



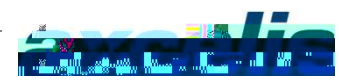
Supplier Quality Collaborative Efforts for Problem Solving

SUPPLIER IMPROVEMENT COMMITTEE: CO-MAKERSHIP INITIATIVE

July 23, 2020

QUALITY SYSTEMS

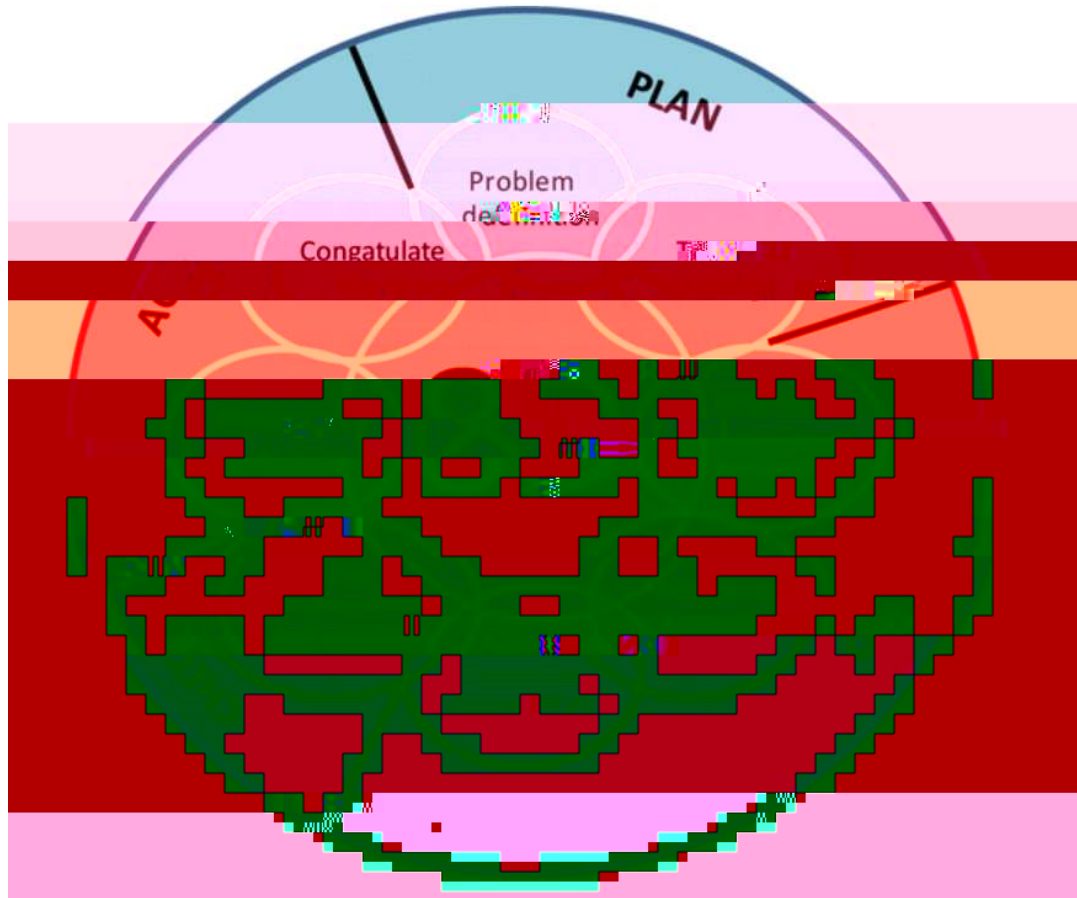




Purpose



8 Disciplines of Problem Solving PDCA Model



- D1 – Define the Team**
- D2 – Describe the Problem**
- D3 – Interim Containment Actions**
- D4 – Root Cause Analysis**
- D5 – Corrective Action(s)**
- D6 – Verification & Implementation**
- D7 – Preventive Action(s)**
- D8 – Congatulate the team**

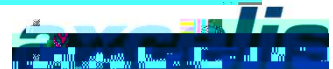
D1- Define the Team

It is imperative to have the right team to solve the problem Things that we must consider while defining the team to solve a problem are

The team is cross-functional

The right Team Leader will drive the team to solve the problem efficiently and effectively

The team should not be more than 36 people unless the problem has an enormous scope



D2 Describe the Problem

The key to success in problemsolving is to have the right problemstatement upfront. The excellent problemstatement covers all the details in terms of

WHO,

WHAT,

WHERE,

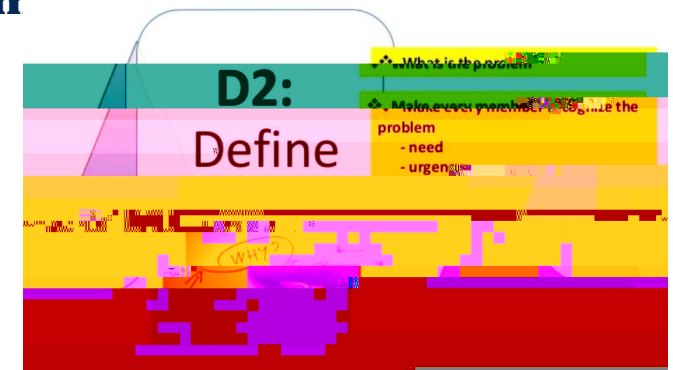
WHEN,

WHY,

HOW&HOWMANY. Identify the gap that needs to be closed by solving the problem

Tools can turn out to be useful while defining the scope of the problem

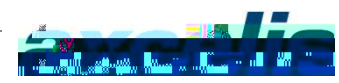
(See the next slide)



D2 Describe the Problem

Is / Is Not Analysis

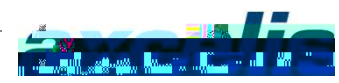
	IS	IS NOT
1	1. The product is made of high-quality materials.	1. The product is not made of high-quality materials.
2	2. The product is easy to use.	2. The product is not easy to use.
3	3. The product is durable.	3. The product is not durable.
4	4. The product is reliable.	4. The product is not reliable.
5	5. The product is safe.	5. The product is not safe.
6	6. The product is aesthetically pleasing.	6. The product is not aesthetically pleasing.
7	7. The product is cost-effective.	7. The product is not cost-effective.
8	8. The product is environmentally friendly.	8. The product is not environmentally friendly.
9	9. The product is innovative.	9. The product is not innovative.
10	10. The product is user-friendly.	10. The product is not user-friendly.



D4 Root Cause Analysis

Check points:

- Make sure the cause identified is not just a symptom but is the actual root

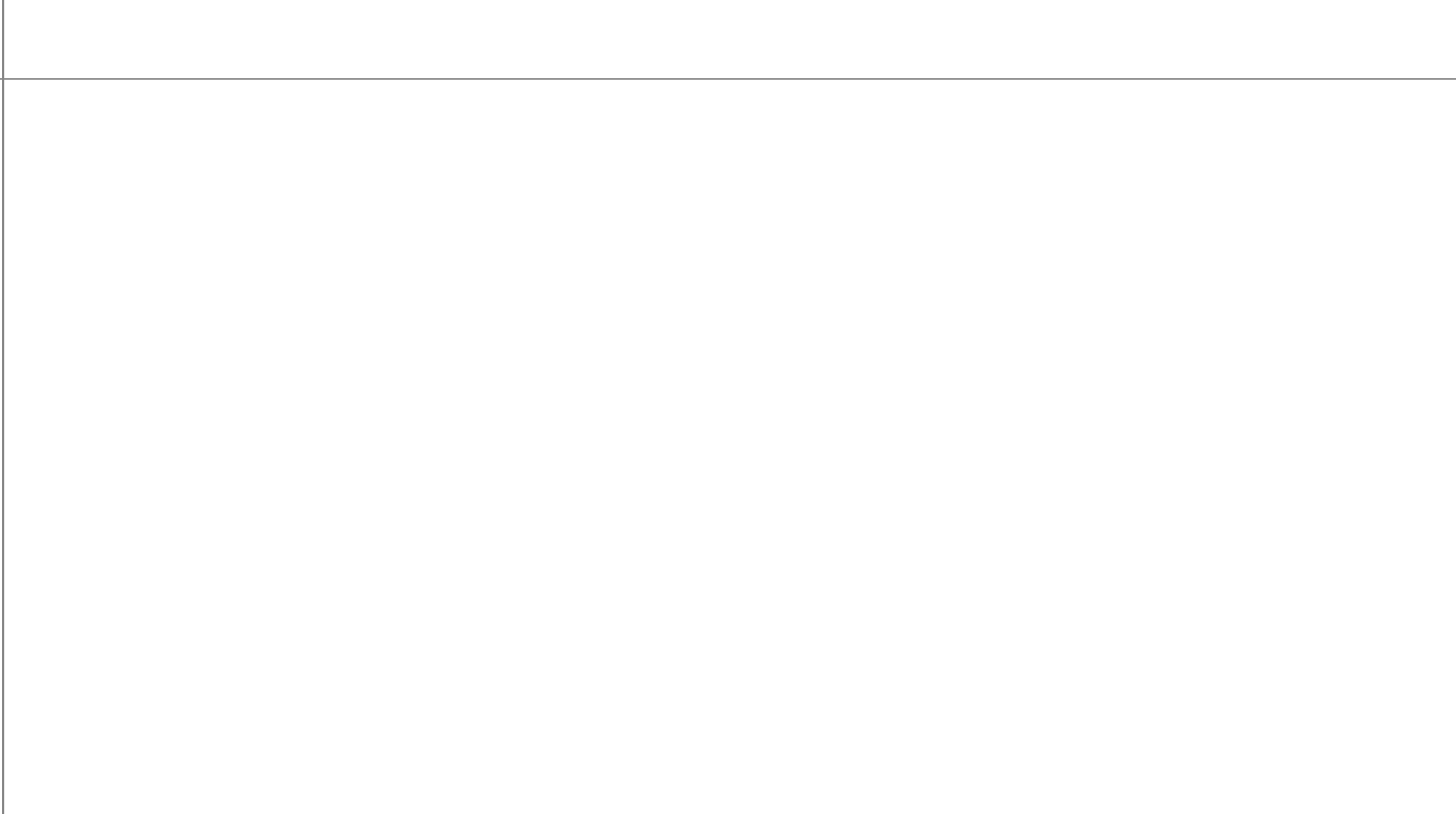


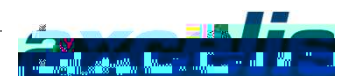
D4 Root Cause Analysis

D4- Root Cause Analysis (Occurrence, Detection or Escape, System)

Here is an example which shows how it works

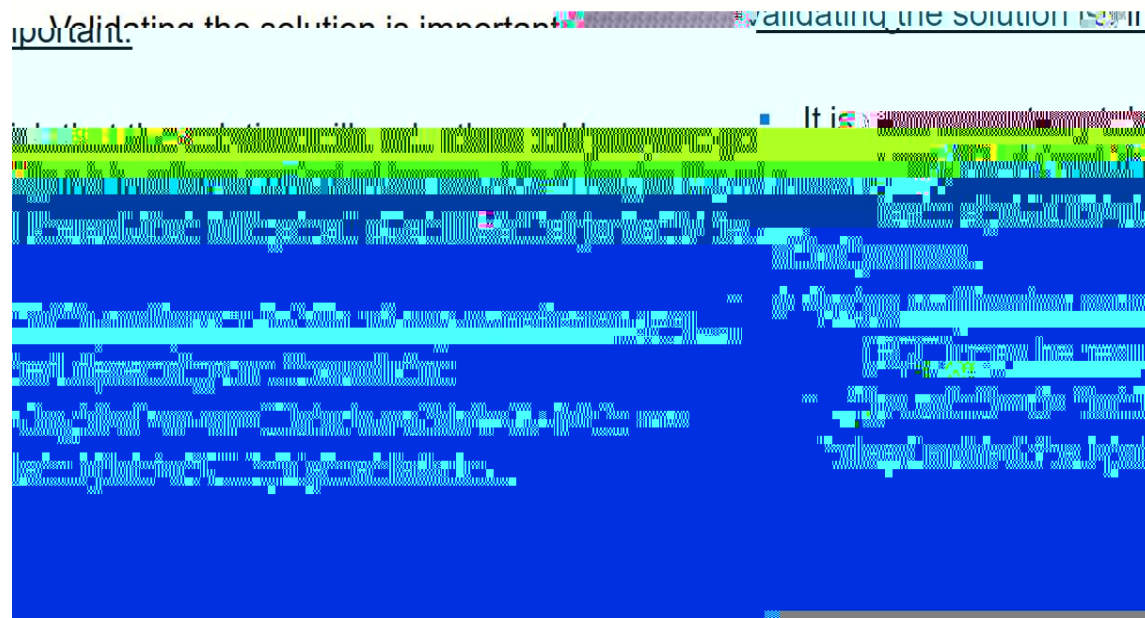






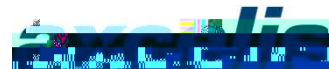
D6- Verification of Corrective Action(s)

For a team to “declare victory” in resolving a problem, there needs to be a verification and validation of the corrective action(s). The team needs to ensure that the actions taken were adequate.



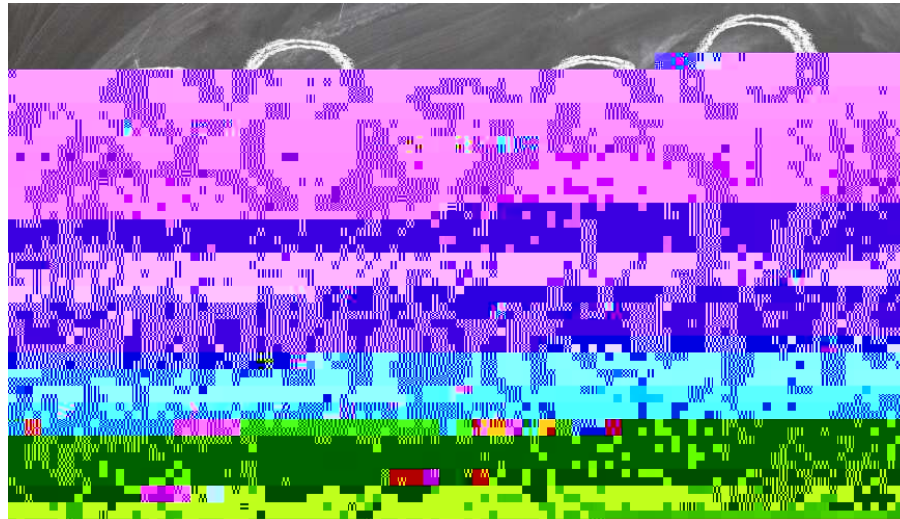
D7- Preventive Action(s)

- **Once a team has identified root cause(s) and corrective actions, it is highly desirable that activities occurred that a customer cannot encounter the same or similar problem from an Axcelis product or service**
- **Preventive action is a change to a product or management system that is not yet responsible for causing a problem for a customer**
- **The team should list preventive action investigation steps and any actions taken to mitigate potential issues**
- **Preventive actions could include:**
 - **Investigating (and mitigating if appropriate) if the problem observed could occur on other areas of the same product**
 - **Investigating (and mitigating if appropriate) if the problem observed could occur on a different product**
 - **Investigating (and mitigating if appropriate) if the process problem could occur in other processes**
 - **Actions were taken to mitigate issues discovered during the investigation process that may not affect the issue being investigated, but another issue that could have occurred**



D8- Congratulate the Team

Depending on the scope of the problem resolved, this “D” can be accomplished as the Teamleader sending out a “thank you” e-mail to the team members or could be more formal, with more management recognition



Based in original presentation from Kaan Malhotra - Jul 23, 2020

