

## Personality and Situational Effects in Decision Making

### Survey Introduction and Participant Pre-screening

**This survey seeks to identify factors related to decision making performance in organizational settings. To qualify for inclusion, participants must have a minimum level of experience or exposure to organizational decision making. The two following questions will establish your eligibility to participate.**

1. Are you 27 years of age or older and currently located outside the European Union?

Yes

No

2. Do you have 5 or more years of military, government, business or professional academic experience?

Yes

No

## Personality and Situational Effects in Decision Making

### Informed Consent Document

**You are being asked to be a volunteer in a research study.**

**Following are the specific details of your consent to participate.**

**Consent to be a Research Participant, GA Tech College of Engineering** [NOTE: this consent is to be obtained electronically by check box acknowledgement].

**Project.** Personality and Situational Effects in Decision Making

**Principal Investigator.** Dr. David Goldsman

**Co-Investigators.** James Fredrick Dickens

**Duration of Study.** 15 to 60 Minutes

**Total Compensation.** None

**Number of Participants.** 760

**Participation Limitations.** Individuals at least 27 years of age, located outside the European Union, with 5 or more years military, government, business or professional academic experience and/or or students currently enrolled in an accredited graduate or executive management program.

## **Survey General Information.**

Thank you for taking part in this important research effort. This research has been approved by the Georgia Institute of Technology Institutional Review Board (IRB) as of 01/09/2018.

This research seeks to identify key aspects of decision making situations that affect different decision makers in the performance of their task. It is anticipated that this research will lead to the development of improved models and principles for organizational decision making that will maximize the performance of diverse decision makers.

The survey is comprised of 4 main sections, which are estimated to require between 15 to 60 minutes for completion. It is not required to be completed in a single session.

## **Survey Participation Details.**

**Survey Description.** Based upon descriptions of various decision makers and decision making circumstances, you will assess the expected quality of their decision making and the requirement for possible adjustment to the circumstances to improve decision making performance. This will be accomplished through completion of an electronic survey. This supports research related to the development of improved models and principles for organizational decision making that can maximize the performance of diverse decision makers.

**Benefits.** There are no direct benefits to you by participating, however your participation will help us to develop improved models for organizational support to decision making.

**Compensation.** You will not be compensated for participating in this study.

**Costs.** There are no costs to you except for your time.

**Risks/Discomforts.** There are no foreseeable risks to you by participating.

**Confidentiality.** The following procedures will be followed to keep your personal information confidential:

- Any data that is collected about you will be kept private to the extent required by law. Your name and any other fact that might point to you will not appear when results of this study are presented or published.
- The SurveyMonkey software will collect and store the IP address of the machine you use to access this survey. No other personally identifying information is requested and none will be stored unless you explicitly enter it. Because this experiment is not being run from a secure server of the kind typically used to handle credit card transactions, there is a small possibility that your responses could be linked to you through the IP address and viewed by unauthorized third parties.
- The Office of Human Research Protections may also look over study records during required reviews.
- Additionally, to make sure that this research is being carried out in the proper way, the Georgia Institute of Technology IRB may review your study records.

**In Case of Injury/Harm.** If you are harmed in any way as a result of taking part in this study, please contact Dr. David Goldsman at telephone 404-822-8949. Be advised that neither the Principal Investigator nor Georgia Institute of Technology have made provision for payment of costs associated with any injury or harm resulting from participation in this study.

## **Subject Rights.**

- Your participation in this study is voluntary. You do not have to be in this study if you don't want to be.
- You have the right to change your mind and leave the study at any time without giving any reason and without penalty.
- Any new information that may make you change your mind about being in this study will be given to you.
- You can print this consent form to keep.
- You do not waive any of your legal rights by agreeing to this consent form.

## **Questions about the Study or Your Rights as a Research.**

- If you have any questions about the survey-related research, you may contact James Dickens at [jdickens3@gatech.edu](mailto:jdickens3@gatech.edu) or 404-358-0922. You may also contact Dr. David Goldsman at telephone 404-822-8949.
- If you have any questions about your rights as a research participant, you may contact the Georgia Institute of Technology Institutional Review Board (IRB) through Ms. Melanie Clark, Office of Research Integrity Assurance, at email: [melanie.clark@gtrc.gatech.edu](mailto:melanie.clark@gtrc.gatech.edu) or phone: (404) 894-6942.

## Personality and Situational Effects in Decision Making

### Informed Consent Electronic Acknowledgement

#### \* 3. Electronic Acknowledgement.

Do you consent to take part as a research subject for this project? If so, select "Yes." (If you do not select Yes you cannot proceed).

- Yes
- No (If you do not select Yes you cannot proceed)

## Personality and Situational Effects in Decision Making

You may exit at any point and your work will be saved. When returning later, you **MUST** return from the same IP Address / Computer / Device in order to be recognized as the same participant.

## Personality and Situational Effects in Decision Making

### Subject Administrative Information

#### \* 4. What is your age range?

- Under 25
- 25 to 29
- 30 to 39
- 40 to 49
- 50 to 59
- 60 or older

\* 5. What is your gender?

- Female
- Male
- Do Not Prefer to Disclose / Other

\* 6. What best describes your primary vocation or profession? You may select more than one option.

- Military
- National Security (non-military)
- Other Government / Civil Service
- Business
- Finance
- Medical
- Psychology
- Academia / Education
- Other

\* 7. How many years experience do you have in decision making or support to decision making in an organizational setting?

- Less than 1 year
- 1 to 5 years
- 6 to 10 years
- 11 to 20 years
- More than 21 years

\* 8. Are you currently enrolled in an executive / professional education / graduate education program at an accredited institution?

- Yes
- No

9. If so, what is the name of that institution?

## Assessment Instructions

The core of this survey is comprised of six military decision making scenarios for your assessment. THEY WILL BE PRESENTED IN RANDOM ORDER. You will be required to complete a minimum of one scenario with the concluding survey questions for your submission to be validated. You are encouraged to complete all six scenarios.

Each scenario is supported by a brief description of the decision maker and the circumstances. The scenarios are sanitized to remove information tying them to a specific historical persons or events. They will permit your visualization of the event and assessment of probable decision quality. You should apply your judgment to fill in where necessary details are missing.

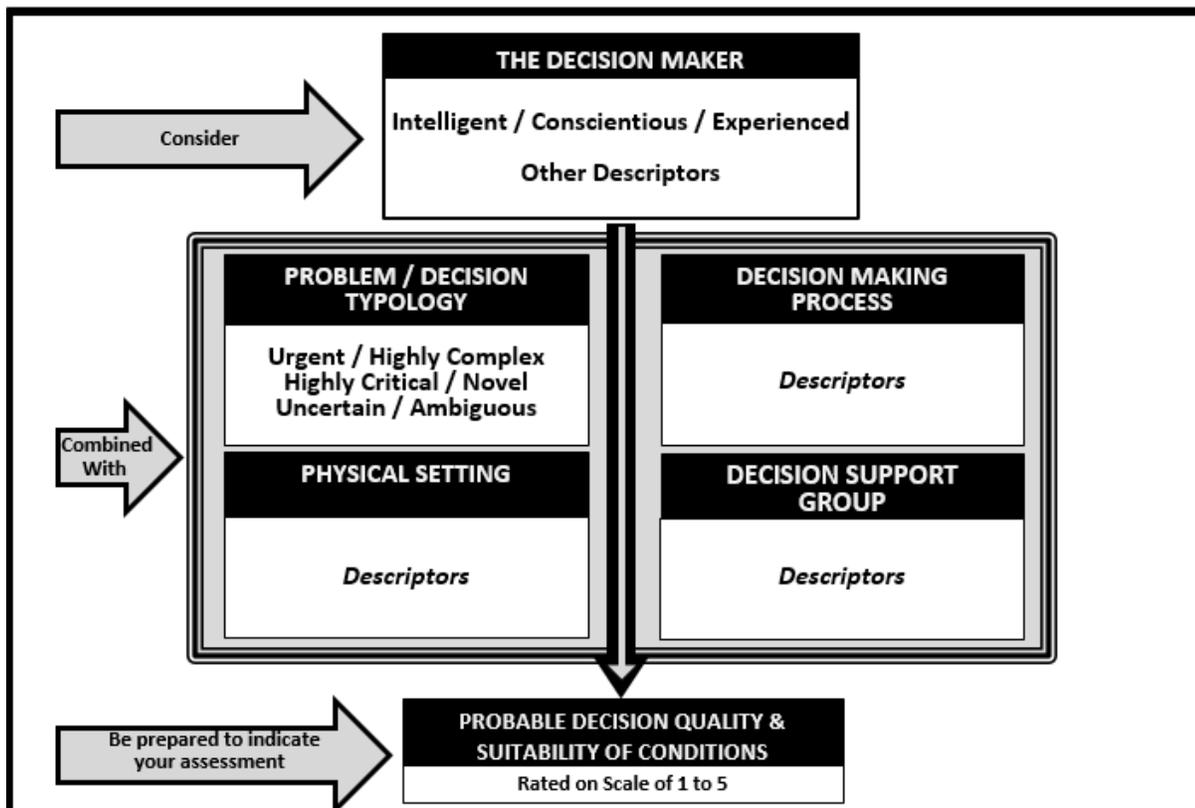
Each scenario provides detailed attributes of the decision maker, the group supporting the decision making process and the physical circumstances. These details are important for your assessment of probable decision quality. As such, they will be summarized as a graphic following each scenario

The following definitions describe the main components of the graphic summaries:

- PROBLEM / DECISION TYPOLOGY describes key characteristics of the problem under consideration.
- PHYSICAL SETTING describes atmospherics or aspects of the physical environment (sound / light / feeling) of the decision making event.
- DECISION MAKING PROCESS describes key aspects of the process applied to making a decision.
- DECISION SUPPORT GROUP describes key characteristics of the group assembled to assist in decision making.

These concepts will be presented as word pictures to aid in your assessment of decision quality and conditions as shown below. Note that PROBLEM / DECISION TYPOLOGY conditions remain the same for all scenarios.

### Generic Scenario Word Picture



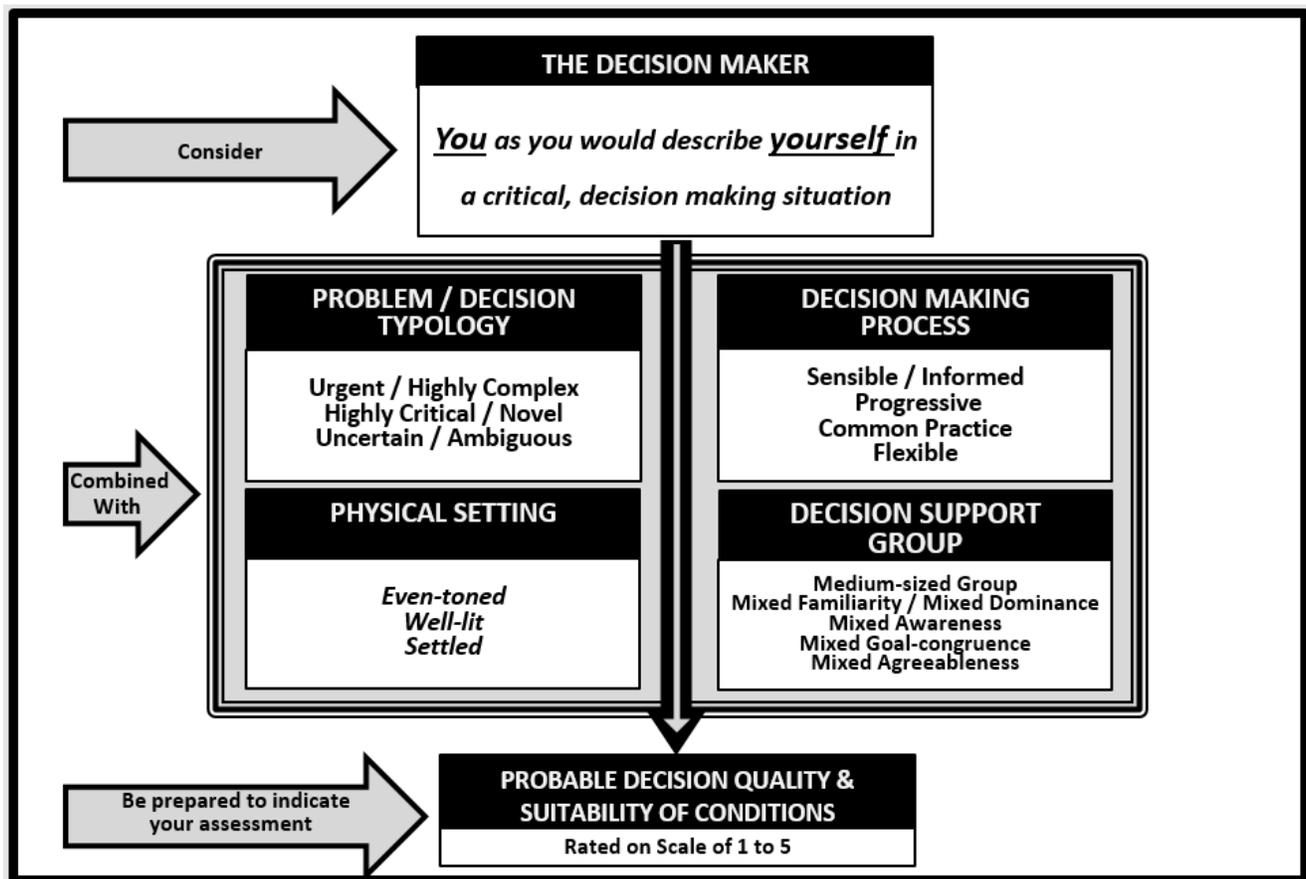
In order to provide you a specific critical perspective for making your assessments, you will be asked to assume the role of the Chief of Staff to the decision maker at the conclusion of each scenario. A second set of questions will ask you to assume the role of decision maker.

## Personality and Situational Effects in Decision Making

### Baseline Scenario Assessment

The following four questions establish a baseline for your scenario assessments. They request your assessment of a decision making situation where you are the designated decision maker and the conditions approximate the average conditions employed across the survey's six scenarios.

**Baseline Case Word Picture:** The following graphic summarizes the characteristics of decision making conditions in a situation where YOU are the decision maker. Review this briefly as you form your assessment.



\* 10. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision

Poor Decision

Average Decision

Good Decision

Very Good Decision



\* 11. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 12. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 13. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

You will now begin the survey scenario assessments. You may opt to continue for all six scenarios.

After completion of your final scenario, you must complete the final survey questions for your input to be validated.

## Personality and Situational Effects in Decision Making

### Scenario 1A Narrative

**Strategic Context:** Much is at stake, and the outcome of tomorrow's engagement will have huge consequences on the campaign. A dramatic victory would provide the rationale for continuation of the broader strategy and present fundamental challenges to the enemy's long-term approach. A dramatic loss would be disastrous in terms of men and materiel. It would also dictate major shifts in friendly strategy. Responsibility and authority to decide tomorrow's actions have both been completely vested in the commander, however grave the implications. A decision will be required tonight.

**Operational Context:** After several dramatic turns of fortune, the opposing forces were settling into a tense equilibrium. There are still many unknowns. Component commander reports are incomplete and uneven. In one important instance, they are contradictory. This situation could not have been anticipated. There was nothing in the commander's prior experience to provide a template for action. There are three main options, each with its own opportunities and risks and each unique in terms of geography, force options, resource requirements and synchronization issues. Given the limitations on forces and resources, they are mutually exclusive. Careful synchronization and forceful execution would be required to achieve a positive outcome.

The subordinate commanders and staff with whom the commander will confer are a competent, well-acquainted and collegial team who share acceptance of his strategic and tactical goals. Each of them are only partially informed about the theater-wide situation. They are highly likely to be agreeable with the commander's decision, whatever it might be.

**The commander can be described as follows:**

- intelligent, conscientious and experienced
- shy / very shy
- accommodating / timid
- nervous / tense
- passionate / moody
- tough-minded / stubborn
- very creative / innovative

These characteristics are generally consistent with his personal qualities over time.

**Plan for the Decision Making Event:** The commander recommends a process of informal collaboration among key commanders and staff, carried-out through a combination of one-on-one conferencing, direct communication with key staff, and through personal review of reports, staff assessments and intelligence. This approach will only permit his contact with a small number of the key commanders and staff. The decision making process will be guided by his experience: intuitive and inductive. Having taken discussions with his subordinates on-board, the commander would move on to further discussion with others, as and when they become available. This will be an improvised and relaxed approach. As necessary, he will turn back on the most crucial questions, analyses and conclusions. Once the commander is satisfied that he has all available input and feedback, he will decide and transmit his selected concept to the components for their execution.

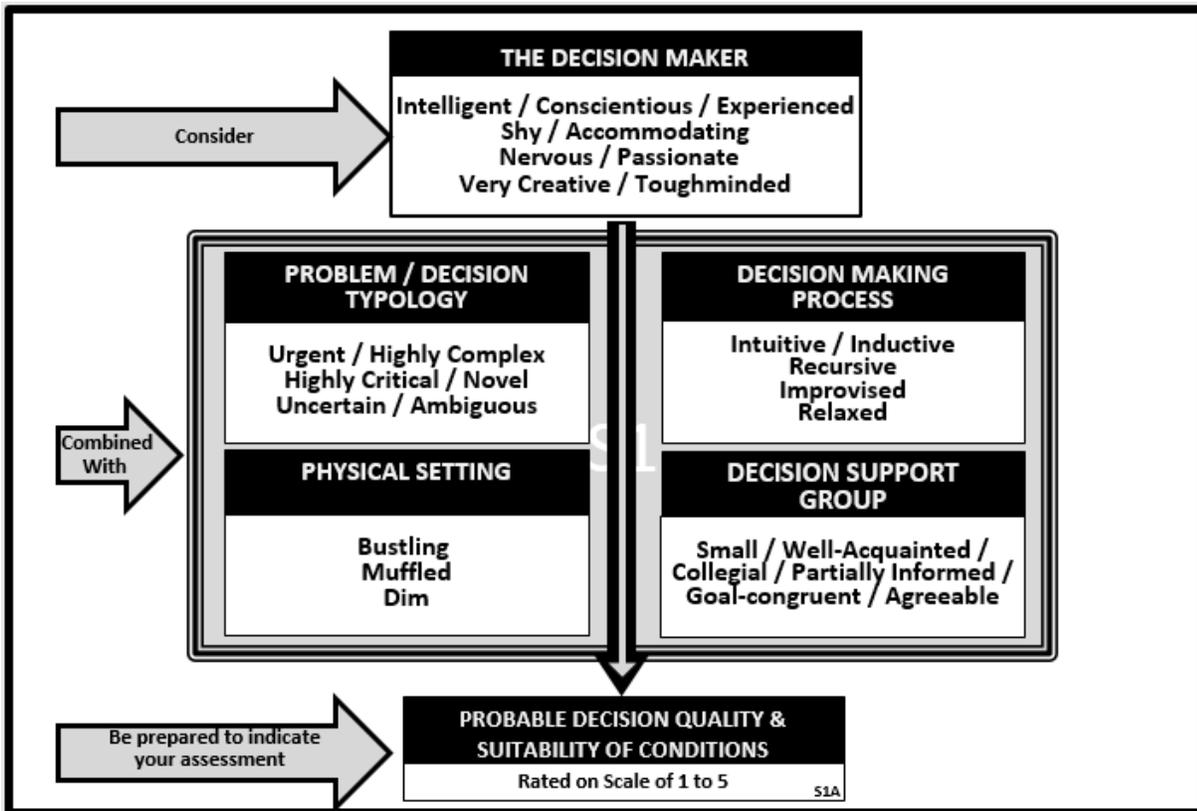
He proposes to carry out his decision making from the command post stationed in the margins of the operations center. At night, it will become increasingly muffled and dim, but with constant bustling even in the commander's poorly furnished workspaces from the back-and-forth of the staff shuttling charts, maps, correspondence and new reports.

**Your Role:** You are the Chief of Staff and have access to any required facilities, communications and other resources. You have the ability to influence the immediate priorities of the subordinate commanders and staffs. You are well-trusted by this commander and familiar with his strengths and weaknesses. He asks you to consider his recommended approach to for the decision making event. Will it produce the best possible decision? If not, what adjustments would you recommend?

## Personality and Situational Effects in Decision Making

### Scenario 1A Assessment

**Scenario 1A Word Picture:** The following graphic summarizes the key personal aspects of the commander and signal characteristics of the decision making conditions he recommends. Review this briefly as you form your assessment.



\* 14. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision      Poor Decision      Average Decision      Good Decision      Very Good Decision

☆                      ☆                      ☆                      ☆                      ☆

\* 15. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 16. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 17. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

\* 18. Assess the quality of the decision **YOU** would make under the circumstances as described in this scenario.

Very Poor Decision	Poor Decision	Average Decision	Good Decision	Very Good Decision
★	★	★	★	★

\* 19. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance if **YOU** are the decision maker.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 20. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance if **YOU** are the decision maker.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 21. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance if **YOU** are the decision maker.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

## Personality and Situational Effects in Decision Making

### Scenario 1A Historical Basis and Continuation Option

**Scenario 1 Historical Basis:** The historical basis for this scenario is General Robert E. Lee's overnight decision to attack the Army of the Potomac on 3 July, 1863 at Gettysburg. General Lee personally consulted only with selected subordinates, including a significant and contentious discussion with General James Longstreet, who strongly recommended against Lee's proposed concepts for the attack. There is ample evidence that no specific decision making event ever took place, as Lee chose to consider his options and decide alone at his headquarters. This decision led to an infamous assault on the Union's center, which culminated in the Union's repulse of Pickett's charge and the subsequent retreat of the Army of Northern Virginia.

\* 22. Are you willing to assess another scenario?

Note: If you have completed six scenarios, you will continue to final questions with a Yes or No answer.

It is not required that you complete the survey in a single session. Your work will be saved and you may exit at any time and return to complete the survey later.

Yes (you may select an additional scenario up to 5 times)

No (you will be directed to concluding items)

## Personality and Situational Effects in Decision Making

### Scenario 2A Narrative

**Strategic Context:** A surprising series of events led to this circumstance where friendly and enemy forces had aligned themselves in direct opposition. Failure to reassert control over the enemy's offensive maneuver would require a disorganized redeployment. However, if that is all that can be achieved, it will be perceived as catastrophe by political leadership, who see an opportunity to strike the enemy's main force and establish new strategic momentum. Timelines for action are short. Despite the strategic peril, the commander has the full responsibility and authority to decide what happens next.

**Operational Context:** The enemy's attacks threaten the viability of the current deployment. However, his momentum has slackened, with the hint of a pause. Nonetheless, the enemy remains intent on pressing the offensive. Subordinate reporting indicates that the components are tenuously secure in their deployments as compressed by the enemy's attacks. They are also urgently requesting reinforcement based on their sense that renewed enemy attacks might prevail if they achieved better concentration on any front.

The clamor for resources argues against any immediate friendly transition to the offensive. Two main courses of action are apparent: to reinforce in position; or to redeploy according to an existing contingency plan. In addition, both options might be employed in combination. Redeployment will eliminate both the risk of an operational defeat and the chance to inflict serious damage on the enemy. Reinforcement in position offers the opportunity to exact high costs from the enemy's offensive forces and systems, while preserving the potential to transition to the offensive when conditions are improved. No formal decision is required to reinforce within the current deployment as the components are already working to achieve relevant objectives. Activation of the contingency redeployment would require synchronization by the command followed by detailed coordination among the components.

**The commander can be described as follows:**

- intelligent, conscientious and experienced
- original / creative
- reasonable / considerate
- sociable / approachable
- cooperative / assertive
- sensitive / anxious
- moderately stable / moderately emotional

These characteristics are generally consistent with his personal qualities over time.

**Plan for the Decision Making Event:** The commander recommends that he convene a decision making session comprised of all subordinate commanders and other key staff. The intended process is a sensible and flexible approach that is well-informed by all available information. It is also logically progressive: with or without consensus, it will produce a decision. The process is guided by formalized procedures that are familiar to all attendees. The large group of subordinate commanders and staff with whom the commander will confer are competent but new and unfamiliar as a team. Each commander is only partially informed of the key operational considerations. They are high-spirited, with a strain of competitiveness among them. They are also divergent in their views of operational and strategic goals, with the potential for disagreement over the best choice for the next maneuver.

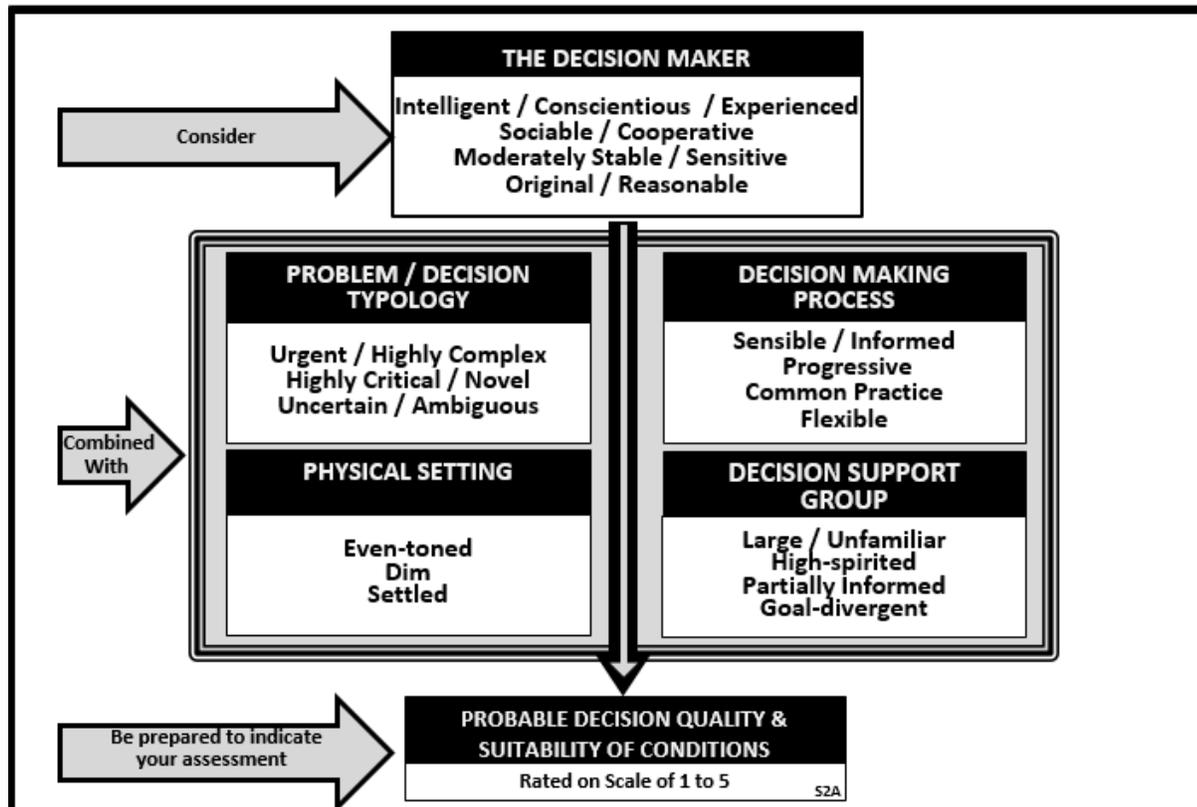
The commander proposes to carry out his decision making from a residence located near the most forward-deployed forces. Removed from the clamor of the main headquarters, the room is small, sparsely furnished and dim, but otherwise settled and still. Its size and physical arrangement will permit even-toned discussion between the several attendees.

**Your Role:** You are the Chief of Staff and have access to any required facilities, communications and other resources. You have the ability to influence the immediate priorities of the subordinate commanders and staffs. You are well-trusted by this commander and familiar with his strengths and weaknesses. He asks you to consider his recommended approach to for the decision making event. Will it produce the best possible decision? If not, what adjustments would you recommend?

## Personality and Situational Effects in Decision Making

### Scenario 2A Assessment

**Scenario 2A Word Picture:** The following graphic summarizes the key personal aspects of the commander and signal characteristics of the decision making conditions he recommends. Review this briefly as you form your assessment.



\* 23. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision

Poor Decision

Average Decision

Good Decision

Very Good Decision



\* 24. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 25. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 26. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

\* 27. Assess the quality of the decision **YOU** would make under the circumstances as described in this scenario.

Very Poor Decision

Poor Decision

Average Decision

Good Decision

Very Good Decision



\* 28. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance if **YOU** are the decision maker.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 29. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance if YOU are the decision maker.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 30. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance if YOU are the decision maker.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

## Personality and Situational Effects in Decision Making

### Scenario 2A Historical Basis and Continuation Option

**Scenario 2 Historical Basis:** The historical basis for this scenario is General George Meade's overnight decision to remain in defense at Gettysburg to defeat the Confederate attacks of 3 July, 1863. Late on 2 July, General Meade convened a Council of War with his key subordinates and selected staff at a small farmhouse on the Union front lines. Consistent with military custom, the Council of War delivered an ordered presentation of commander assessments and recommendations for Meade's consideration and decision. This decision led to the successful defense of Gettysburg and the subsequent retreat of General Robert E. Lee's Army of Northern Virginia.

\* 31. Are you willing to assess another scenario?

Note: If you have completed six scenarios, you will continue to final questions with a Yes or No answer.

It is not required that you complete the survey in a single session. Your work will be saved and you may exit at any time and return to complete the survey later.

- Yes (you may select an additional scenario up to 5 times)
- No (you will be directed to concluding items)

## Personality and Situational Effects in Decision Making

### Scenario 3A Narrative

**Strategic Context:** Friendly forces are postured to strike in massive force. Higher authorities have finally delivered all necessary resources, and are in no position to further influence the commander's sole decision. Success will mean that the coalition could chart a clear course toward the end of all hostilities. However, failure to gain a quick advantage on this new front will ensure that the grind on all other fronts must continue. The primary risk of failure will come from the loss of surprise if strike forces are recalled after launch.

**Operational Context:** Enemy forces are employed across the new front, supported by impressive reserves. With enough notice, they will reinforce locally to make any friendly maneuver infeasible. Due to the questionable strike conditions forecast for the coming days, the enemy is not inclined to lean forward in anticipation of any imminent assault. The time between initial friendly launches and their effective delivery on target will not permit effective enemy adjustments. However, any signature created by the launch-recall of friendly strikes would make later re-initiation more difficult along similar lines.

The two friendly options are to initiate the offensive, with initial strikes subject to recall over a short period, or to delay the attacks until the next feasible window. Several conditions are required to be in tolerance. For the knowable conditions, tomorrow is feasible. However, some conditions are unknowable until after initial sorties are launched. Once those are confirmed, they might require the strategic recall of strike forces. Forecasts for tomorrow offer only a slim chance for follow-through.

Subordinate reporting indicates that the combined forces are at maximum preparedness for the attacks. Assessments and staff estimates have been updated as of today, and the process of making the launch decision has been exhaustively rehearsed. Activation of the plan simply requires a decision to launch.

**The commander can be described as follows:**

- intelligent, conscientious and experienced
- original / creative
- reasonable / considerate
- shy / very shy
- cooperative / assertive
- sensitive / anxious
- stable / unemotional

These characteristics are generally consistent with his personal qualities over time.

**Plan for the Decision Making Event:** Consistent with rehearsals for the launch decision, the commander recommends that he convene the same small, well-acquainted team of subordinate commanders and staff. They are a competitive group, yet collegial and completely congruent on the strategic and operational goals of the operation. Each subordinate is comprehensively informed on of the operational details through months of preparation. This process will be guided by their rehearsed decision making experiences as informed by, and flexibly adapted to updated reports, assessments and forecasts. The method is both sensible and progressive: either a Go or No Go decision will result.

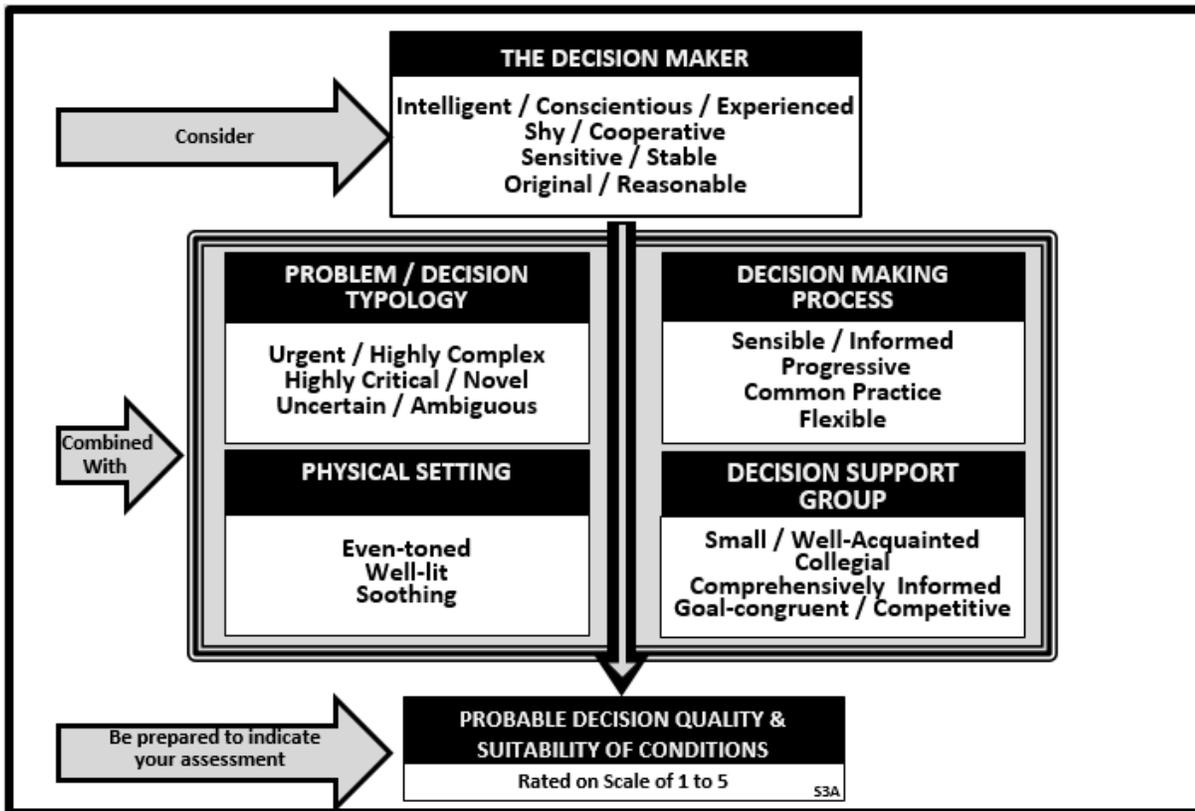
Deliberations are planned to occur as rehearsed, from the conference room in the headquarters suite. The expansive room is well lit, ornately furnished and insulated from the nearby operations center activities. The soothing environment will encourage comfortable and even-toned discussion by the small group.

**Your Role:** You are the Chief of Staff and have access to any required facilities, communications and other resources. You have the ability to influence the immediate priorities of the subordinate commanders and staffs. You are well-trusted by this commander and familiar with his strengths and weaknesses. He asks you to consider his recommended approach to for the decision making event. Will it produce the best possible decision? If not, what adjustments would you recommend?

## Personality and Situational Effects in Decision Making

### Scenario 3A Assessment

**Scenario 3A Word Picture:** The following graphic summarizes the key personal aspects of the commander and signal characteristics of the decision making conditions he recommends. Review this briefly as you form your assessment.



\* 32. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision      Poor Decision      Average Decision      Good Decision      Very Good Decision

★                      ★                      ★                      ★                      ★

\* 33. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 34. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 35. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

\* 36. Assess the quality of the decision **YOU** would make under the circumstances as described in this scenario.

Very Poor Decision	Poor Decision	Average Decision	Good Decision	Very Good Decision
★	★	★	★	★

\* 37. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance if **YOU** are the decision maker.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 38. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance if **YOU** are the decision maker.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 39. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance if **YOU** are the decision maker.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

## Personality and Situational Effects in Decision Making

### Scenario 3A Historical Basis and Continuation Option

**Scenario 3 Historical Basis:** The historical basis for this scenario is General Dwight D. Eisenhower's time-sensitive decision to launch the D-Day attacks of 6 June, 1943. As Supreme Commander, General Eisenhower convened a well-rehearsed decision making event with his key subordinates and staff at his headquarters in Hampshire, England. Eisenhower and his command group reviewed crucial details of the operation and specifically confirmed that the dynamic threat and weather conditions would permit initiation of the massive D-Day invasion. This decision led to the successful breach of Germany's Fortress Europe and the opening of the decisive front for World War II' in central Europe.

\* 40. Are you willing to assess another scenario?

Note: If you have completed six scenarios, you will continue to final questions with a Yes or No answer.

It is not required that you complete the survey in a single session. Your work will be saved and you may exit at any time and return to complete the survey later.

Yes (you may select an additional scenario up to 5 times)

No (you will be directed to concluding items)

## Personality and Situational Effects in Decision Making

### Scenario 4A Narrative

**Strategic Context:** The enemy's unexpected surge caught friendly forces off-guard and threaten staggering losses if their further assaults are not blunted. Their expanding gains also threaten to break the critical momentum built over time. A rapid maneuver is required to prevent key strategic forces from being overwhelmed and permit continuation of the friendly offensive strategy. However, if the enemy's new pressure is not quickly relieved and gains not reversed, a new and static aspect of the campaign is likely to develop. Higher military authorities are engaged at their level to resolve the emergent challenges. They require an effective maneuver option from this commander to support their own adjustments.

**Operational Context:** The enemy forces have penetrated the friendly offensive front to significant depth, with their reserve capabilities following in support. Friendly reserves deployed to contain the penetration are decisively engaged and at risk of being overrun. The enemy shows every indication of continuing the attacks. In command of the only major friendly force that can provide leverage on the predicament, the commander is currently focused on other objectives. Now higher command has tasked him to present them with counteroffensive options. He is being called to their location to deliberate and decide.

Before departing his command, he has taken time to thoroughly assess the situation with his key subordinates in preparation for the formal discussion of maneuver options with his seniors. They decide together on the feasibility of three distinct courses of action, pending the commander's discussion and decision with his higher authorities. The three friendly options present distinct geographic and synchronization challenges. They are also distinguishable by the degree to which they will impact on command's ability to resume operations directed toward previously-established objectives. Their advisability depends on other key aspects of friendly and enemy disposition that can only be effectively assessed up the chain of command.

**The commander can be described as follows:**

- intelligent, conscientious and experienced
- very creative / innovative
- tough-minded / stubborn
- sociable / approachable
- demanding / dominant
- sensitive / anxious
- passionate / moody

These characteristics are generally consistent with his personal qualities over time.

**Plan for the Decision Making Event:** The commander recommends that he proceed alone to higher headquarters to deliberate and decide with a small group of his seniors. During those discussions, he will make his decision and convey the selected course of action back to his subordinates by secure communications. The commander is well-acquainted with each of the higher headquarters personnel with whom he plans to meet. As a group, they are also all senior to him, generally collegial and agreeable among themselves. However, they are also divergent on their sense of the strategic and operational goals of this operation. None of them possesses relevant information about the command and its current capabilities, despite that each of the commander's own subordinates are comprehensively informed.

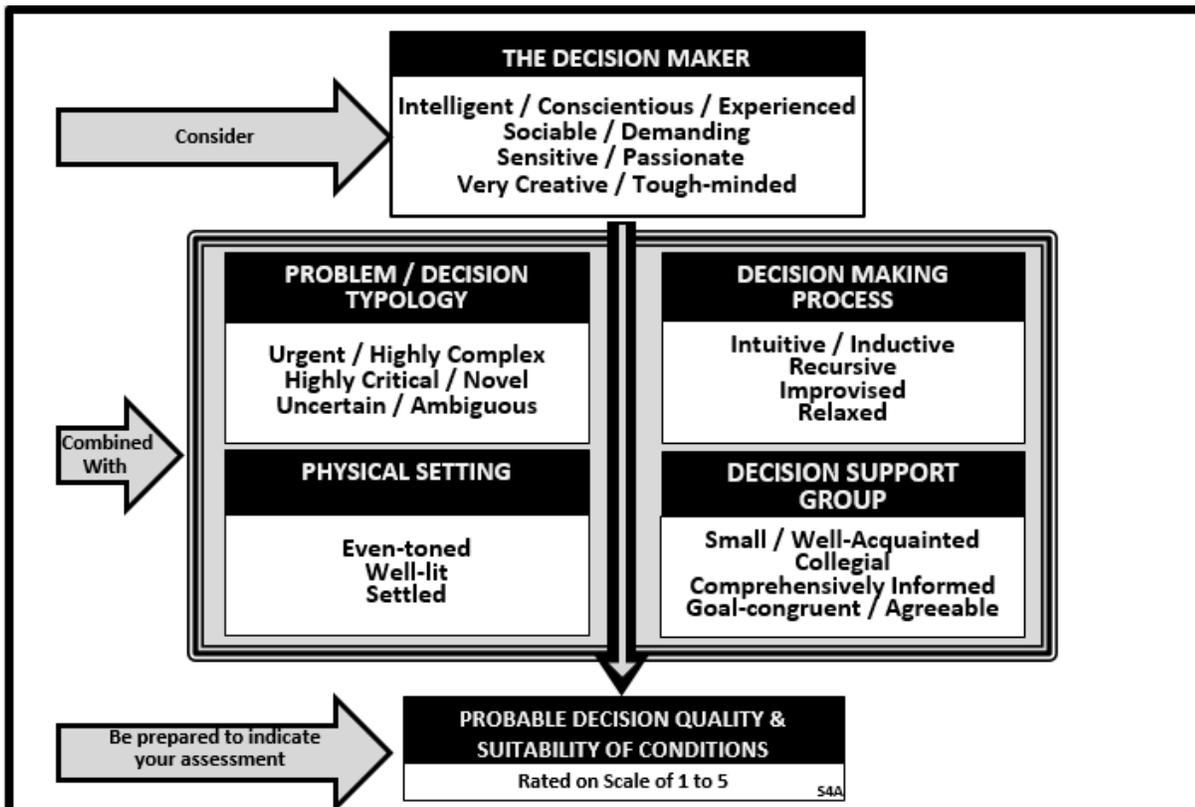
This decision making process will be guided by the higher commander's preferences. As such, it will be a relaxed and improvised approach to the assessment of options and decision making. The process will be guided by intuition, induction and recursive discussion of the core issues. Deliberations are planned to occur in a large, well-lit conference room. The attendees will be comfortable at the miscellaneously furnished conference table, and the room settled and still. This facility will set conditions for an even-toned discussion.

**Your Role:** You are the Chief of Staff and have access to any required facilities, communications and other resources. You have the ability to influence the immediate priorities of the subordinate commanders and staffs. You are well-trusted by this commander and familiar with his strengths and weaknesses. He asks you to consider his recommended approach to for the decision making event. Will it produce the best possible decision? If not, what adjustments would you recommend?

## Personality and Situational Effects in Decision Making

### Scenario 4A Assessment

**Scenario 4A Word Picture:** The following graphic summarizes the key personal aspects of the commander and signal characteristics of the decision making conditions he recommends. Review this briefly as you form your assessment.



\* 41. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision

Poor Decision

Average Decision

Good Decision

Very Good Decision



\* 42. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 43. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 44. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

\* 45. Assess the quality of the decision **YOU** would make under the circumstances as described in this scenario.

Very Poor Decision

Poor Decision

Average Decision

Good Decision

Very Good Decision



\* 46. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance if **YOU** are the decision maker.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 47. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance if YOU are the decision maker.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 48. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance if YOU are the decision maker.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

## Personality and Situational Effects in Decision Making

### Scenario 4A Historical Basis and Continuation Option

**Scenario 4 Historical Basis:** The historical basis for this scenario is General George Patton's decision to turn his 3rd Army from their continued attacks toward Germany, and attack in a new direction to lift the siege of US forces in Bastogne, Belgium. On 19 December, 1944, General Eisenhower called Patton to a chateau in Verdun, France to confer with Alliance leadership. Patton was aware that he would be required to recommend options for the relief of encircled forces in Bastogne and prevent a widening breach of the Alliance offensive front. Before his departure to Verdun, Patton prearranged three maneuver options with his key subordinates. However, selection of an option depended on the outcome of discussions with the Alliances' senior commanders. At the Verdun meeting and without further collaboration with his own subordinates and staff, Patton confirmed the necessary details to make his decision for an armored assault deep into the German offensive front. Patton's attack broke the German encirclement of Bastogne and restored the integrity of the Alliance offensive front.

\* 49. Are you willing to assess another scenario?

Note: If you have completed six scenarios, you will continue to final questions with a Yes or No answer.

It is not required that you complete the survey in a single session. Your work will be saved and you may exit at any time and return to complete the survey later.

- Yes (you may select an additional scenario up to 5 times)
- No (you will be directed to concluding items)

## Personality and Situational Effects in Decision Making

### Scenario 5A Narrative

**Strategic Context:** After several weeks, friendly forces have shored-up their front and are gradually reclaiming their losses from the enemy. However, continued friendly expansion along this front would come only at a cost in time and resources that will prevent any decisive maneuver against the enemy's main sources of strength. Relief of embattled friendly forces is no longer the primary issue. Instead, the key concern is to determine how to apply meager strategic reinforcements to turn the tables on the enemy without opening a second and independent front. Political leadership is intent to be informed of the plan immediately so that they could see to the necessary resourcing and condition setting. If the planned operation succeeds, the enemy's concentrations against the deployed friendly forces will be greatly reduced and their ability to consolidate their prior gains eliminated. If the plan succeeds, continued friendly reinforcement through the expanded front will accelerate progress toward eliminating the enemy regime and restoring international order.

**Operational Context:** The enemy's strength slowly wanes as they marshal dispersed forces and resources to sustain offensive pressure. There is no apparent limit to their offensive intent. Friendly forces have achieved coordinated effects across the defensive front, with increasing success in foiling the enemy's constant probing. However, the enemy is now resource-strapped, with no potential for bold maneuver or even the exploitation of localized gains. Neither friendly nor enemy forces can drastically change the status quo short of some stroke of luck or a daring ploy. The enemy continues to slowly reinforce their probing forces across the now-stabilizing front.

The theater commander has three options to employ strategic reinforcements: through the current friendly front; as an envelopment of the enemy's main offensive echelon; or through a deep strike against the elongated enemy. All but reinforcement through the friendly front are dependent upon complex conditions and will require specialized systems and tactics. Each option has its own specific resourcing and timing demands for which political leaders require immediate knowledge.

**The commander can be described as follows:**

- intelligent, conscientious and experienced
- very creative / innovative
- toughminded / stubborn
- outgoing / very forward
- demanding / dominant
- calm / very relaxed
- stable / unemotional

These characteristics are generally consistent with his personal qualities over time.

**Plan for the Decision Making Event:** To finalize a decision, the commander recommends that he convene a session with his key staff and subordinate commanders. This will include staff representatives from higher headquarters. The assembly will be large with unfamiliar and high-spirited attendees who are each only partially informed on the relevant operational details. They also have divergent views of the strategic and operational goals of the proposed operation and competitive positions about the possible courses of action. The commander intends to facilitate a meticulously detailed and doctrinal assessment and review of the situation and options. The presentation and discussion will be rationally structured, deductive and methodological. Once concluded, the commander will make his decision.

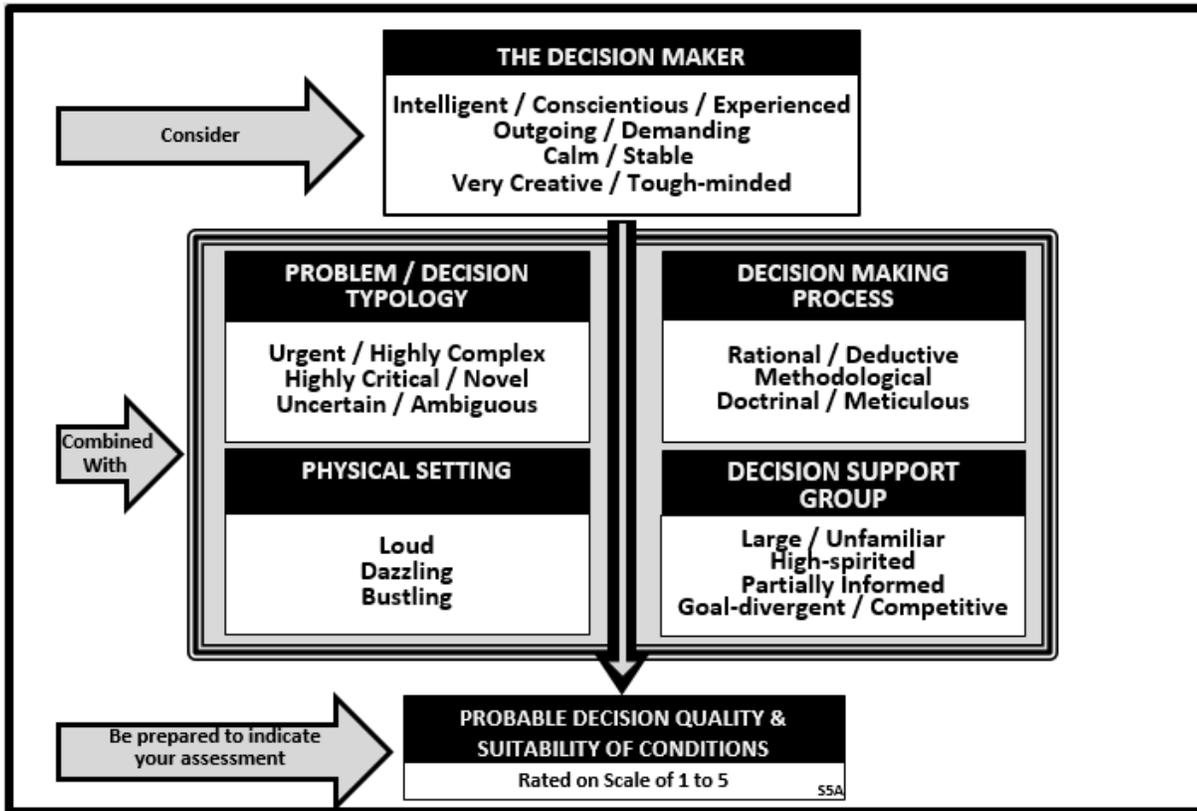
The conference room proposed for the decision making session will be decked out with a dazzling array of lights, maps, charts and other displays. Given the size of the assembled group and the contentious nature of the intended discussions, deliberations will be loud and bustling with energy and movement.

**Your Role:** You are the Chief of Staff and have access to any required facilities, communications and other resources. You have the ability to influence the immediate priorities of the subordinate commanders and staffs. You are well-trusted by this commander and familiar with his strengths and weaknesses. He asks you to consider his recommended approach to for the decision making event. Will it produce the best possible decision? If not, what adjustments would you recommend?

## Personality and Situational Effects in Decision Making

### Scenario 5A Assessment

**Scenario 5A Word Picture:** The following graphic summarizes the key personal aspects of the commander and signal characteristics of the decision making conditions he recommends. Review this briefly as you form your assessment.



\* 50. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision	Poor Decision	Average Decision	Good Decision	Very Good Decision
★	★	★	★	★

\* 51. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 52. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 53. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

\* 54. Assess the quality of the decision **YOU** would make under the circumstances as described in this scenario.

Very Poor Decision	Poor Decision	Average Decision	Good Decision	Very Good Decision
				

\* 55. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance if **YOU** are the decision maker.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 56. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance if **YOU** are the decision maker.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 57. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance if **YOU** are the decision maker.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

## Personality and Situational Effects in Decision Making

### Scenario 5A Historical Basis and Continuation Option

**Scenario 5 Historical Basis:** The historical basis for this scenario is General Douglas MacArthur's decision to envelop North Korean forces at Inchon, South Korea and relieve the pressure of United Nation's forces in the Pusan Perimeter. On 3 August, 1950, MacArthur hosted a large assembly of commanders and staff at his Tokyo headquarters. This group included a significant contingent from the US Joint Chiefs of Staff. The thoroughly-scripted event was vigorously contested by selected attendees, despite MacArthur's accommodation for the presentation and discussion of their considerations of risk and maneuver alternatives. In the end, MacArthur himself provided a theatrical and forceful presentation of the Inchon option's merits, despite his acknowledgement of poor odds for success. Given General MacArthur's gravitas, his contrary decision was certain to prevail with the US Joint Chiefs and the US President who would secure the necessary reinforcements. This decision set the course for one of the most astounding military reversals in the history of amphibious warfare, as it forced North Korean forces into a precipitous retreat from South Korea.

\* 58. Are you willing to assess another scenario?

Note: If you have completed six scenarios, you will continue to final questions with a Yes or No answer.

It is not required that you complete the survey in a single session. Your work will be saved and you may exit at any time and return to complete the survey later.

- Yes (you may select an additional scenario up to 5 times)
- No (you will be directed to concluding items)

## Personality and Situational Effects in Decision Making

### Scenario 6A Narrative

**Strategic Context:** The defeated enemy is falling back to their most secure bases in order to escape the widening onslaught and regenerate combat capability. Friendly forces have achieved dominance over the enemy with increasing coordination among independent fighting forces. In the pending attacks, friendly success will assure the elimination of the enemy as an immediate military threat. On the other hand, failure will ensure the need for continuing friendly attacks on more inaccessible objectives defended by reorganized enemy formations. The enemy's current vulnerabilities will not last long, and the necessary intelligence gathering must start immediately if the required conditions for success are to be set. The commander has been provided authority to decide how to continue pursuit of the enemy. However, strategic leadership expects notification prior to the initiation of any supporting activities.

**Operational Context:** Friendly forces have consolidated their gains across the theater with subordinate and supporting commands refit following the culmination of recent victories. New capabilities and formations have been added, with formerly distinct commands now in an improved position to coordinate roles and objectives. However, coordination mechanisms are not fully established. Employment of this complex new force will require detailed synchronization on a different level than any previous operation.

The enemy is in disarray with their main defensive systems neutralized. They remain concentrated and exposed. Their options for fallback basing and defensive reorganization are limited. Intelligence reporting indicates their probable continued withdrawal to an area that will provide them with much greater protection. Those fallback bases would challenge the effective reach of friendly systems.

The friendly commander's principle decision is to initiate condition-setting and intelligence gathering for an attack to destroy the enemy in detail. However, there are several critical internal variations and timing issues to be resolved. The intensive details related to the variations will drive the prioritization of condition-setting resources and the repositioning of attack systems and formations.

**The commander can be described as follows:**

- intelligent, conscientious and experienced
- unoriginal / unimaginative
- agreeable / submissive
- outgoing / very forward
- accommodating / timid
- calm / very relaxed
- moderately stable / moderately emotional

These characteristics are generally consistent with his personal qualities over time.

**Plan for the Decision Making Event:** The commander recommends that he convene a decision briefing with all of his key staff and subordinate and supporting commanders. The assembly will be large with unfamiliar and high-spirited attendees who are each comprehensively informed on the specific situational details of the pending attacks. They are likely to be agreeable about the selected approach, although they have divergent views of the strategic and operational goals of the operation. The decision making process he proposes will be guided by combined doctrine familiar to them all. The staff will provide a meticulous review of the operational considerations, and by use of rational and deductive arguments, will provide analysis and comparison of the courses of action. The methodological approach will result in a single recommended option for the commander's consideration.

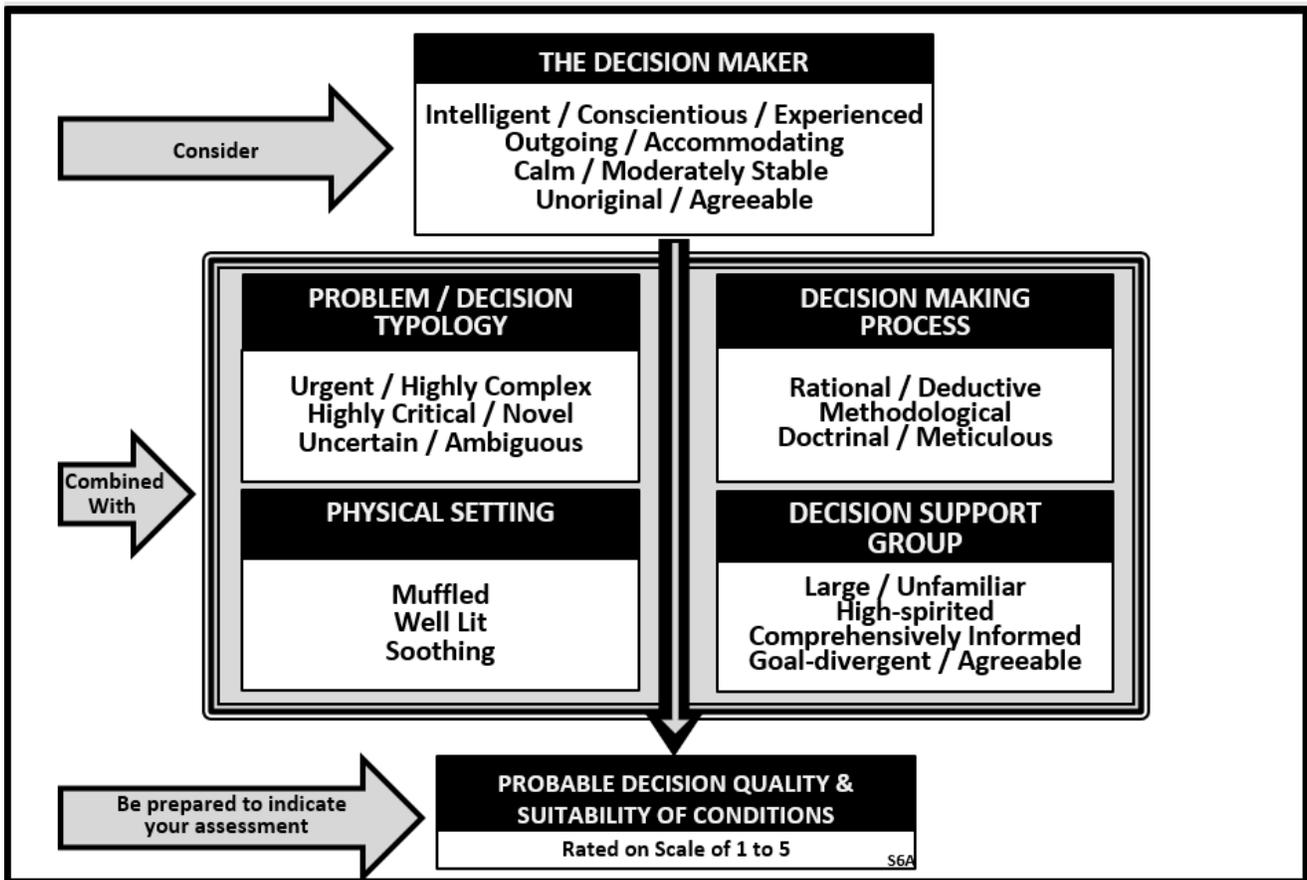
The facility proposed for the event will be soothing and comfortable even for a crowd this size. Except for the alternating speaker's voices, the tone will be muffled. However, the multiple charts, displays and visual presentations will be well lit.

**Your Role:** You are the Chief of Staff and have access to any required facilities, communications and other resources. You have the ability to influence the immediate priorities of the subordinate commanders and staffs. You are well-trusted by this commander and familiar with his strengths and weaknesses. He asks you to consider his recommended approach to for the decision making event. Will it produce the best possible decision? If not, what adjustments would you recommend?

## Personality and Situational Effects in Decision Making

### Scenario 6A Assessment

**Scenario 6A Word Picture:** The following graphic summarizes the key personal aspects of the commander and signal characteristics of the decision making conditions he recommends. Review this briefly as you form your assessment.



\* 59. Assess the quality of the decision made under the circumstances described in this scenario.

Very Poor Decision      Poor Decision      Average Decision      Good Decision      Very Good Decision

☆                                  ☆                                  ☆                                  ☆                                  ☆

\* 60. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 61. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 62. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

\* 63. Assess the quality of the decision **YOU** would make under the circumstances as described in this scenario.

Very Poor Decision	Poor Decision	Average Decision	Good Decision	Very Good Decision
★	★	★	★	★

\* 64. Assess the need for any adjustment to DECISION MAKING PROCESS conditions to improve decision making performance if **YOU** are the decision maker.

- Decrease decision making process constraints, structure and clarity
- No adjustments required
- Increase decision making process constraints, structure and clarity

\* 65. Assess the need for any adjustment to PHYSICAL SETTING conditions to improve decision making performance if **YOU** are the decision maker.

- Increase noise, light and other physical stimulation
- No adjustments required
- Decrease noise, light and other physical stimulation

\* 66. Assess the need for any adjustment to DECISION SUPPORT GROUP conditions to improve decision making performance if **YOU** are the decision maker.

- Increase size and diversity of the decision support group
- No adjustments required
- Decrease size and diversity of the decision support group

## Personality and Situational Effects in Decision Making

### Scenario 6A Historical Basis and Continuation Option

**Scenario 6 Historical Basis:** This is a composite scenario developed to round-out the set of scenarios with decision maker personality and situational conditions necessary to consider the theoretic scope of decision making conditions. There is no specific historical basis. Modern US-led military coalition decision making processes since 2001 provide a possible basis for decision making events that could be described by this combination of conditions. However, modern coalition decision making processes are generally more interdependent with US-directed inter-governmental decision making processes and political direction. Thus, they are more difficult to isolate as discrete and effective events.

\* 67. Are you willing to assess another scenario?

Note: If you have completed six scenarios, you will continue to final questions with a Yes or No answer.

It is not required that you complete the survey in a single session. Your work will be saved and you may exit at any time and return to complete the survey later.

Yes (you may select an additional scenario up to 5 times)

No (you will be directed to concluding items)

## Personality and Situational Effects in Decision Making

### Subject Descriptor Association and Experience Self-Assessments

**Thank you for completing the scenario assessments. The remainder of the survey is comprised of two brief sections which will require no more than 5 minutes to complete. These items are required for your assessments to be fully validated in the survey results.**

## Personality and Situational Effects in Decision Making

### Subject Self-Assessment of Descriptor Applicability

**The following questions ask you to assess the how well the personality descriptors used in this survey describe you at work in your profession or vocation. Please assess how well the following words/phrases describe you at work in your profession/vocation.**

\* 68. Very Creative; Tough Minded

Completely Inaccurate  
Description of Me

Poor Description of Me

Partly Accurate  
Description of Me

Good Description of Me

Perfect Description of Me



\* 69. Unoriginal; Agreeable

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 70. Sociable, Cooperative

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 71. Approachable; Assertive

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 72. Tense, Moody

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 73. Very Relaxed; Unemotional

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 74. Innovative; Stubborn

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 75. Unimaginative; Submissive

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 76. Outgoing; Demanding

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 77. Shy; Accommodating

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 78. Sensitive; Moderately Stable

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 79. Calm; Stable

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 80. Original; Reasonable

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 81. Creative; Considerate

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 82. Very Forward; Dominant

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
☆	☆	☆	☆	☆

\* 83. Very Shy; Timid

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
				

\* 84. Nervous; Passionate

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
				

\* 85. Anxious; Moderately Emotional

Completely Inaccurate Description of Me	Poor Description of Me	Partly Accurate Description of Me	Good Description of Me	Perfect Description of Me
				

## Personality and Situational Effects in Decision Making

### Subject Self-Assessment of Experience

**The following questions ask you to assess qualitative aspects of your own prior experience, knowledge and expertise in areas related to this survey. Please assess your experience or knowledge in the following areas.**

\* 86. Assess your experience in organizational decision making as a decision maker.

- Very Limited / No Experience
- Some Experience
- Extensive Experience

\* 87. Assess your experience in decision making as a support group or staff member.

- Very Limited / No Experience
- Some Experience
- Extensive Experience

\* 88. Assess your knowledge of organizational decision making processes.

- Limited / No Knowledge
- Working Knowledge
- Expert Knowledge

\* 89. Assess your knowledge of psychology, sociology, leadership or management concepts related to judgment and decision making.

- Limited / No Knowledge
- Working Knowledge
- Expert Knowledge

\* 90. Assess your knowledge of personality concepts.

- Limited / No Knowledge
- Working Knowledge
- Expert Knowledge

\* 91. Assess your knowledge of methods or techniques that compensate for and/or exploit key aspects of personality, leadership or management styles at work.

- Limited / No Knowledge
- Working Knowledge
- Expert Knowledge

## Personality and Situational Effects in Decision Making

### Survey Conclusions

**Thank you for taking part in this survey. Your responses are invaluable to the development of principles and models that will help us all make better decisions.**

**If you have interest in obtaining more background on this study including, please feel free to contact James Dickens at [jdickens3@gatech.edu](mailto:jdickens3@gatech.edu).**