Core Problem Solving (CPS) – Kepner Treg Approach to strengthen quality performance at PT. UTC Aerospace System Bandung (UTAS Bandung)

Erwan Nofrianto[1], Mursyid Hasan Basri[2]
Institute Technology Bandung, Indonesia[1&2]
erwan_nofrianto@sbm-itb.ac.id[1], mursyid@sbm-itb.ac.id[2]

Abstract
Purpose: This research aims to determine the effectiveness of Core Problem Solving (CPS) with the Kepner Tregoe approach, which is able to improve %SRR performance from 0.73% in 2022 to 0.5% in the next five years and take the right solutions to be planned in 2023.

Methods: A study on this case at UTAS Bandung with a focus on the %SRR performance that is driven by the amount of scrap, rework, and repair parts, called the cost of poor quality (CoPQ) divided by the total amount of parts sold to the customer. Core Problem Solving (CPS) combined with the Kepner Treg method can strengthen the quality performance. Starting with problem identification, followed by problem analysis using a Pareto diagram, an ishikawa diagram (fishbone diagram), and five why analysis to obtain the correct root cause and come out with alternative solutions to prevent future faults.

Results/findings: Based on problem analysis, it was found that the highest CoPQ contributor comes from prismatic cells, around 61% or $154,000 of total CoPQ $254,300 in 2022. To reach a 0.5% target in 2027 need to improve around $81,115 within 5 years or similar with $16,223 per year. Core problem solving (CPS) combined with the Kepner Treg method will be applied to achieve quality performance as planned.

Limitations: This research only refers to data available in SAP based on performance in 2022 without counting the return part from reject customer and reject part caused by supplier.

Contribution: Implementing core problem solving (CPS) combined with the Kepner Treg approach showing the right direction and good impact on quality performance at UTAS Bandung. It is important to develop an army of core problem-solving by encouraging more people to learn about it. This can also be used as a benchmark for other sites in global groups.

Keywords: *Core Problem Solving, Root Cause Analysis, Kepner Tregoe, Pareto Diagram, Fishbone Diagram, Five-Why Analysis*

How to Cite: Nofrianto E. E. & Basri M. H. (2024). Core Problem Solving (CPS) – Kepner Treg Approach to strengthen quality performance at PT. UTC Aerospace System Bandung (UTAS Bandung). *Review of Multidisciplinary Academic and Studies*, 1(2), 181-197.

1. Introduction

Aviation conditions that were depressed during the Covid-19 pandemic are slowly starting to be revived. Travel activities using airplanes have increased over time. Of course, this gives confidence to business ventures in the aviation sector. One of them is PT. The UTC Aerospace System Bandung (UTAS Bandung) is part of the Collins Aerospace group that supplies aircraft parts to Airbus and Boeing. To survive, the company must improve its performance and continue to be the best because there is a lot of competition between companies doing the aviation business.(Andrews, Emamjome, ter Hofstede, & Reijers, 2022; Harish & Amaroh, 2023).

The quality performance at UTAS Bandung is the main factor in fulfilling customer satisfaction. Improvements in performance quality continue to be made to become the best companies in class. One of the performance indicators is the percentage of part scrap, rework and reject (%SRR) (Curkovic, Vickery, & Dröge, 2000). In the last three years, the %SRR performance has been quite good, and the %SRR in 2022 is 0.73% of the target set at 1.1%, as shown in Fig. 1. UTAS Bandung set the %SRR target for the next five years at 0.5%.
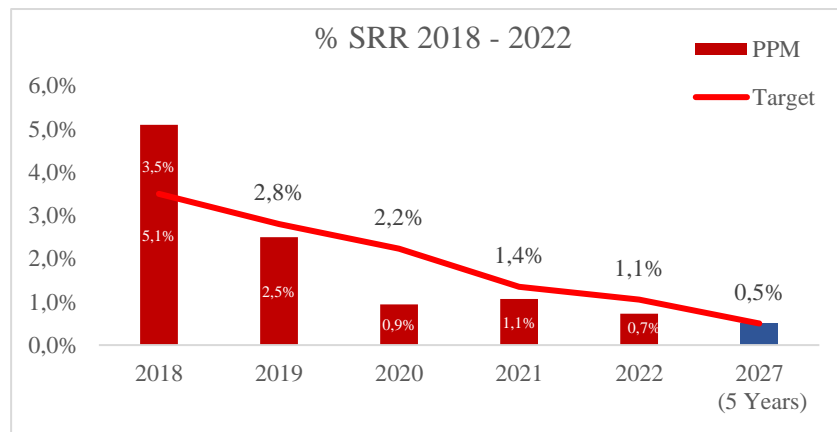

Figure 1: %SRR Period 2018 – 2022
Source: QA Department UTAS Bandung

%SRR is calculated based on the amount of scrap, rework and reject costs or called as cost of poor quality (COPQ) divided by the number of goods sold to customers. In 2022, the total COPQ amount was $254,300 and the total parts sold to customers was $34,637,000; thus, the %SRR is

$$\$254,300 / \$34,637,000 = 0.73\%.$$

Units in $ will be used in these cases because the value calculated for the part being disposed also in units of $. This makes the calculation easier. The next five-year target of % SRR is 0.5%, assuming the total amount ($) part sold to customer is fixed until 2027, so the total amount COPQ maximum limit in the next five years is:

$$\$34,637,000 \text{ X } 0.5\% = \$173,185$$

With this calculation, the COPQ improvement must reduce the minimum around $81,115 within the next five years, as calculated:

$$\$254,300 - \$173,185 = \$81,115$$

To achieve the 0.5% target in 2027, the minimum improvements made are $81,115 within 5 years or a minimum $16,223 per year. Therefore, it is necessary to conduct an in-depth analysis to achieve the specified targets. The strategy to achieve a reduction of approximately $81,115 within the next five years is divided by the COPQ minimum improvement target every year, as shown in Figure 2.
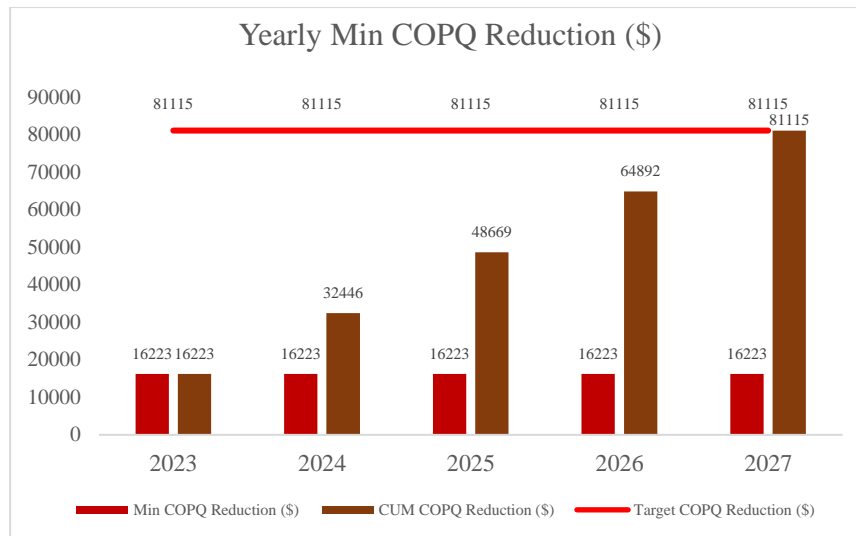
Figure 2: Yearly minimum target of COPQ reduction

The Core Problem Solving (CPS) method using the Kepner Treg problem analysis approach was chosen as the right tool to achieve the specified targets. Analysis using Pareto diagrams, Ishikawa diagrams (fishbone diagrams), and 5-Why analysis targeted will help find the right root cause to obtain the right solution to improve %SRR performance.

2. Literature Review

2.1. Theoretical Foundation

There are many methodologies for conducting root cause analysis. A U.S. The Department of Energy (DOE, 2003) lists the following five:

1. Events and causal factor analysis: This process is widely used for major single-event problems such as refinery explosions.
2. Change analysis: This approach is applicable to situations in which a system's performance has shifted significantly.
3. Barrier analysis focuses on what controls are in place in the process to either prevent or detect a problem that might have failed.
4. Management oversight and risk tree analysis. One aspect of this approach is the use of a tree diagram to examine what occurred and why it might have occurred.
5. Kepner-Tregoe problem-solving and decision-making, this model provides four distinct phases for resolving problems: (1) situation analysis, (2) problem analysis, (3) solution analysis, and (4) potential problem analysis.

2.1.1 Kepner Tregoe

Kepner Tregoe method approach will use to decide best decision to solve the problem. There are some steps that need to be defined before taking the right decision based on the Kepner Treg approach, as shown in Figure 3.

1. Situation Analysis
   Identify concerns or issues: Where are we?
2. Problem Analysis
   Analyzing the problem, what were the faults in the past?
3. Decision Analysis
   Generate and evaluate alternative solutions, including proposing and implementing the solution, and how to correct the fault at present?
4. Potential Problem Analysis
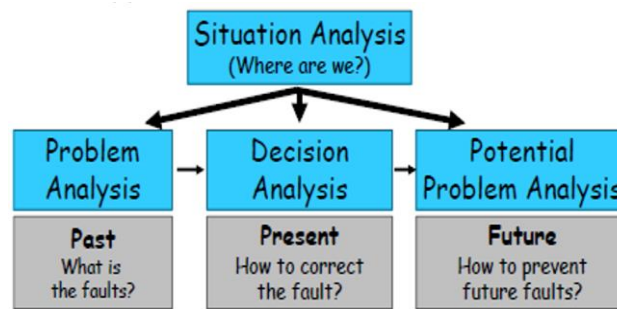   Analyze the outcomes and improve the process and how to prevent future faults

Figure 3: KT Method Approach

2.1.2 PDCA Approach

Problem-solving models that more familiar with everyone are Plan-Do-Check-Act (PDCA) developed by Walter A Shewhart in 1939. The PDCA cycle is a well-known model for continuous process improvement (CPI). It teaches organizations to plan an action, do it, check to see how it conforms to the plan and act on what has been learned (Aini, Shafitranata, Madyoningrum, & Octavia, 2023; Franken, van Dun, & Wilderom, 2021; Khalid et al., 2021).

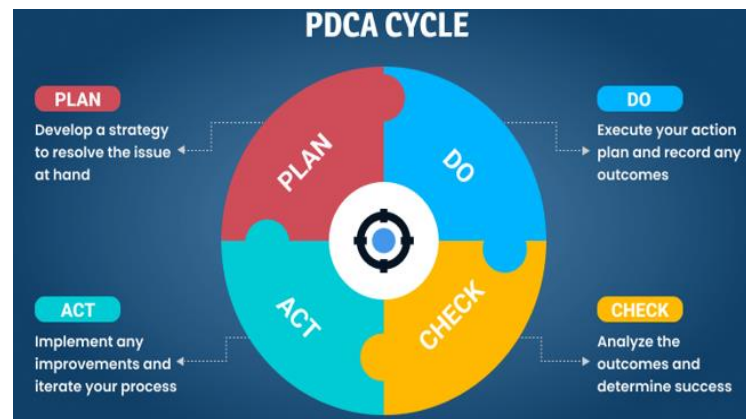The PDCA cycle consists of four steps: improvement and change.

Figure 4: PDCA Cycle

2.1.3 Core Problem Solving (CPS)

Core problem solving (CPS) is a common problem-solving language and methodology that applies at UTAS Bandung as a cultural change to the army of problem solvers. CPS can help organizations solve problems with the people closest to the process and become a learning organization (Franken, van Dun, & Wilderom, 2019). CPS can also permanently correct problems, leading to improved safety, quality, delivery, cost, and morale. Accelerating improvements and creating a sustainable competitive advantage (Budiman, 2023; De Yusa, 2023; Sakdiyah, Eltivia, & Afandi, 2022).

In carrying out the stages of improvement using core problem solving, UTAS Bandung uses five steps, which must be carried out according to Figure 5.
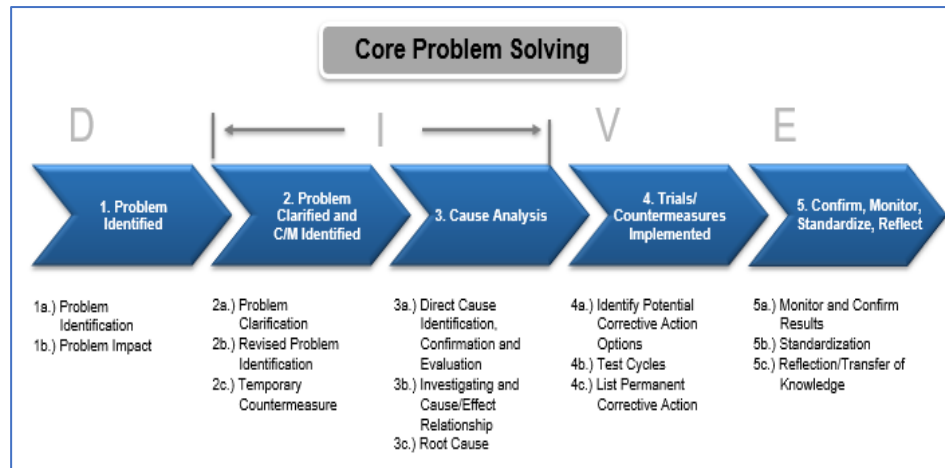
Figure 5: Core Problem Solving Steps
Source: CI Department UTAS Bandung

The five stages start with problem identification, problem clarification, cause analysis, countermeasures implemented and confirmed, monitoring, standards, and reflection. These are abbreviated as DIVE (Define, Investigate, Verify, and Ensure). The progress was then monitored through Relentless Root Cause Analysis (RRCA) visual management, as shown in Figure 6.

Figure 6: RRCA Visual Management
Source: CI Department UTAS Bandung

Details of RRCA steps include problem identification, 5W1H of the problem, containment action, analysis (fishbone diagram, potential direct cause, 5 why analysis), permanent corrective action, and result monitoring.

2.1.4 Pareto
Found by Vilfredo Pareto from Italian (Economist) to separate the significant aspects of a problem from the trivial ones. Pareto analysis states that 80% of a project's benefit or results are achieved from 20% of the work or conversely, 80% of problems can be traced to 20% of the causes (Ananda, 2023; Ilie & Ciocoiu, 2010). Focus on the small number of important problems and establishing priorities by showing the most critical problems to be addressed. Focusing efforts where it can have the greatest potential impact. See the Pareto sample in Figure 7.
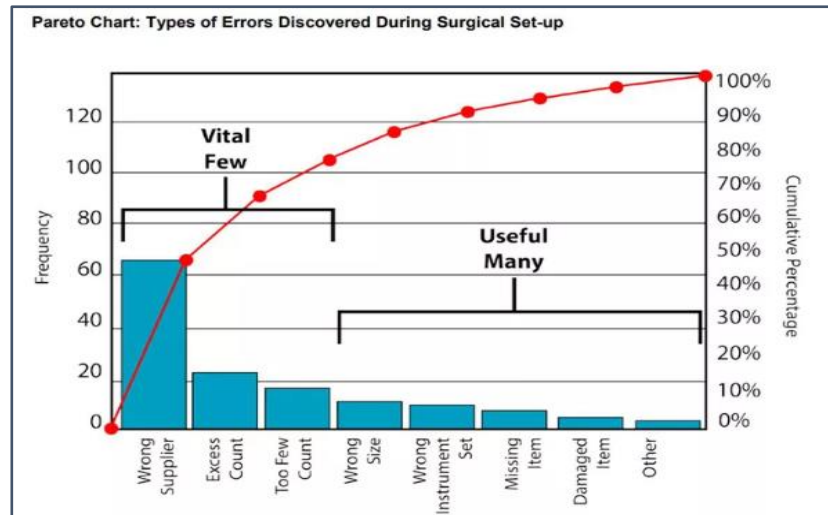
Figure 7: Example of Pareto

2.1.5 Fishbone Diagram

The fishbone diagram or Ishikawa diagram was developed by Prof. Kaoru Ishikawa from Japan (University of Tokyo in the 1940s). The design of the diagram is similar to that of the skeleton of a fish. Six main causes (Methods, Machines, Manpower, Materials, Measurement and Management) need to identify and brainstorming (Isniah, Purba, & Debora, 2020). A fishbone diagram is an analysis tool that provides a systematic way of looking at the effects and causes that create or contribute to these effects. Because of the function of the fishbone diagram, it can be referred to as a cause-and-effect diagram (Tague, 2023; Thareja, 2019). A sample fishbone diagram is shown in Figure 8.
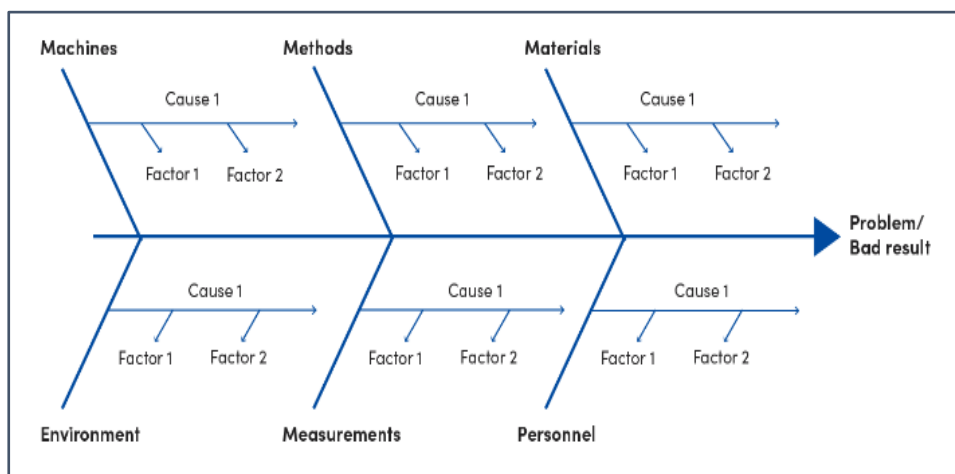
Figure 8: Fishbone Diagram

2.1.6 Mistake Proofing

A master's mind of the Toyota Production System introduced the concept of poka yoke or mistake-proofing (Shingo, 1986). There are three levels of mistake-proofing.
1. Level I prevents errors from occurring.
Tools that allow only one part to be installed

2. Level II detects an error in the process and prompts correction.
The torque tool activates red or green light detection to determine whether the correct torque has been achieved.

3. Level III captures the errors made prior to moving to the next step.
Standard work checklists/forms that walk through each step of the process.
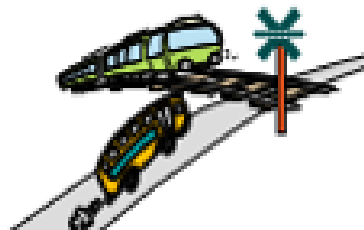
2.2 Conceptual Framework

The conceptual framework explains the current situation of quality performance at UTAS Bandung related to Scrap, Rework and Reject (SRR), as detailed in Figure 9. Analysis of direct and indirect items that pro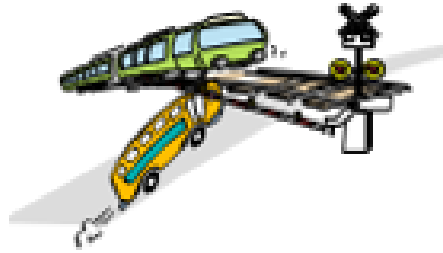bably influence and impact the creation of scrap, rework, and reject parts as general. From the machine perspective, the direct items are parameter setting and coolant systems (Johnson, 2002). If the parameter setting of the machine is incorrect, it is possible to influence the product dimension out of specification. The coolant system must flow well and straight to the part during the machining process to avoid overheating, which will impact the unstable dimension (Prabowo & Aisyah, 2020).

Indirect items may be considered as preventive maintenance and autonomous maintenance activities, schedule execution on track, or any delay because of constraints with production schedules or shipment plans. Resources, skills, and training may contribute to the creation of scrap, rework, and reject parts (Realyvásquez-Vargas, Arredondo-Soto, Carrillo-Gutiérrez, & Ravelo, 2018). Ensuring that all employees had been trained and certified in their jobs. Any new hire, replacement, and movement must be well recorded and have a skill matrix to ensure the ability to run current job activities. One important thing Machining operators must pass geometric, dimension, and tolerance assessments and refresh every year to maintain their knowledge (Koskela, Tezel, & Patel, 2019).

Figure 9: Conceptual Framework of SRR

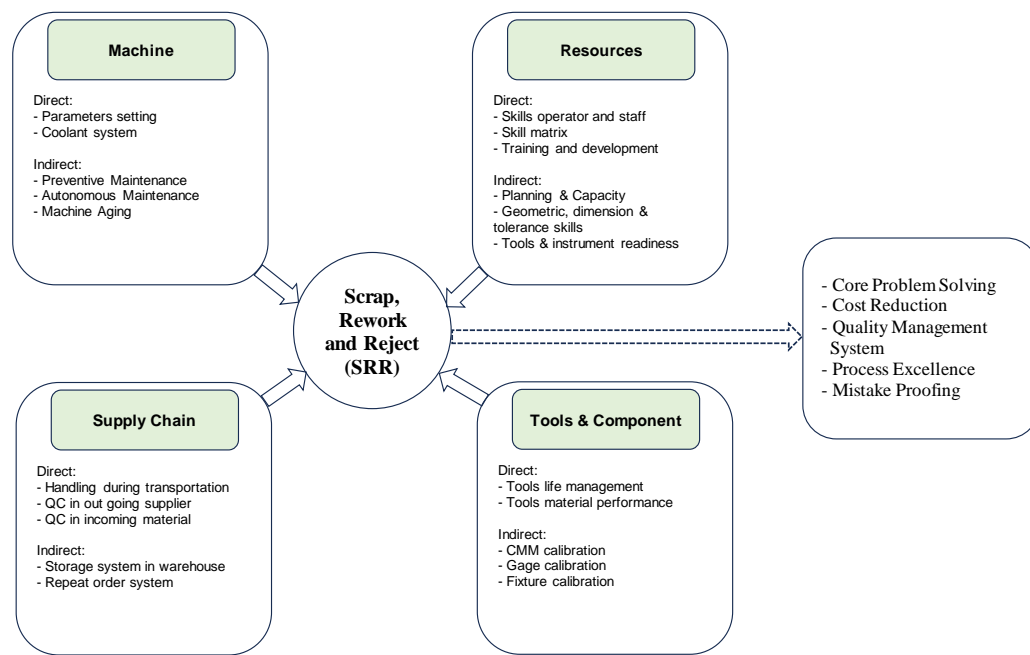From the tool and component perspective, tool life management becomes a priority because of the direct impact of creating scrap and rework. Once tools break before their lifetime, they directly impact part scrap or rework (Latino, Latino, & Latino, 2019). It is linked to the tool material performance from the supplier. Reducing material performance also reduces the tool lifetime, which is a risk to part rework and rejection. Calibration of the CMM, gage, and fixtures is considered indirect because even though the dimension had been correct from the machining process, it was not supported by a calibrated instrument that could provide incorrect justification for the finished product (Lazarevic, Mandic, Sremcev, Vukelic, & Debevec, 2019).

Another factor that influences scrap, rework, and rejection is the supply chain process. Handling material during transportation may be risky if improper packing is a requirement or bad handling by the forwarder. Quality inspection before part ship out by supplier and quality inspection of incoming material by UTAS Bandung may also have an impact. Undetected abnormality or misinspection risk to deliver a bad material. Handling storage in a warehouse requires proper management (Okes, 2019).

The scrap, rework, and scrap (SRR) parts that were detected following core problem-solving events through root cause analysis and best solutions to reduce cost rejection. Strengthening the quality management system in all processes will support these objectives. Campaigning of process excellence and engagement wider team and looking opportunity to apply mistake proofing at any single problem occur at the production processes (Pambreni, Khatibi, Azam, & Tham, 2019).

3. Research Methods

3.1. Research Design

In principle, the research carried out at UTAS Bandung refers to the 5-core problem solving steps commonly used: problem identified (Define), problem clarified, and countermeasure identified (Investigate), cause analysis (Investigate), trial or countermeasures implemented (Verify), and confirm, monitor, standardize, and reflect (Ensure), which is called DIVE. Pareto diagram, Ishikawa diagram (fishbone diagram) and 5-Why analysis utilize as main tool to found root cause analysis. A flowchart of the research design is shown in Figure 10.
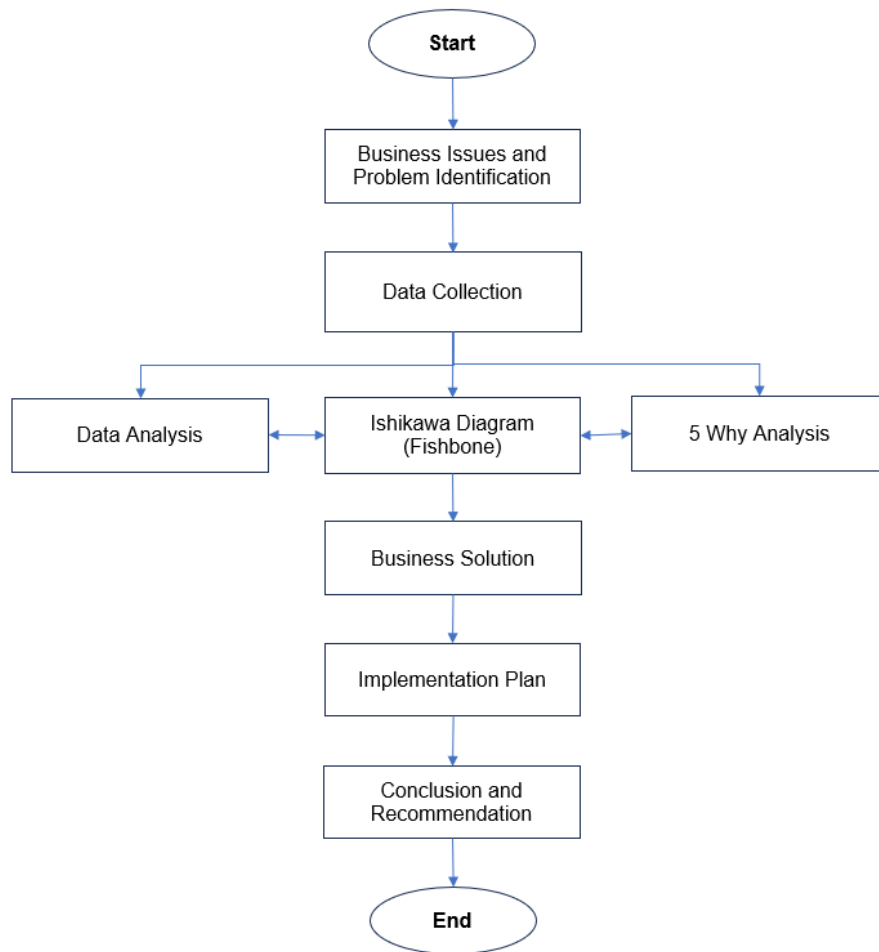
Figure 10: Research Design

3.2 Data Collection Method

The data used were the primary data from each non-conforming part that existed during the production process. All non-conforming data were recorded in the quality notification (QN) via SAP. Every single rejected part will be disposed of within a maximum of five days by the quality engineer, together with engineering. The disposition carried out can be in the form of:

1. This part was released again because it still met the required standards.
2. Parts are either reworked or repaired because they are still minor and can be repaired.
3. Some parts will be scrapped because of major issues and risks to customers.
4. All disposition results are recorded in SAP, and parts that need to be reworked or scrapped are the cost of poor quality (COPQ).

3.3 Data Analysis Method

The methods used to analyze the data are as follows:

1. Pareto Chart Analysis

   Create an analysis using a Pareto chart from the data collection based on SAP. See the Pareto level until 3rd level for a deep analysis and looking at problems that will improve.

2. Fishbone Diagram (Ishikawa Diagram)

   The gathering team consisted of engineering, quality, production, and maintenance to collect ideas and put them into a fishbone chart. The possible cause of the problem was identified and the operator in which the problem was detected was involved. Evaluate each item in the fishbone chart and define potential direct causes through discussion, evaluation, benchmarking, etc. See the potential direct cause from both the detection and occurrence perspectives.

3. Utilize 5 Why Analysis

Identify potential causes by asking "Why?" Answer each "why" by using data and facts.
4. Comparison Matrix
   Prioritize the method to choose between potential solutions vs. selection criteria such as resources, investment, timeline, etc.

4. Results and Discussion

This research focuses on a case study to validate whether Core Problem Solving (CPS) combined with the Kepner Tregoe Approach is the correct way to improve quality performance at UTAS Bandung.

4.1. Analysis Result

4.1.1 Pareo Result

Cost of poor quality: scrap, rework, and reject parts in 2022, around $254,300. The amounts come from five cell areas at UTAS Bandung. The Pareto analysis of the cell is shown in Figure 11.
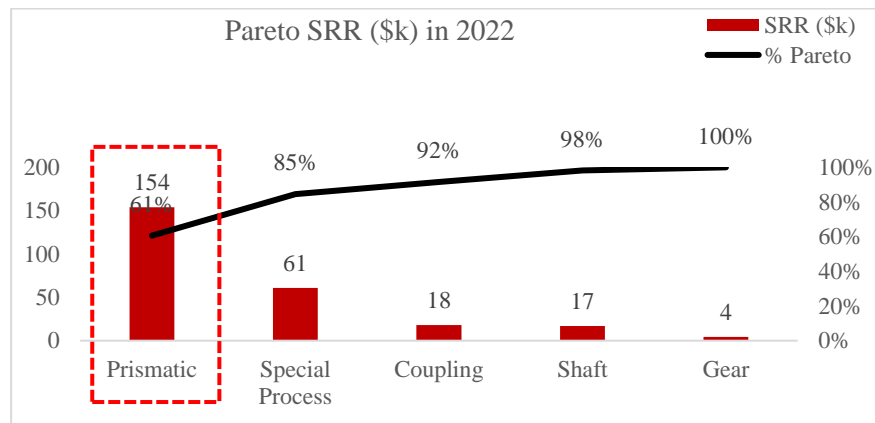
Figure 11: Pareto SRR ($) in 2022 based on cell

From the Pareto plot in Figure 11, the prismatic cell has the highest Pareto of approximately $154k. The scrap and rework parts are shown in Fig. 12.
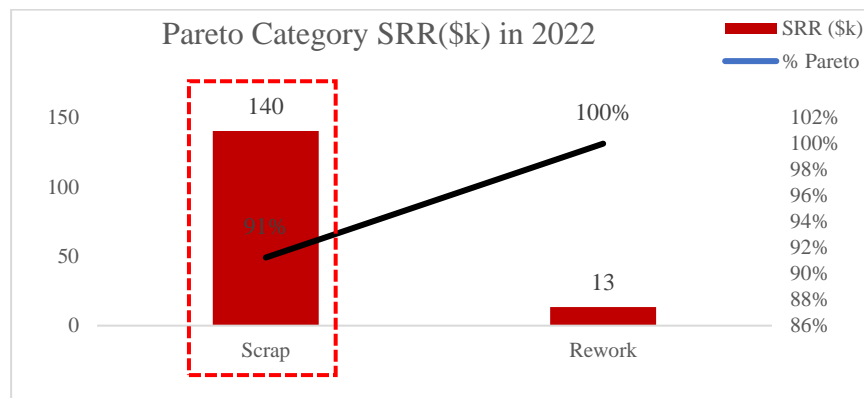
Figure 12: Pareto Category in Prismatic Cell

Figure 12 showing the highest Pareto coming from the scrap part categories. Therefore, focus improvements to reduce the scrap part from the Prismatic Cell, which is approximately $140,000. Then, we continue to observe the second Pareto inside the scrap part in the prismatic cell, as shown in Figure 13.
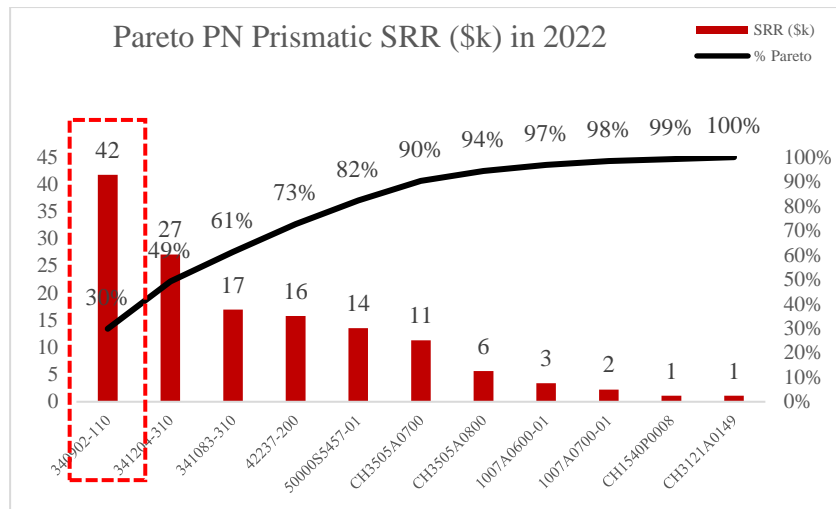
Figure 13: 2nd Level Pareto Based on Part Number (PN)
in Prismatic Cell 2022

Based on the above data, the highest Pareto value was $42,000 for part number 340902-110. Next, we continue to see the next 3rd level pareto inside part number 340902-110. The result analysis of the 3rd Pareto in part number 340902-110 only showing the bigger five, as shown in Figure 14.
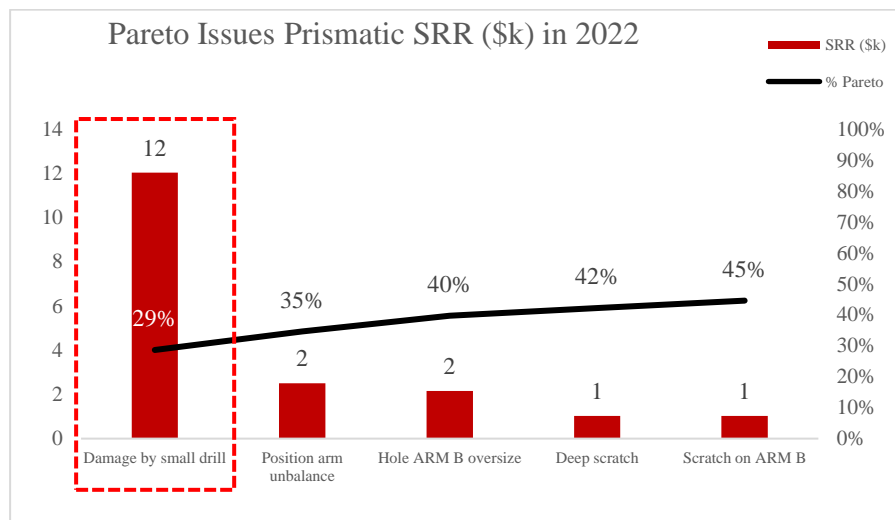
Figure 14: 3rd Level Pareto Based on Issues in PN 340902-110

From the Pareto data in Figure 14, damage by small drill tools was the highest contributor at the 3rd level Pareto in PN 340901-110 that will be the focus improvement in this sample study, around $12,000.

4.1.2 Ishikawa Diagram (Fishbone Diagram) Analysis
Ishikawa Diagram (Fishbone Diagram) will use to mapping all the direct causes as following at Figure 15. Six areas were considered: man, material, method, machine, mother nature, and measurement.
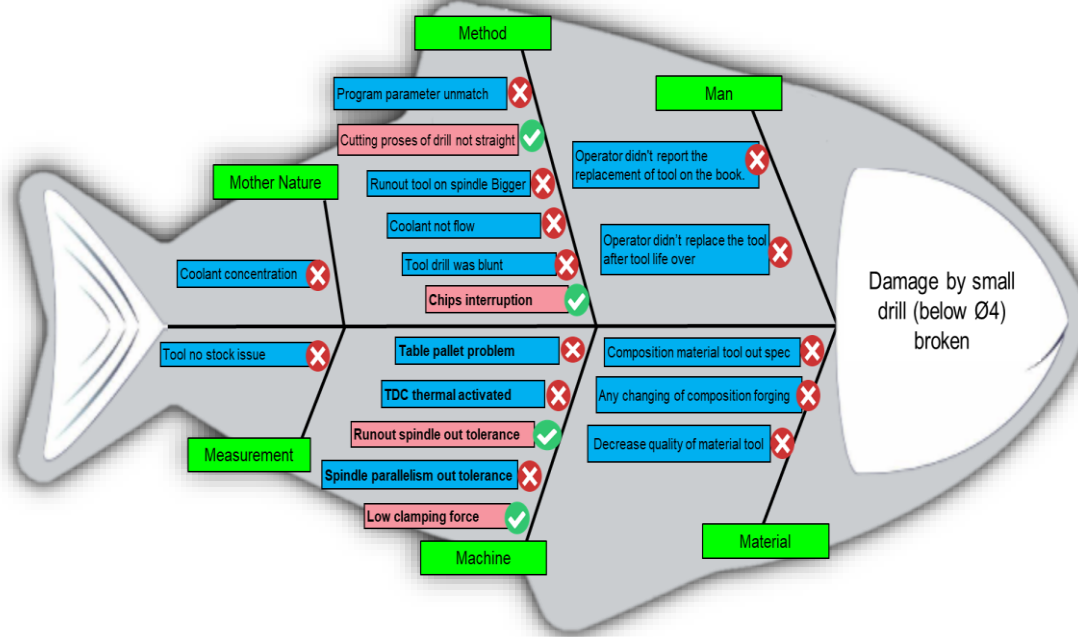
Figure 15: Fishbone of Damage by Small Drill

Each cause should be verified and brainstormed by teams including quality, engineering, production, and maintenance teams. The team discusses and reviews them one by one to define the direct cause that affects the current problem. Output from verified by expert team was four direct causes had been chosen that probably have connection with damage by small drill problem:

1. The cutting process of the drill was not straight.
2. Chip or gram interruption.
3. Runout spindle out of specifications.
4. Low clamping force.

As mentioned above, four direct causes continue to be analyzed to compare the impact and effort from these direct causes. The impact and effort matrix results are presented in Table 1.

Table 1. Impact and Effort Matrix

Potential Cause	Impact		Effort		Remark	Justification
	High	Low	High	Low		
Cutting process of drill not straight	V			V	Simulation by trial, remaining tool broken stuck in the hole	Yes
Chips interruption	V			V	Tool no have through coolant hole	Yes
Runout spindle out of spec	V		V		Check using test bar, still in range standard	Not
Low clamping force	V		V		Check using clamping tool, still in allowance standard	Not

The results from the impact and effort matrix analysis showed that only two of the four direct causes were justified as potential root causes.

4.1.3 5-Why Analysis
The result of the impact and effort matrix from Table 4.1, which had been defined as only two direct causes, were justified as potential root causes. 5-Why analysis will continue for these two potential root causes, as shown in Table 2.

Table 2. Five-Why Analysis of Part Damage.

Cutting process of drill not straight	
Why#1	Why part damage by tool broken ?
	Because cutting process of drill not straight
Why#2	Why cutting process of drill not straight ?
	Because drill deviated when insert to roughing hole
Why#3	Why drill deviated when insert to roughing hole?
	Because length of tool too long then make rounout of drill not good
Why#4	Why length og tool make runout not good?
	Because rigidity of the tool not good

Chips interruption	
Why#1	Why part damage by tool broken ?
	Because chips or gram material interruption when cutting
Why#2	Why chips interruption when cutting ?
	Because remain chips material stuck in the hole
Why#3	Why chips stuck in hole ?
	Because there is no through coolant hole
Why#4	Why no through coolant hole ?
	Because using HSS standard tool

Based on the 5-Why analysis mentioned in Table 4.2, the root cause of damage because the existing small drill tool has issues with the rigidity material that potentially prevents the tool from going straight during the machining process and using HSS standard tool that is not supported by the coolant hole.

4.2 Business Solution

Based on the results of the 5-Why and root cause analyses, existing small drill tool types and materials need to be reviewed. The study of the existing working and running process is shown in Figure 16.
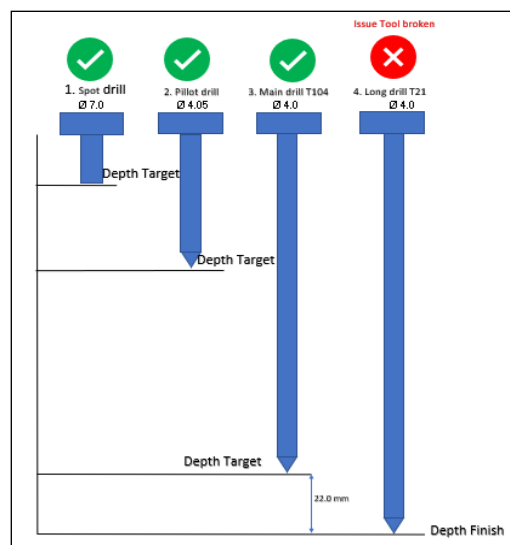
Figure 16: Current Process Diameter 4mm

The sequence process to develop a diameter of 4 mm creates a spot drill diameter of 7 mm, and then creates a pilot drill with a diameter of 4.05 mm, continues to create a main drill diameter of 4 mm by tool T104, and finishes with a drill diameter of 4 mm using the long drill tool T21.

The brainstorming team between Engineering, Quality, Production and Maintenance came up with the idea of removing the last process of a drill diameter of 4 mm using the long drill tool T21 and the combined process with tool T104 from the previous process before finishing. This is because tool T104 has the same diameter as tool T21, which creates a damaged part, and tool T104 is a carbide material. Another reason is that T104 was supported by a coolant hole that could remove the chip material properly during the machining process. It will also simplify the process that reduces cycle time and cost savings because there is no need to buy tool T21.

4.3 Implementation

Before the idea is implemented, some plans are defined to ensure that everything will not create new issues, as explained in Table 3.

Table 3. Implementation Plan of Improvement.

No	Agenda	Owner	Due Date	Status	Result
1	Trial to remove Tool T21 and combine intoTool T104 process	Engineering	W1 Apr-23	📋	OK
2	Dimension verification	Quality	W1 Apr-23	📋	OK
3	Updating document related to improvement	Engineering	W2 Apr-23	📋	OK
4	Review and final decision	Team	W3 Apr-23	📋	OK
5	Start mass production	Production	W1 May-23	📋	OK
6	Monitoring quality performance	Quality	W4 Jul-23	📋	OK
7	Improvement result summary	Team	W1 Aug-23	📋	OK

The performance results after implementation were tracked starting in May 2023. The significant impact is shown in Fig. 17. The cost of rework, scrap, and rejection related to damage caused by small drill tools has improved from $12,000 in 2022 become $3,200 in 2023, reducing 73% or similar to $8,800 saving a year.
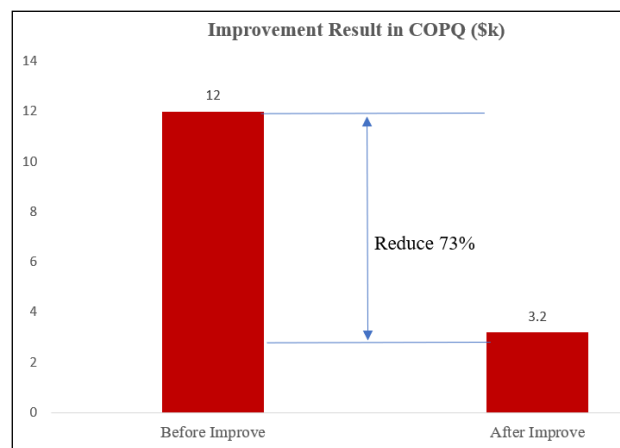

Figure 17: Improvement Result in COPQ

Removing tool T21 and combining it into tool T104 process improvement at part number 340901-110, had been impacting to reduce the cycle time by approximately 13 min or improved it by 13%, from 99 min to 86 min. This improvement also gives another cost saving of tool consumables because there is no need to order tool T21 anymore, which normally consumes 48 pcs a year at a cost of $29.5 per piece. The total benefits from one case study are shown in Table 4.

Table 4. Summary benefits of improvement.

No	Items	Impact	Remark
1	COPQ reduction	$8,800 per year	Reduced 73%
2	Cycle time reduction	Faster 13 minutes	Improved 13%
3	Tool cost savings	$1,400 per year	No need to order anymore

Core Problem Solving combined with the Kepner Treg analysis approach has been starting in some other issues that occurred in the production area. The total COPQ amount in 2023 is $217,077 which is improve $37,223 compared with COPQ in 2022 at approximately $254,300, as shown in Figure 18.
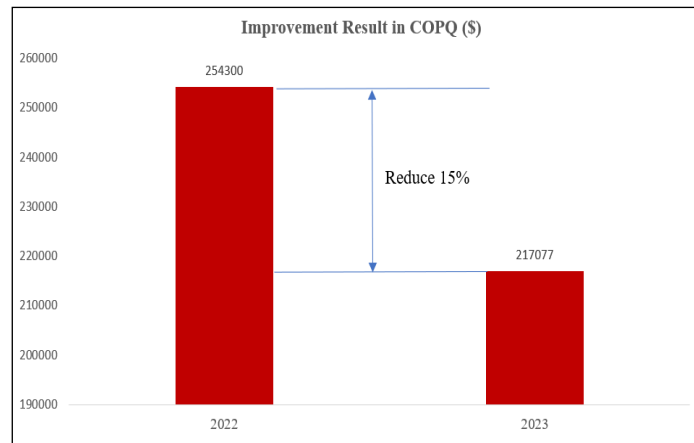
Figure 18: Total Improvement Result in COPQ ($)

4.4 Potential Problem Analysis

A potential problem analysis based on the Kepner Treg approach is how to prevent future faults or problems. A preventive problem is how to avoid repeating the same issue in the future. Some of the systemic improvements are presented in Table 5.

Table 5. Systemic Improvement Activities.

No	Area	Systemic Improvement
1	Machine	a. Daily autonomous maintenance by machining operator. Simple activities that able to support by operator like check pressure, coolant level, etc before running production.
		b. Preventive maintenance by maintenance. Some activities do by quarterly, half year and yearly. Create check list to cover all items to be checked.
		c. Coolant control and replacement. Top up volume of coolant refer to min max level, even need to replace by new coolant if needed y dedicated person.
		d. Machine refurbishment. Long term plan to buy new machine for aging machine, considering machine that create lot of quality issues.
2	Resources	a. Refresh training operator once a year in training school. Geometric, dimension and tolerance training to make sure operators updated with current inspecion method and refresh with any problem from customer.
		b. Certified operator machining. Operator must hold stamp as evidence pass assessment and certified every two year to maintaince their knowledges.
		c. Skills matrix. Tracking and recording skills operator, if any replacement during some operator taking leave, will not allow to replace by operator who don't have skill on replacement job.
3	Tools & Component	a. Tool life management. Dedicated person to record and monitoring tool life management by Engineering. If any tool broken before tool life time set up, need to revise current lifetime.
		b. Gage and CMM calibration Gage that be used for inspect of dimension must be calibrated and not expired from the calibration date.
		c. Fixture calibration. Arrange fixture calibration for some critical fixture based on historical problem.
4	Supply Chain	a. Standard packaging. Supplier must follow standard packing that agreed refer to drawing or purchase document.
		b. Storage system Storage system and handling during raw material at warehouse must follow the work standard to avoid any damage or broken.
		c. Repeat order point (ROP) Put repeat order point (ROP) to maintain minimum stock ready for raw material, coolant and tool. Avoid line production stop that wil impact to instability machine performance.

To maintain core problem-solving behavior sustained at UTAS Bandung, build the army of core problem-solving. The steps to build the army of core problem solving are as follows:

1. Provide training in core problem solving to all employees.
2. Develop team core problem solving at each cell area by involving engineering, quality, and production personnel, including operators.
3. Develop at least one CPS every month in each cell area.
4. Visit CPS events at the manager level to ensure correct understanding and as a learning curve session.
5. Place into the control tower to track the performance of how many CPS events and percentage operators join CPS events from each cell area.

These activities will help companies solve problems quickly and take action correctly.

5. Conclusions

5.1. Conclusions

One case study provided in this study has shown great results. By using core problem solving (CPS) combined with the Kepner Treg approach analysis method through a Pareto diagram, Ishikawa diagram (fishbone diagram), and 5-Why analysis can detect the correct root cause of problems that occur in prismatic cells as the highest Pareto. After addressing the issues raised, the performance of part damage in part number 340902-110 due to small drill tools is only $3,200 in 2023. This means that there will be a significant improvement from the previous $12,000 in 2022. Thus, the improvement achieved is $8,800 for one year or an improvement of 73% compared to 2022 performance.

This result contributes to 54% of the minimum target set annually at $16,223. The total improvements carried out in 2023 from all activities reached $37,223. This figure has exceeded the annual target that has been determined by achieving 230% of the annual target.

From the results that have been achieved, the Core Problem Solving (CPS) method using the Kepner Treg problem analysis approach is the right choice to achieve the specified target. Bandung believes that maximizing the core problem-solving method and approaching Kepner Treg analysis will achieve a %SRR target of 0.5% in 2027. For this reason, UTAS Bandung focuses on building an army of core problem solving in all lines from the manager level to the operator level.

5.2. Suggestions

The implementation of core problem solving (CPS) combined with the Kepner Treg approach showed the right direction and good impact on quality performance at UTAS Bandung. It provides recommendations to develop a more army of core problem solving by encouraging more people to learn about it and implement it. This can also be used as a benchmark for other sites in global groups.

Some recommendations from the current improvements for internal teams:

1. Read across similar methods using core problem solving combined with the Kepner Treg approach to another part number and another cell.
2. Encourage the team to look for opportunities for another tool that has similar characteristics to other cells that can be improved.
3. Continue implementation of core problem solving combined with the Kepner Tregoe approach analysis method to achieve a %SRR of less than 0.5% in 2027.

at Blemba-67 MBA ITB and all my other friends, who I cannot possibly mention one by one. You are all the best.

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