptoms, having a consistent process to decide on priority and to attack complaints accordingly is crucial to successful resolution.

As you make this decision, consider:

- What kinds of objectives should drive complaint "escalation?"
- What would an effective escalation process look like?
- What other references could you consult?

Select the criteria you will use to escalate "red alert" complaints. Then decide whom to involve and how to prioritize the complaints.

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4. There are two purposes of containment

- To minimize the seriousness of the problem
- To buy time to analyze the cause of the problem

As you make this decision, consider:

- What kinds of factors drive successful containment?
- What would that look like?
- What other references could you consult?

Select the containment actions you will take for your customer's complaint. Use the Decision Analysis process card.

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5. As you prepare to hand the complaint off to the next shift or the next level, consider:

- Who should be involved in following up the Problem Analysis?
- Who should be involved in following up the containment actions?
- How do you involve them?
- What other references could you consult?

Describe the action you will take to close out and document the complaint. Indicate who will be involved and what they will do.

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