

## ***A Physicist, an Engineer, and a Political Scientist are stranded on a deserted island...***

A Physicist, an Engineer, and a Political Scientist are stranded on a deserted island and are all very hungry. They are delighted to find a large can of beans that has been washed up on the beach. Having no way to open the can they try to find a way to the beans. The physicist states that if he puts the can on a fire it will heat up and explode the can allowing them to get to the beans. The political scientist says that will be way too messy for them. The engineer comes up with the idea that if he drops a large rock or coconut out of a tree, it will smash the can and allow them to get at the beans. The political scientist says again that this will be way too messy for them. Hearing this for a second time, the physicist and engineer ask the political scientist if he has any better ideas. To which he stands up and says "Assuming we have a can opener..."

### **Collaborative Problem Solving – Leveraging Team Power to Bring Great Ideas to Life**

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Collaborative Problem Solving (CPS) is essentially *solving problems by working together as a team* [Webster]. Effectively solving technical problems as a team is more than just sharing the number-crunching. Rather, CPS encompasses the Critical C's of Communication, Cooperation, Creativity, and Critical Thinking, augmented with Computerized information gathering, computation and sharing. The challenges of solving problems as a team involve blending the skills and knowledge of multiple people who will deal with a magnitude of ideas and options, while attempting to focus and stay on track, all the while engaging efficiently and communicating effectively during the collaboration. To say this can be daunting is putting it mildly.

This article will offer techniques and suggestions to deal with the agony and the ecstasy of CPS – leveraging the power of teamwork to develop and implement the best solution.

#### **Too Many Cooks Spoil the Broth**

The first CPS challenge deals with the most critical element of any team – *the people*. Suggestions include:

**Establish Team Norms.** At the inception, set the expectations for team member behavior. For example, the team expects openness, mutual respect, and equal consideration of all ideas without retribution.

**Include Many Voices.** Obtaining input from individuals affected by the problem, beyond the team, can prove to be invaluable.

**Clearly Define the Problem.** A well-defined problem is the core of CPS, helping to yield a great solution.

#### **Many Hands Make Light Work**

The next CPS hurdle deals with *the process*. Developing the problem solution requires the following:

**Think Critically.** The team must consider a wide range of potential possibilities, thinking beyond the mundane and the “tried and true” solutions. Consider the crazy.

**Kindle Creativity.** Encouraging “out-of-the-box” thinking is a hallmark of CPS. Proposing solutions that may seem, at first, impossible to implement may spark a creative approach with merit leading to an elegant, robust resolution.

**Evaluate to Motivate.** Providing positive public feedback to the team and individual members encourages participation, distills fear, and improves team morale. It is easier to be critical than correct; best to praise in public and punish (if necessary) in private.

#### **Many Minds in Harmony Produce Great Results**

The third leg of the CPS stool is *the plan*. Taking the proposed solution to completion requires:

**Reach Consensus.** Considering alternate solutions needs an appropriate level of reflective discussion on the relative pluses [advantages] and minuses [drawbacks] of each proposal. Coming to a consensus on *THE* decision means the team agrees to support implementing the agreed-to solution.

**Work the Plan.** The *consensed* [a Ford-ism] solution to the defined problem [the *what*] requires a realistic plan [the *how*] to put it into action. The team, involved in creating the solution, must be empowered to execute the problem resolution [Mind Manager, 2022]. The best time to act is now.

**Lessons Learned on TGR & TGW.** The team's work is not finished until the paperwork is done, which includes evaluating the solution to the problem [the plan] as well as the team's performance [the process]. The project review addresses the *things gone right* [TGR], *things gone wrong* [TGW] with suggestions for improvement. Including review input from executive management, support organizations, and the groups impacted by the solved problem makes for a robust review.

### **Celebrate Success as a Team**

The burden that is lifted when a problem is solved is enough victory for some. However, a team that plays together should celebrate together. It's not only collaboration that brings unity to a team. It's also the combined celebration of a unified victory— savoring the moment, and realizing the collectiveness of one's success.

In conclusion, as with any project endeavor, many hands (and minds) make light work.

As always, your questions, comments and criticisms are welcome. Feel free to contact me in care of email:

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Best regards,

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### References

Mind Manager (2022), Collaborative Problem Solving: What It Is and How to Do It, available at <https://www.mindmanager.com/en/tips/problem-solving/collaborative/>