Practical Implementation of Rational Process

You know the What? Why? How? of Situation Appraisal and Problem Analysis, now for the When. For most people, grasping the concept of Situation Appraisal (SA) and Problem Analysis (PA) is not overly demanding. Practice on some carefully constructed case studies and, more importantly, application of these techniques to real life issues during the workshop can help to bridge the gap between theory and practice.
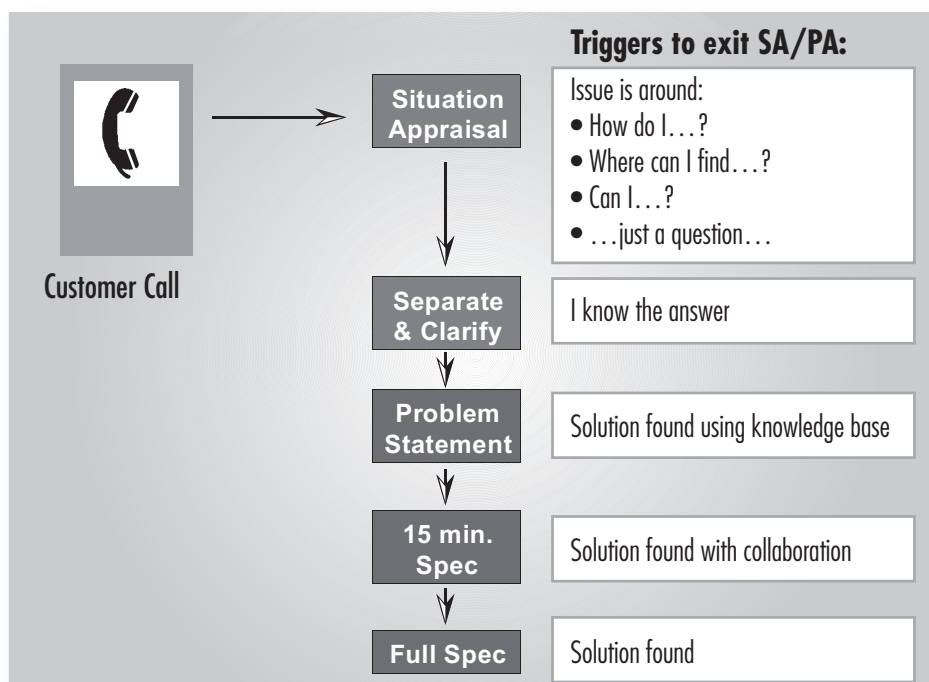
However, when the workshop participant returns to his or her desk, all too often, the demands of the job afford them little or no time to think about applying the process, let alone time to use the process, on real life case studies. "Situation Appraisal/Problem Analysis takes too long" is an all too familiar refrain.

Appropriate use of process

KT does not propose that people use process indiscriminately—far from it. What KT proposes is appropriate use of process. One question that is often asked is "When should I use KT Resolve?" This, in fact, is the wrong question! Remember that KT Resolve comprises four individual thinking processes—therefore the question should be "When should I use Problem Analysis?" or "When should I use Decision Analysis?" Each thinking process will have its own set of triggers—a feedback system that encourages the agent to use the KT thinking processes effectively.

These triggers are usually either time related or event related. For example, an organization may stipulate that if a case has been open for more than 4 hours, then the minimum expectation is that the supporting engineer will have put together a basic PA specification; alternatively the same expectation may be set if a supporting engineer wants to 'escalate' the case to the next level of support.

Triggers can also be used to inform supporting engineers to stop using a KT process. This is especially (but not exclusively) true for Situation Appraisal. Whereas PA, DA and PPA/POA require triggers to start the analyses at the appropriate time, the default setting for SA is 'on'. Hence, in SA we need to identify triggers that tell agents to stop using the process—to avoid 'analysis paralysis'!

	Triggers to exit SA/PA:
Customer Call → Situation Appraisal	Issue is around: • How do I...? • Where can I find...? • Can I...? • ...just a question...
Separate & Clarify	I know the answer
Problem Statement	Solution found using knowledge base
15 min. Spec	Solution found with collaboration
Full Spec	Solution found

What to use when?

In much the same way that the Pareto principle (80:20 rule) can be applied to almost any facet of a business, equally it can be applied to Problem Analysis. Anecdotal evidence shows that in 80% (or often more) of cases, issues can be resolved in a relatively short period of time—analysis would show that these 80% of cases would take up 20% of the organization's technical support capacity. Conversely, 20% of cases will consume 80% of available technical support capacity and it is at these cases that PA is targeted. Even then it is not necessarily the case that the whole PA process will need to be used to find root cause.

Problem Analysis

The following table may be useful in determining how much Problem Analysis to use based upon different situations:

Situation/Trigger	Recommendation	Rationale
ALWAYS	An accurate, concise problem statement	To ensure no ambiguity as to the nature of the problem exists between the agent and the customer To clearly identify the object and the deviation (i.e. what's wrong with what) To facilitate the compilation of the specification To improve the quality of the knowledge base to simplify the search process
"I know the cause"	Fix it. Think beyond the fix	If the agent 100% knows the cause of the problem then PA is not the appropriate tool. Selecting the most appropriate fix and thinking about risks and opportunities when applying that fix should be uppermost in the agent's mind.
"I think I know the cause"	Confirm true cause	If the agent can confirm true cause through verifying any assumptions, observing the problem, recreating the problem on a test system, or by being able to demonstrate cause and effect then again the formulation of a full problem specification may be unnecessary.
"I have some ideas of cause"	Specify the problem, identify possible causes, test possible causes, determine most probable cause	Here, it is necessary for the agent to test a number of possible hypothesis against the facts as laid out in the problem specification before identifying the most probable cause for further testing.
"I have no idea of cause"	Use full PA process including distinctions and changes	In this situation, it is impossible for the agent to rely upon knowledge and experience. Identifying distinctions and related changes will give the agent additional information from which he can speculate as to possible causes.