SG | Intake - Understand the Issue

■ Step 1 - UNDERSTAND THE PROBLEM

Q1 LISTEN	WHAT IS THE ISSUE? WHAT SERVICES ARE DEGRADED? Get the major concern as it is stated by the information source	
Q2 CLARIFY	WHAT EXACTLY DO YOU MEAN BY[Q1]? WHAT DO WE SEE OR MEASURE THAT TELLS US THERE A DEVIATION EXISTS? Clarify the issue stated by listening and recording. Avoid interrupting. Are there other issues occurring? What else can you tell me so that I fully understand the issue?	
Q3 OBJECT	WHICH SPECIFIC OBJECT/SERVICE/THING IS EXPERIENCING THE SYMPTOM? Be specific. Which system, app, process, component, function, method or part of a process is not working? IT: Which OS, version, patch level and platform? What kind of instance, upgrade, new, virtual? Which specific version of the application, which configuration/settings? OE: Which tool, machine, model, and configuration?	
Q4 GOOD SHOULD	WHAT IS THE NORMAL BEHAVIOR OF [Q3]? Clarify the should. What benchmarks exist? What is the normal state like?	
Q5 DEVIATION	WHAT IS THE CURRENT BEHAVIOR OF [Q3]? Be specific. What exactly is happening? What is the error code? Alert? What do you see? How do you know this is a departure from the expected performance? Is this statistically significant and/or different from [Q4]?	
PROBLEM STATEMENT	Combine [Q3] + [Q5]	

■ Step 2 - SET PRIORITY (Optional)

WHAT IS THE CURRENT IMPACT AND CLIENT EXPERIENCE? IT: # OF USERS IMPACTED? SERVICES AFFECTED? OE: YIELD, QUALITY, COST, SCHEDULE, CTB, MPS, WIP? Record current impact to this moment in time. What evidence does the information source have to back up their claims?	WHAT IS THE EXPECTED OR ANTICIPATED IMPACT FROM NOW INTO THE FUTURE? How is this issue expected to grow based on knowledge and experience? Will the seriousness change? Get worse? Disappear?	WHEN WILL THE IMPACT CHANGE? Date/Time format only. When will we breach SLA to the client? When is the future impact expected to occur? Do not use ASAP.

SG | Analyze & Understand the Issue

■ Step 3 - BLUE SHADED = 1st Priority , PURPLE SHADED = 2nd Priority

- A) Gather IS and IS NOTs
- B) Document Possible causes (optionally use Distinctions and Changes)
 C) Evaluate Causes by testing against IS and IS NOTs

WHAT	WHAT IS Facts regarding specifically what is observed	WHAT IS NOT Reasonably could be, but IS NOT being observed	Distinctions What is different, odd, special, unique, or peculiar about the IS compared to the IS NOT? Record new data that is factual to the 'IS' ONLY.	Changes What changed in, on, or around each the distinction? What else?	When did this Change?	Possible Cause #1		Possible Cause #2		Possible Cause #3	
Specific Object / [Q3] Which system, process, tool, machine, software, application, component or function?						□ Yes bc □ No bc □ Yes if		☐ Yes bc ☐ No bc ☐ Yes if		☐ Yes bc ☐ No bc ☐ Yes if	
Specific Deviation/[Q6] What exactly is happening? What specific defect, error message, fault?						□ Yes bc □ No bc □ Yes if		☐ Yes bc ☐ No bc ☐ Yes if		☐ Yes bc ☐ No bc ☐ Yes if	
WHERE	WHERE IS Facts regarding specifically what is observed	WHERE IS NOT Reasonably could be, but IS NOT being observed	Distinctions What is different, odd, special, unique, or peculiar about the IS compared to the IS NOT? Record new data that is factual to the 'IS' ONLY.	Changes What changed in, on, or around each the distinction? What else?	When did this Change?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?
Where Geographic? Where is the system, process, tool, machine, software, application, or hardware component located? Which line, facility, room, and location? Where in network or process diagram? Which device, physical disk, VM, port, rack, router, access level, group, VLAN?						□ Yes bc □ No bc □ Yes if		□ Yes bc □ No bc □ Yes if		□ Yes bc □ No bc □ Yes if	
Where on the Object [Q3]? Which component, screen, tool, application, module, component, line of output, procedure/function does the deviation appear on the object?						☐ Yes bc ☐ No bc ☐ Yes if		☐ Yes bc ☐ No bc ☐ Yes if		☐ Yes bc ☐ No bc ☐ Yes if	

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WHEN	WHE Facts regarding s obse		WHEN IS NOT Reasonably could be, but IS NOT being observed	Distinctions What is different, odd, special, unique, or peculiar about the IS compared to the IS NOT? Record new data that is factual to the 'IS' ONLY.	distinction? What else?	When did this Change?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?
When first observed? What time/date did customer, user, logs, or monitoring FIRST confirm the deviation?							□ Yes bc □ No bc □ Yes if		□ Yes bc □ No bc □ Yes if		□ Yes bc□ No bc□ Yes if	
When Since observed? How often does the deviation show up in samples, on the production line, in log files or in trace?							□ Yes bc □ No bc □ Yes if		□ Yes bc □ No bc □ Yes if		☐ Yes bc☐ No bc☐ Yes if	
What Pattern? Chart all deviations at different time intervals (seconds, minutes, hours, days, weeks, months, quarters, years), shifts (AM, PM, Overnight), and lifecycles. What evidence do you have of pattern?	Continuous Sporadic Periodic One Time Even	t										
When in the Lifecycle? At what physical or virtual step, line, inspection process, point in the install, boot up, startup, shutdown, transaction, authorization, or use does the deviation occur?							□ Yes bc □ No bc □ Yes if		☐ Yes bc ☐ No bc ☐ Yes if		☐ Yes bc ☐ No bc ☐ Yes if	
EXTENT	EXTENT IS Facts regarding specifically what is observed	TREND	EXTENT IS NOT Reasonably could be, but IS NOT being observed	Distinctions What is different, odd, special, unique, or peculiar about the IS compared to the IS NOT? Record new data that is factual to the 'IS' ONLY.	distinction? What else?	When did this Change?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?		If this is the true cause of the problem, how does it explain each of the IS and IS NOTS?
How Many Affected? How many products, lines, users, groups sessions, applications, systems, or transactions are affected?		IncreasingDecreasingStable					□ Yes bc□ No bc□ Yes if		□ Yes bc□ No bc□ Yes if		☐ Yes bc☐ No bc☐ Yes if	
What is the size of the deviation? How much of the product, data, session, transaction, CPU load, memory is affected by each deviation?		IncreasingDecreasingStable					□ Yes bc □ No bc □ Yes if		□ Yes bc □ No bc □ Yes if		☐ Yes bc☐ No bc☐ Yes if	
How many instances of each deviation on the object? How many defects, errors per user, per session, per transaction?		IncreasingDecreasingStable					□ Yes bc □ No bc □ Yes if		□ Yes bc □ No bc □ Yes if		☐ Yes bc☐ No bc☐ Yes if	

SG | Design & Track your Trials/DOEs



				Most Probable Causes					
Trial / DOE	Result Summary	DRI	NEXT CP	Possible Cause #1	Possible Cause #2	Possible Cause #3			
[Description of Trial]	Describe trial and effect on response.			no data	suggests	no data			
[Desciption of DOE]	Describe active factors and effect on responses.			no data	no data	no data			
	[Description of Trial]	[Description of Trial] Describe trial and effect on response.	[Description of Trial] Describe trial and effect on response.	[Description of Trial] Describe trial and effect on response.	Trial / DOE Result Summary DRI NEXT CP Possible Cause #1 [Description of Trial] Describe trial and effect on response.	Trial / DOE Result Summary DRI NEXT CP Possible Cause #1 Possible Cause #2 no data suggests			

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SG | Execute and Fix the Issue

■ Step 4 - DECIDE ON BEST SOLUTION

Solution Description What do we think will Restore Service(s)?	Priority Based on Confidence	When did we Attempt? Alt-Shift-F	Result? Success/Fail/New Outage?

■ Step 5 - IMPLEMENT FIX - PLAN ACTIONS TO PREVENT SECONDARY OUTAGES

WHAT ARE THE LIKELY REASONS FOR THE FIX TO GO WRONG?	WHAT COULD YOU DO TO PREVENT EACH REASON?	WHO IS ASSIGNED TO THIS ACTION?

Step 6 - IMPLEMENT FIX - DOCUMENT A BACKUP PLAN

HOW WOULD YOU KNOW THAT A PROBLEM IS OCCURING DURING THE FIX? Brainstorm for each level of seriousness (Spark = Small Impact, Inferno = Major Impact)	WHAT ACTIONS WILL BE TAKEN BY THE TEAM TO MINIMIZE IMPACT IF THIS OCCURS?
Spark:	
Flame:	
Fire:	
Inferno:	

SG | Prevent the Issue from occurring again

■ Step 7 - THINK BEYOND THE FIX

WHAT CAUSED THIS PROBLEM?	
WHAT OTHER DAMAGE COULD THIS CAUSE CREATE?	
WHERE ELSE COULD THIS CAUSE CREATE A PROBLEM OR INCIDENT?	
WHAT CAUSED THE CAUSE?	
WHAT IDENTICAL THINGS REQUIRE THE SAME FIX?	
WHAT PROBLEMS, IF REMEDIATED WOULD PREVENT REOCCURANCE?	

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