

How To Apply Critical Thinking

A PM's perspective

Note: The PM is a PMT401 graduate 😊

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Project Manager
Soldier Sensors and Lasers
PEO SOLDIER

Applying Critical Thinking: 2 Scenarios



Flame Resistant
Issued to Every Deployer
\$38/Pair

- Scenario 1: Flame Resistant Army Combat Glove Not Meeting Warfighters' Needs



1.9 pounds
550M range
AAO 60,000

- Scenario 2: 17 micron Light Weapon Thermal Sight Personal Electro-Static Discharge (PESD) Image Shift

Scenario 1: It's just a Glove!

Overview: LTC Sloane had been the PM for six months in JAN2009 managing 300 programs ranging from boots to gloves to parachutes when he learned that, in mid 2007, the Army awarded \$9.2M on a firm fixed price contract to produce 240,000 Army Combat Gloves. These gloves came in five sizes per the purchase description. Production to delivery is 6-9 months and the gloves were being delivered and some (18,000) were already being fielded to Soldiers deploying into combat. As luck would have it, in DEC2008, the Army began to learn that there were some serious quality issues with the fielded gloves. At that point, 180,000 pairs of gloves (\$38/pair) had been produced and delivered to fielding sites. Further reports indicated that the gloves were incorrectly sized, sewn with defective stitching and seams not aligned, and they would pull apart between the thumb and forefinger. Soldiers had to remove their gloves to engage the enemy with their weapons and perform other tasks. Soldiers required this flame resistant capability to prevent their hands and arms from receiving 3d degree burns during IED encounters.

As the PM, what would you do?

Scenario 2: It's just an Image!

Overview: Soldiers began asking if this sight could be used on other weapon systems so before responding, COL Sloane and his team initiated additional testing to determine if the 17um LWTS, originally designed for light weapons (M4 rifle) could be used on medium, heavy weapon systems, and sniper rifles. While shooting these weapon systems, using the newly developed thermal weapon sight, PM SSL personnel observed an Image shift (digital picture-shift) during March 2014 testing at White Sands Missile Range (WSMR), NM. It appeared to be related to electrostatic discharge (ESD) exposure of the sight. Fielded to date: 2,407 Systems (\$5,400/system; \$13M fielded) to CONUS units and units deployed in combat—Regular Army and SOF. The potential to engage a target with the reticle not properly placed introduced risk to Soldiers using this new system.

As the PM, what would you do?

Applying Critical Thinking: Real Scenarios

First thing to do: Think! Don't land on an immediate answer. It will stop you and your team's thought generation process like a red light.



Next: Revisit the Elements of Reasoning: Purpose, Point of View, Assumptions, Implications and Consequences, Data/Facts/Experiences, Inferences and Judgments, Concepts/Theories, in an attempt to answer the questions we should be asking in order to develop an executable path ahead.

Spend time understanding the question/problem, discuss the issue with your team, capture your thoughts in a coherent and consistent manner then proceed with a green light.

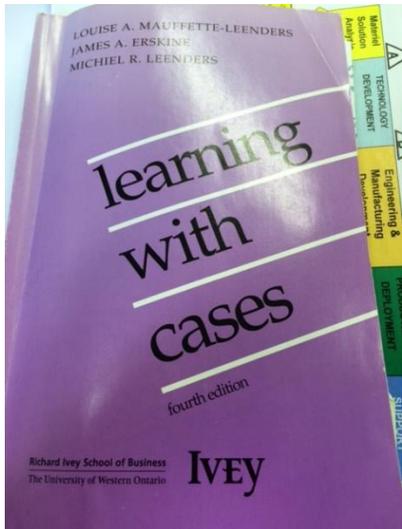


Application of skills: Analytical, Decision Making, Application, Oral Communication, Time Management, Interpersonal, Creative, and Written Communication to Achieve Effective Outcomes—now that's Critical Thinking!

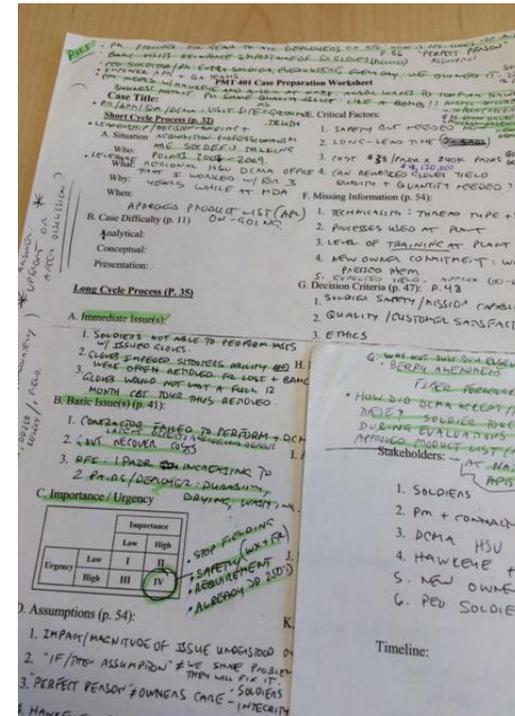
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Capture your thoughts



Achieve Effective Outcomes

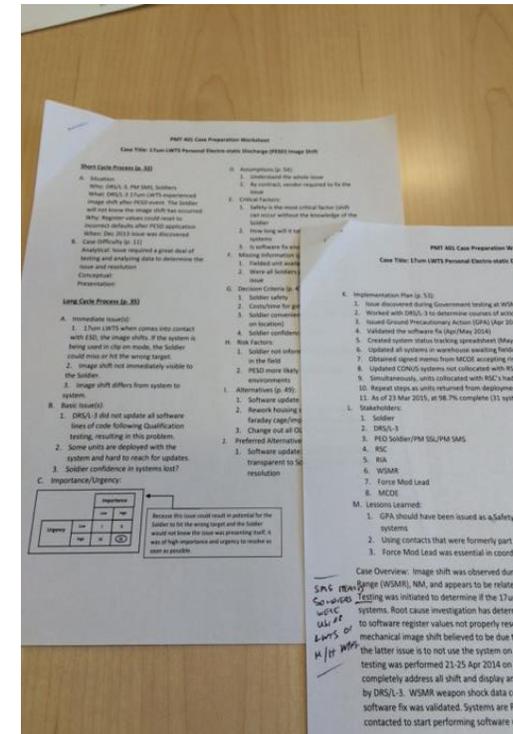
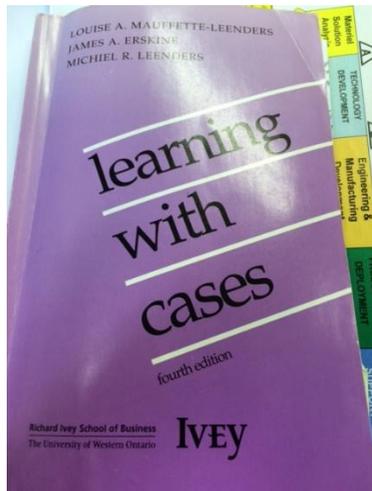
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Achieve Effective Outcomes

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Conclusion

- Critically Think About Everything You Do
- Apply Education, Training, Experience Daily
- Develop Processes To Facilitate Critical Thinking:
 - Case Worksheet
 - Stoplight Chart
- Teach/Coach Your Team To Become Critical Thinkers