DECISION MAKING

SUPERVISION OF POLICE PERSONNEL

NORTHWESTERN UNIVERSITY
CENTER FOR PUBLIC SAFETY

TOM ROSS

09.25

Decision Making

LEARNING OBJECTIVES

- Describe the value of an informed and systematic decision making process in police work
- Give examples of different types of decisions and decision making processes and the pros and cons of each
- Explain the role of group dynamics in the decision making process
- Understand (try to remove) implicit bias in decision making

KINDS OF DECISIONS

- Police, Tactical, Operational
  - Emergency
  - Routine
- Police Management
  - HR Issues
  - Discipline
  - Policy & Procedure

Decision-Making and Emergency Responses

HISTORY

The history of decision theory began in the early 18th century, with dice-rolling French noblemen asking mathematicians to help them figure out how to gamble….. and win!

The expected gamble was the sum of it's outcomes, each weighted by the probability of it's occurring.

"The Undoing Project" by Michael Lewis

RATIONALITY

There must be a ***mathematical*** way to predict - therefore a way to assess likelihood – therefore a way to assess risk.

- Casino gambling
- Buying a lottery ticket
- How to invest in the stock market
  - Which stocks, when to get in, when to get out = more $$
- Buying life insurance (we're all going to die)
- Buying fire insurance for your house (what are the chances?)

***** Need "totality of the circumstances" in order to make an informed decision

“GUT FEELING” VS. PROCESS DRIVEN

- Judgement
- Reasoning
- Logical Thinking
- Intuition
- Risk Assessment
- Process
- Structure
- Analytical
- Prediction
- Mathematical Likelihood
- Assigning Odds
- Probability

MINIMIZING REGRET

Playing it safe. Scientific decision making, odds may indicate one preferred course of action, but the FEAR of being wrong, or taking a risk and losing is overpowering.

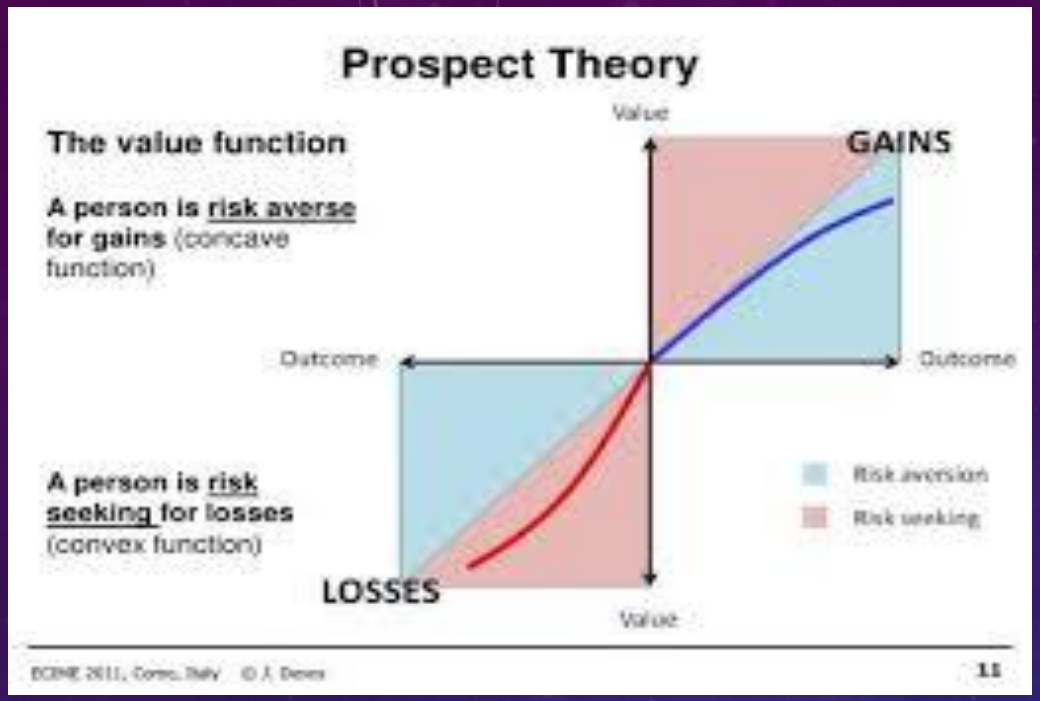
- We are “hard wired” (survival) to be risk averse.
- We were cavemen – pain, cold & hunger is/was a powerful force.
- We try to minimize risk while maximizing benefit – but minimizing risk is first!
- We play it safe.
- We HATE to regret.

EXAMPLES

- We find people freeze (panic stricken) and hide/die when there is an active shooter
- We find people go in the bathtub (kids under bed) and die in structure fires

PROSPECT THEORY

- Prospect theory is a behavioral economic theory that describes the way people choose between alternatives that involve risk.
- The theory was created by Professors **Daniel Kahneman** (recipient of the 2002 Nobel Prize for Economics) and **Amos Tversky** (now deceased) as a psychologically more accurate description of decision making, compared to the expected utility theory. The paper "Prospect Theory: An Analysis of Decision under Risk" (1979) has been called a "seminal paper in behavioral economics".
- Classical utility theory assumes that decision makers value a 50 percent chance of winning as exactly that: a 50 percent chance of winning. In contrast, prospect theory treats preferences as a function of “decision weights,” and it assumes that these weights do not always correspond to probabilities.
- Specifically, prospect theory postulates that decision weights tend **to overweight small probabilities and underweight high probabilities.’**
- The “goods” aren’t that good, and the “bads” are not that bad.


Prospect Theory
The value function
A person is risk averse for gains (concave function)
Value
GAINS
Outcome
Outcome
A person is risk seeking for losses (convex function)
Risk aversion
Risk seeking
LOSSES
Value
ECONE 2011, Como, Italy © J. Dewey
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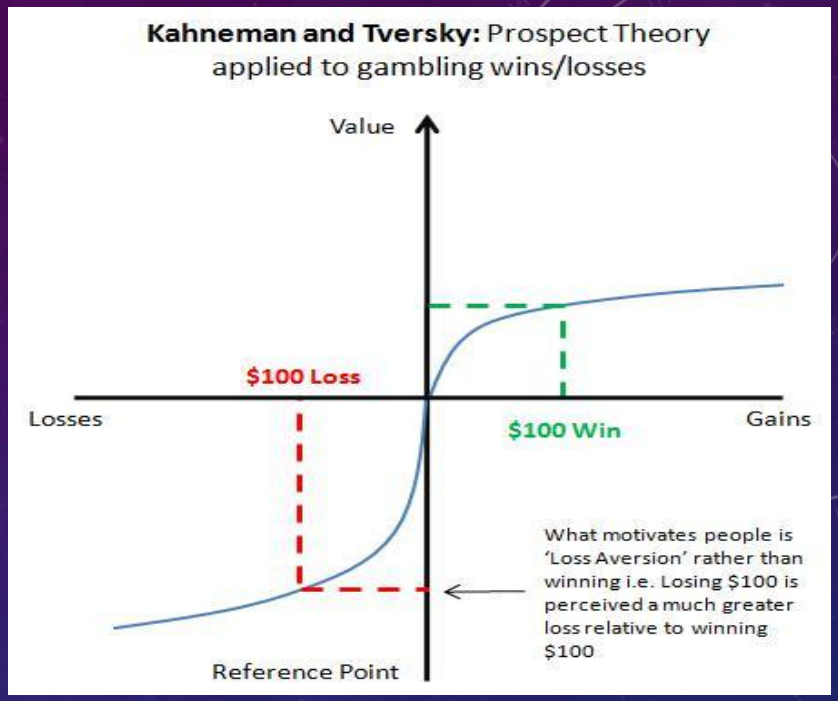
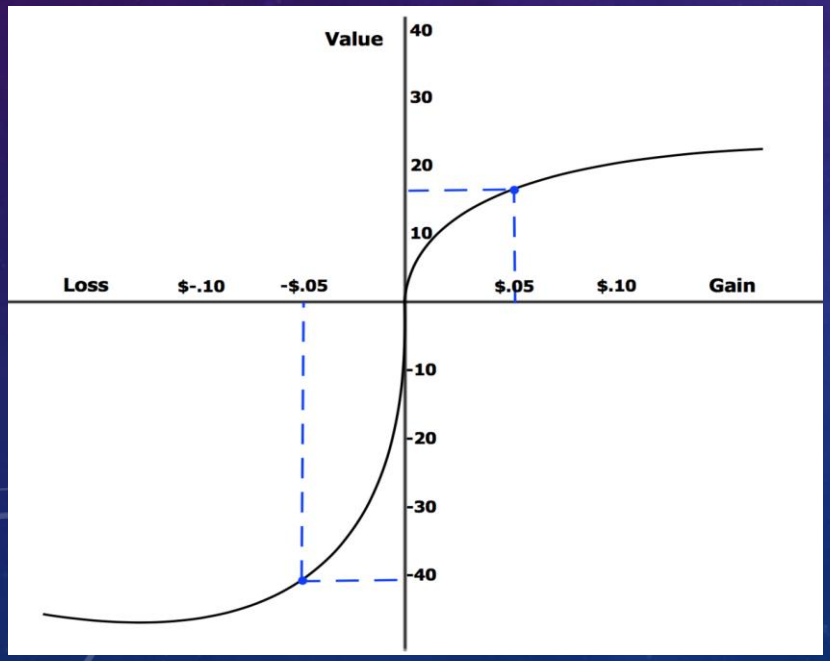
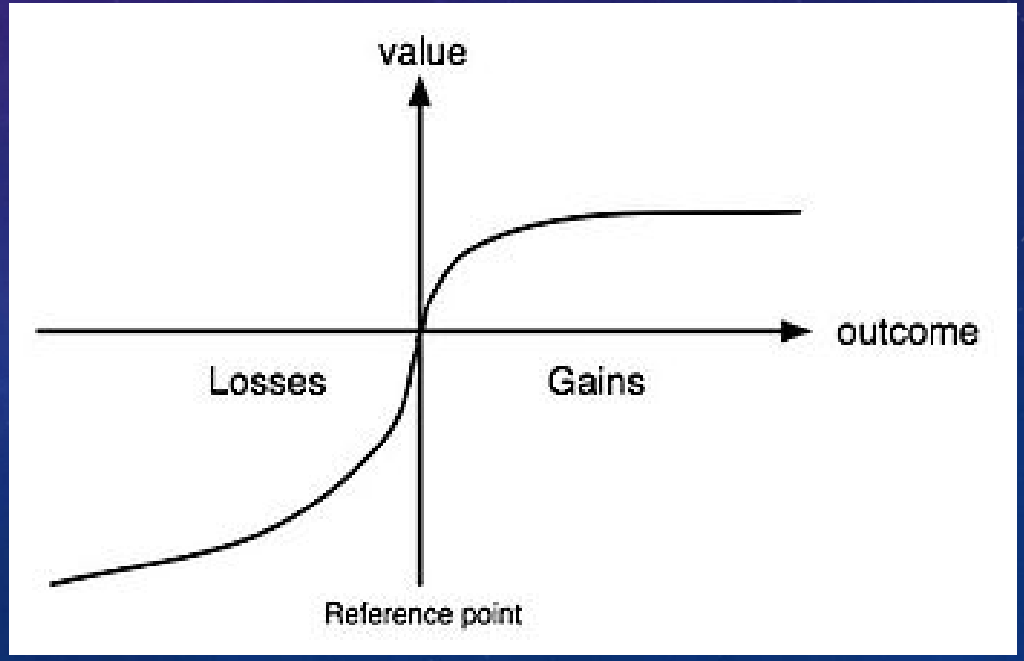

Kahneman and Tversky: Prospect Theory applied to gambling wins/losses
Value
$100 Loss
Losses
$100 Win
Gains
What motivates people is 'Loss Aversion' rather than winning i.e. Losing $100 is perceived a much greater loss relative to winning $100
Reference Point


Value
40
30
20
10
Loss
$-.10
-$.05
$.05
$.10
Gain
-10
-20
-30
-40

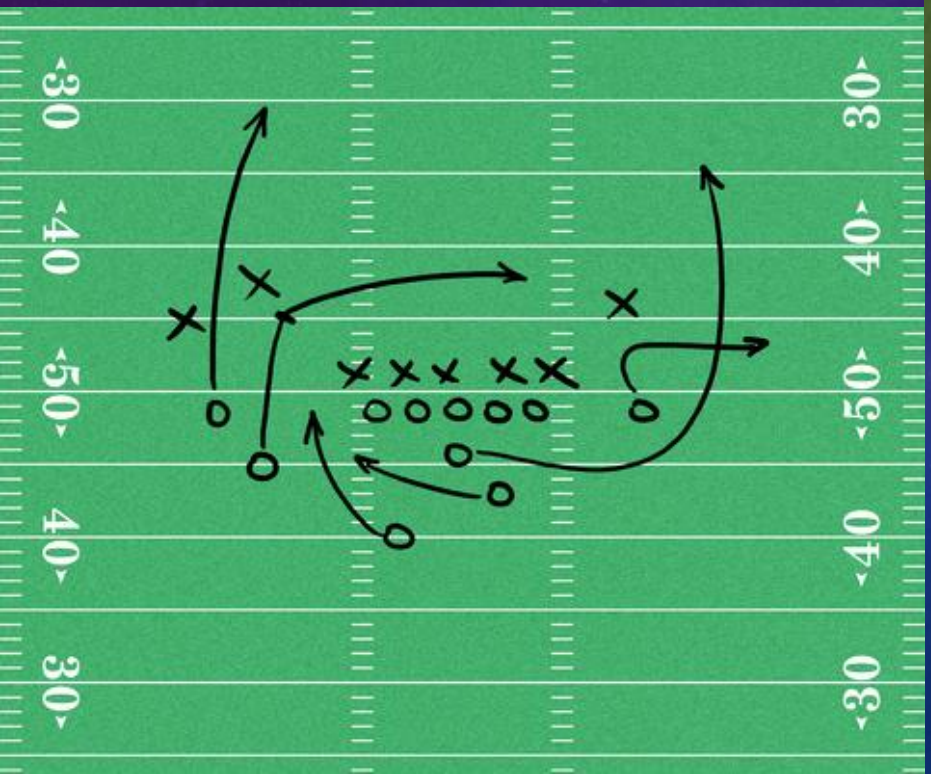

value
outcome
Losses
Gains
Reference point

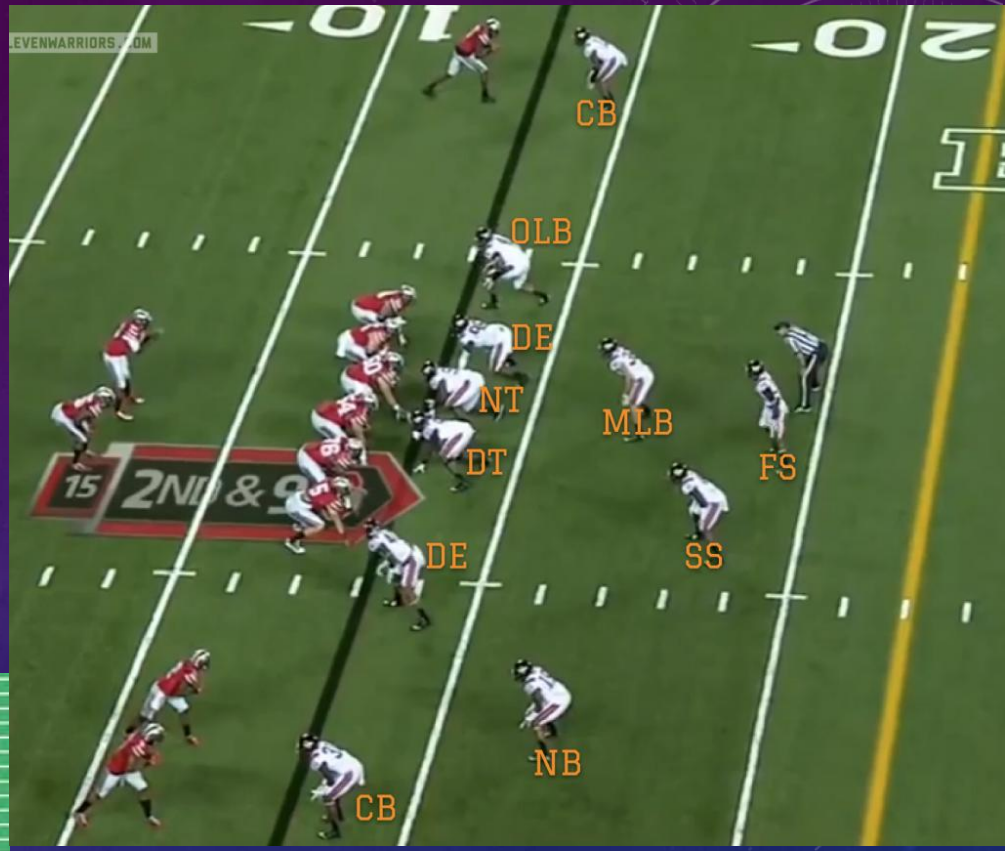
$$$$$$$$$$$$$$$$$$$$$$$$$

- We have an irrational tendency to be **less** willing to gamble with **profits** than with losses. This means selling quickly when we earn profits…… but not selling if we are running losses.

- Prospect theory helps explain how “loss aversion”, (inability to ignore “sunk costs”), leads people to throw good money after bad and take actions that are not in their best interest. The sting of losing money, for example, often leads investors to pull money out of the stock market unwisely when prices dip.

PLAYING DEFENSE ALL THE TIME





EVER 100% ??


"We've considered every potential risk, except the risk of avoiding all risks !"
HARDIN

DO WE DO THAT IN POLICE WORK???

ACCEPT, MANAGE, MITIGATE, OR TRANSFER RISK FOR ……REWARD

TYPES OF DECISIONS

- “Police Work”
  - Crimes
  - Critical Incidents
- Management Stuff
  - Planning
  - Human Resources
  - Discipline

?QUESTION?

- What factors should a first-line supervisor take into consideration when making a decision?
- What system do **you** use?


WHICH
WAY
WILL
YOU
CHOOSE

PROBLEM SOLVING VS. DECISION MAKING

To begin, let's clarify what we mean by problem solving and decision making and how they relate to one another.

Problem solving is a set of activities designed to analyze a situation systematically and generate, implement, and evaluate solutions.

Decision making is a mechanism for making choices at each step of the problem-solving process.

Decision making is part of problem solving, and decision making occurs at every step of the problem-solving process.

PROBLEM SOLVING/DECISION MAKING

- **DECISION: A choice made from available alternatives.**
- **DECISION MAKING: The process of identifying problems and opportunities and then resolving them. Police decisions are difficult due to being made amid, unclear information, conflicting points of view, and ever changing factors.**

IMPORTANCE OF DECISION MAKING

- "One of the most important management activities"
- Transcends all management functions – especially planning
- Effective decisions result from planning

IMPORTANCE OF DECISION MAKING

- Routine and boring v. unusual and critical
- Occurs at all levels
  - Higher = wider scope
  - Same process at all levels
  - Used in daily decisions by ALL employees

LOGIC vs. EMOTION

- (+) Empathy, Sympathy, Mercy, Motivation
- (-) Vengeance, Retaliation, Manipulation
- Politics


A good laugh
and a long sleep
are the two best cures
for anything.
Irish proverb

IMPORTANCE OF DECISION MAKING

- **Decision making skills can be developed**

- **Supervisors must teach decision making to subordinates**

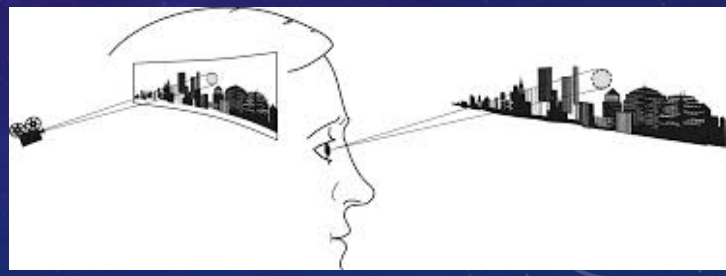

DON'T MISS
THE FOREST
FOR THE TREES

RECOGNITION PRIME DECISION MAKING

Brain Scans from Past

Finds a Match From Past Success

Directs Behavior to Successful Past



Occam's Razor – "The ***simplest solution*** tends to be right or put differently, pick the one that has the least number of assumptions".

We find this to be extremely useful whenever we don't have enough data to make informed decision. And in such situations we always take that route that has minimum assumptions for every assumption introduces error into the decision model.

HORSES (NOT ZEBRAS)

Managerial Decision Making

NATURE HAS PROGRAMMED US FOR SUCCESS VIA EXPERIENCE OR A "BODY OF KNOWLEDGE"

- Logical / Emotional Decisions
- Totality of the Circumstances
- Training, Education, Experience
- First – Best "Fit"
- Lesser of 2 Evils

POLICE

The stages in decision making can be broadly categorized as follows:

1. **Define The PROBLEM**
2. **Generate OPTIONS**
3. **List LIABILITIES**
4. **Gather INFORMATION**
5. **Make A CHOICE**
6. **How to EXECUTE**

P - PROBLEM

1. Is it your problem or someone else's?
2. What kind of problem?
   - Managerial? Operational? Strategic? Political?
3. Are there separate issues that may or may not be related?
4. What is it that you wish to achieve?
5. Is the end result already determined
   - Are we working our way backward?
   - Are we justifying a suspension?

O - OPTIONS

1. ALL possible solutions (history?)
2. Toss out the ones which are not viable.
3. Best-case - worst case scenario?
4. What can back-fire?
5. Sometimes outside expertise may be able to provide options that you haven't thought of.

L- LIABILITIES

1. Any potential (real or perceived) conflicts of interest?
2. Legal, Ethical, Moral, Grievable, within Policy, Precedence setting ?
3. Impact on Morale?
4. Any “Hot Button” related issues of; race, gender, orientation, union, sexual harassment, substance abuse, prior workman’s comp, etc….

I - INFORMATION

1. What do we KNOW & need to find out?
   - Gather the facts…..Need only 40% - 70%

2. Where did the information come from?
3. How accurate / updated is the info?
4. What has / has not worked in the past?

C - CHOICE

1. Have a “Devil’s Advocate” promoting the <u>other</u> option
2. Consider any decision from multiple perspectives:
   - Police, Public (Press) & Politicians
3. Fundamental Fairness – Due Process
4. Test the Waters & Building Support
5. Consensus, concurrence?

E - EXECUTE

1. Pull the Trigger-Act-Commit
2. Usually sooner rather than later
3. Any deadlines to take action?
4. Notifications that need to be made & when?

POLICE

1. Define The PROBLEM
2. Generate OPTIONS
3. List LIABILITIES
4. Gather INFORMATION
5. Make A CHOICE
6. How to EXECUTE

NOT MAKING A DECISION

- Not your decision to make?
- Cop-out
- Avoid Analysis Paralysis
- It's usually much more effective and efficient to just make the decision, implement it, assess as you go, and change later if needed.

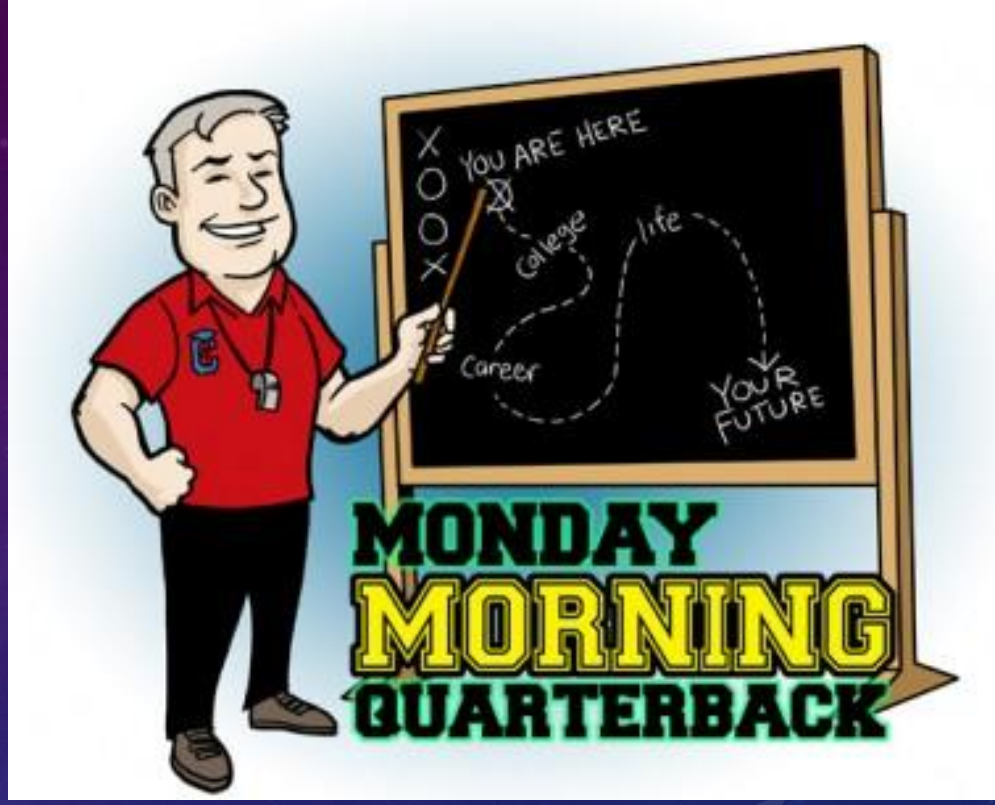
I NEED TO BE 100% SURE

Of course, it's a myth that you can ever be 100% sure when dealing with people.

- Humans are complex & dynamic creatures.
- Life itself is messy and unpredictable.
- The future is unknown, hindsight is 20/20.
- 40-70%

MONDAY MORNINGS

- You WILL be “Quarterbacked”
- What did you know?
- When did you know it?
- Should you have known?
- What did you do about it?
- Were there red flags?
- It is too late when the guys are getting pelted with rocks & bottles (LAPD)



?QUESTION?

- So how do you balance the fear of being Monday Morning Quarterbacked with the fear of doing nothing (analysis paralysis?)

EXPERTISE AND PATTERNS (EXPERIENCE)

- As people become more expert in their field, as they gain more experience, their ability to recognize patterns is **enhanced**.

- This gives them more options to choose from. Which means that, more often than not, the **first option** they choose **will work best**.

- Their rapid and effective movement through the decision making model is what helps them become **experts.**

GARBAGE CAN MODEL

CONFIRMATION BIAS

- Hearing what you want to hear – Things that CONFIRM the result you desire

INSTINCT? 6TH SENSE?

RESEARCH PSYCHOLOGIST GARY KLEIN (SOURCES OF POWER, CAMBRIDGE, MASS: MIT PRESS, 1998), WHO HAS DONE EXTENSIVE STUDIES ON HOW PEOPLE MAKE DECISIONS UNDER EMERGENCY CONDITIONS.

HE STUDIED POLICE, FIRE, EMERGENCY MEDICAL SERVICES, HOSPITAL, AND MILITARY PERSONNEL AND FOUND THAT MANY OF THEM COULD MAKE INSTANT HIGH-PRESSURE DECISIONS BUT COULDN'T ARTICULATE EXACTLY HOW THEY HAD MADE SUCH DECISIONS.

THEY WERE ABLE TO MAKE INSTINCTIVE CHOICES BASED ON RECOGNITION OF, AND A REACTION TO, A SITUATION THAT THEY HAD PREVIOUSLY ENCOUNTERED.

WHEN EVENTS ARE NOT UNFOLDING AS PREVIOUS EXPERIENCE TELLS US THEY SHOULD, THERE IS AN INSTANT SENSE OF ALARM.

HTTPS://WWW.YOUTUBE.COM/WATCH?V=DZERY5YNXXG&T=1S

FIRE DEPARTMENT

POLICE DEPARTMENT

MANAGEMENT


Decision Making
Alternatives
Uncertainty
High risk consequences
Interpersonal issues
Complexity

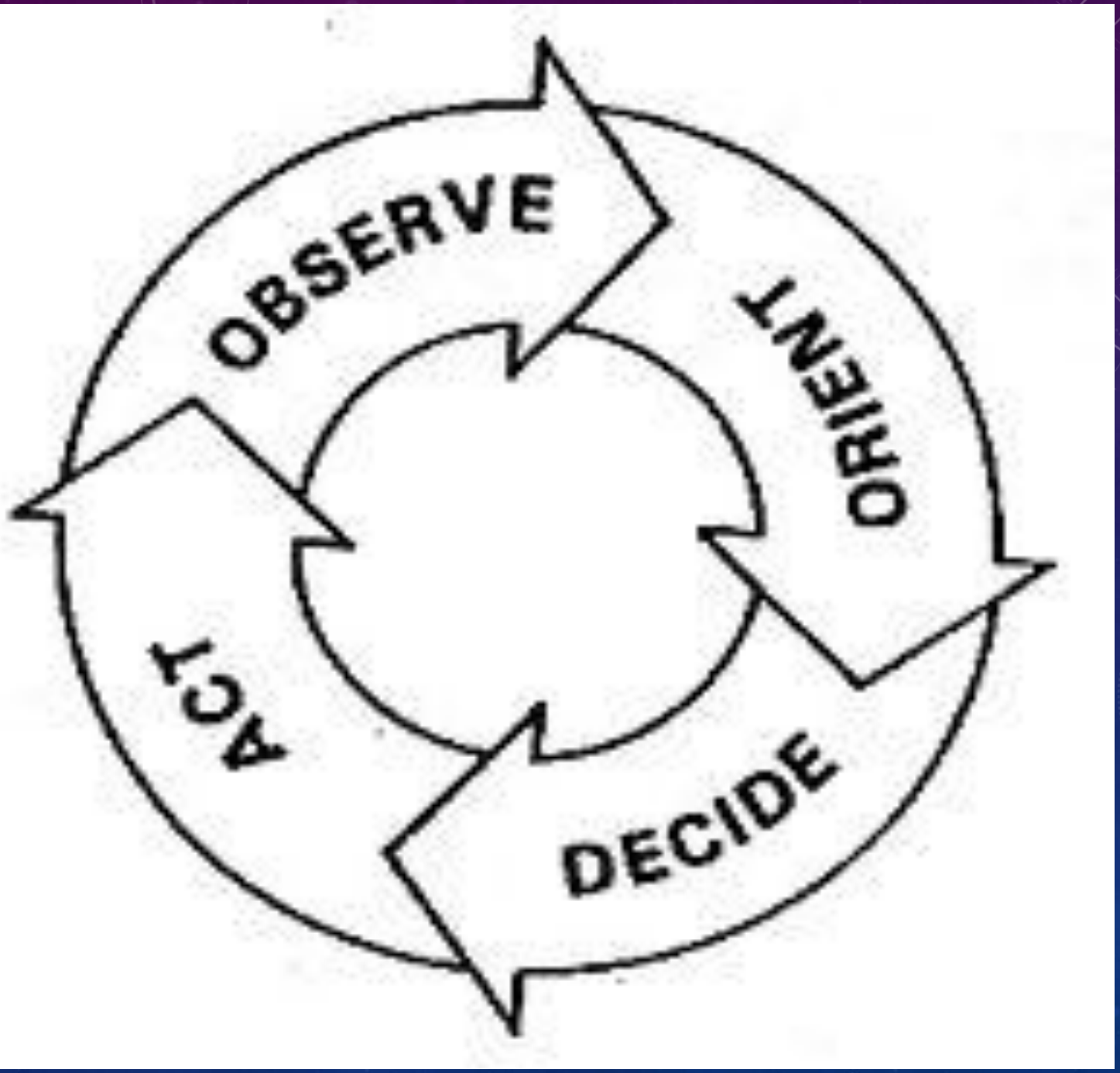
HE WHO HAS THE QUICKEST

O.O.D.A. LOOP

WINS!

OBSERVE.ORIENT.DECIDE.ACT.REPEAT !

COL. JOHN BOYD


OBSERVE
ORIENT
DECIDE
ACT

ADMIN VS. TACTICS

- Don’t EVER confuse administrative policy, rules, regulations, policies and procedures with the real world!

- In the abstract “paper” world, plans and guidelines are necessary and important.

- In the “real” world it’s all about survival and mission--- speed and agility

FORECASTING IN POLICING

- **Police forecast future crime rates, budgets, staffing and resource demands**
- **Likelihood of error increases the further we look into the future**

IMPORTANCE OF DECISION MAKING ALL THE "P'S"

- Considerations:
  - Impact on the public / press (community)
  - Impact on the police (organization)
  - Impact on politicians (elected officials)

MOST IMPORTANT

- **Be fair**
- **Be consistent (with people and events)**
- **Follow-up yourself**
- **“Do the right thing” (Right is always right)**
- **In decision making, more information reduces outcome uncertainty.**

EFFECTIVE DECISION

An effective decision has three components:

1. **It should be timely**
2. **It must meet a desired objective**
3. **It must and is acceptable by those individuals affected by it.**

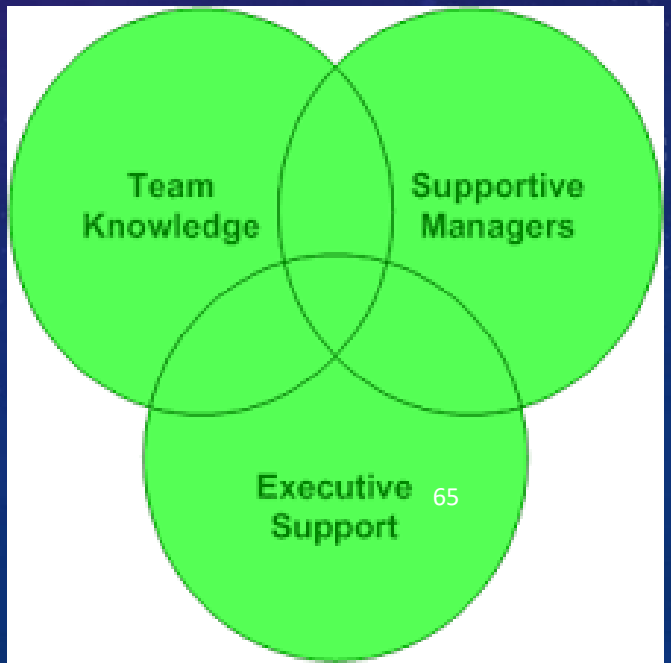
PROGRAMMED VS NONPROGRAMMED DECISIONS

- ***PROGRAMMED DECISION***: **A decision made in response to a situation that has occurred often enough to enable decision rules to be developed and applied in the future. They are made in response to recurring organizational problems.**

- ***NONPROGRAMMED DECISION***: **A decision made in response to a situation that is unique, is poorly defined and largely unstructured and has important consequences for the organization.**

Examples of each?????

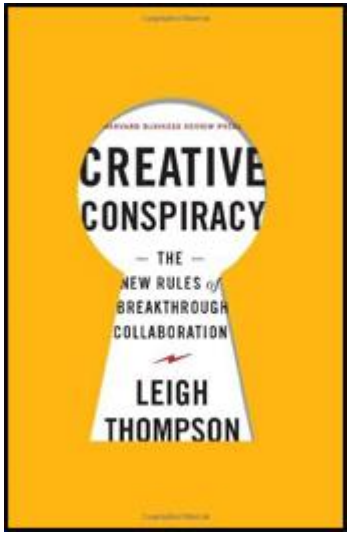
GROUP DECISION MAKING

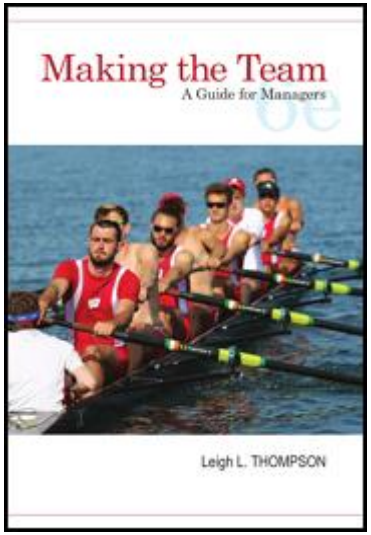


Groups & Teamwork

Professor Leigh Thompson PhD

Director of Kellogg Team and Group Research Center





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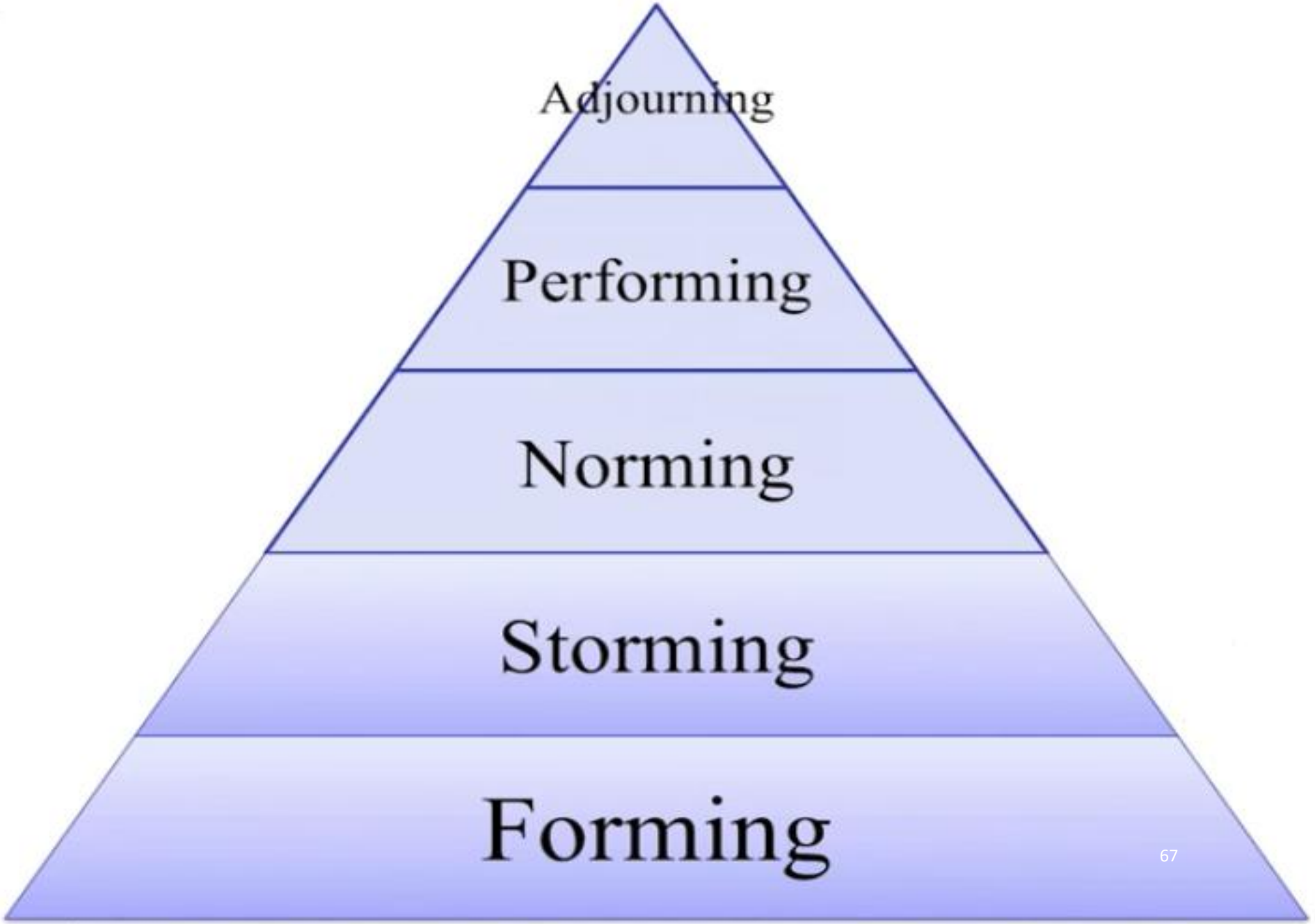
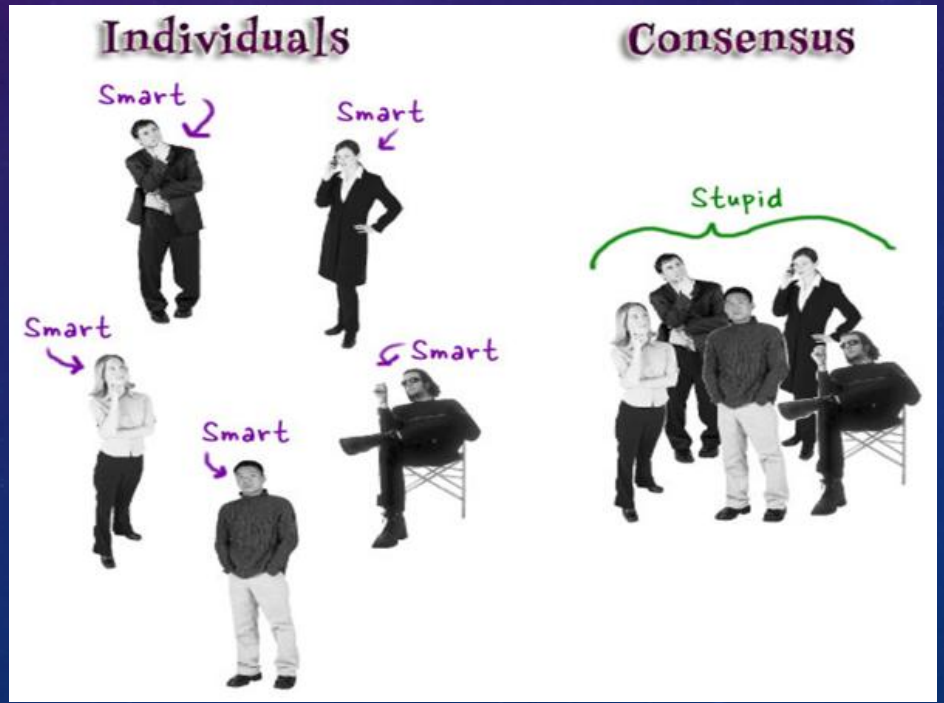


[1] Tuckman, B. & Jensen, M. Stages of small group development revisited. *Group and Organizational Studies, 2, 419-427.*

DISADVANTAGES OF GROUP DECISION MAKING

- Pressure in groups to conform
- Amount of time
- Participants engage in discussions that make them lose their focus.
- Lowest common denominator



ADVANTAGES OF PARTICIPATIVE/GROUP DECISION MAKING

1. **Broader perspective for problem definition and analysis.**
2. **Discussion clarifies ambiguous problems and reduces uncertainty about alternatives.**
3. **Participation fosters employee job satisfaction and support for decision**

ADVANTAGES (CONT.)

- If a group is in conflict, it is recommended they use the participative decision making technique.

GROUPTHINK

"Groupthink occurs when a group makes faulty decisions because group pressures lead to a deterioration of "mental efficiency, reality testing, and moral judgment" **(Irving Janis)**

- Challenge the group:
- **Welcome Dissent**
- **Even when the group comes to a consensus, review the solution <u>one more time</u> to insure they did not arrive at consensus due to Groupthink.**

- Maybe I'm wrong
- Maybe we're looking at this from the wrong angle
- I think_____
- Another way to look at this is_____
- Catholic Church, sainthood, permanent office
- Who? **YOU** should do it first, then rotate the job (best/brightest)

RED TEAMS / RED CELLS

- Red teaming traces its roots to warfare where commanders need to test and refine their own defenses and battle plans to ferret out weaknesses, study adversary tactics, and improve their strategies.

- Provide decision makers an INDEPENDANT capability that offers critical reviews and alternative perspectives that challenge prevailing notions, rigorously test current Tactics, Techniques and Procedures, and counter “group think” in order to enhance organizational effectiveness.

- “Red teaming” is normally associated with assessing vulnerabilities and limitations of systems or structures.

?QUESTION?

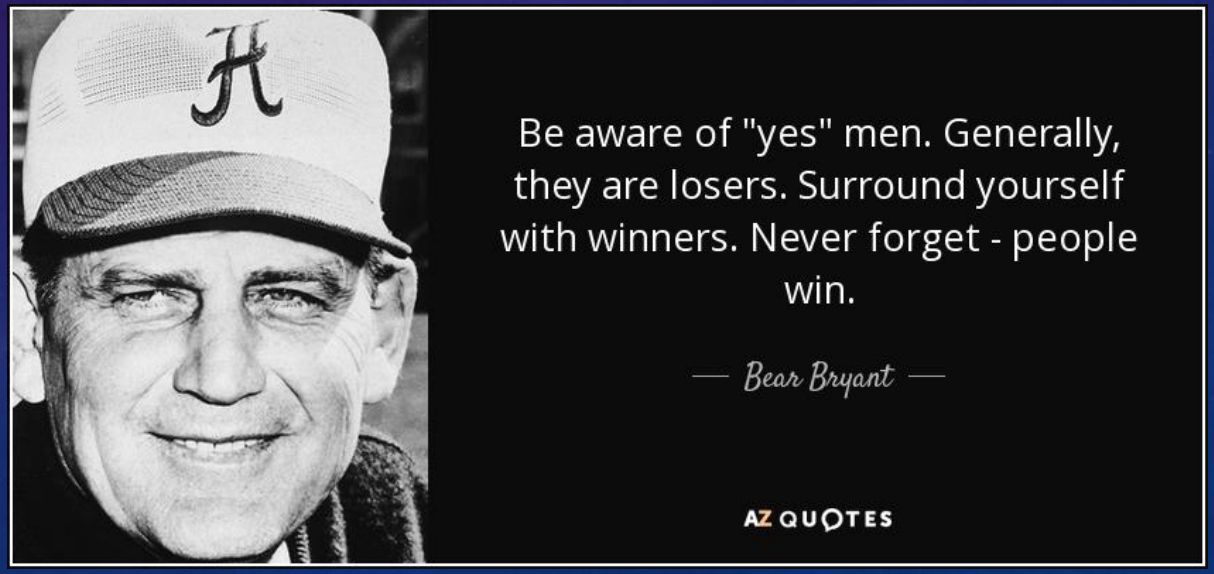
- How might using a “Devil’s Advocate” go wrong?
- Bulldog to be leashed?


We don't want just a bunch of YES men around here..RIGHT?
RIGHT!
YOU SAID IT!
Absolutely!
Zahn

“YES MEN”

- King James I of England (1600) said to his son:

“Choose counsellors who are specially free of that filthy vice of Flattery……the pest of all Princes’.”



STEP ONE: DEFINE THE PROBLEM/OPPORTUNITY THERE IS A DIFFERENCE!!

PROBLEM: **Occurs when organizational accomplishment is less than established goals.**

OPPORTUNITY: **Occurs when managers see potential accomplishment that exceeds current goals.** **Buy when stocks are low, it's an "opportunity"! (Warren Buffett)**

PROBLEM V. OPPORTUNITY

- **The difference between a problem and an opportunity is…..**
  - **The problem is the difference between where an agency *wants to be* (expectations) and where it *is*.**
  - **An opportunity allows the agency to exceeds their expectations.**

LEGITIMATE EXPECTATIONS OF PROBLEM SOLVING

- Eliminate the problem.
- Move the problem.
- *Manage* the problem better.
  - Repair the problem.
  - Reduce the harm.
  - Reduce the problem.

WE LIKE P.O.L.I.C.E.

- Here is another method from the book

STEP 1: DEFINE PROBLEM (CONT.)

PROBLEM STATEMENTS CONTAIN:

Who, what, when, why, and how

STEP 2: RESEARCH OR ANALYZE THE PROBLEM OR OPPORTUNITY

INVESTIGATE: Collect meaningful data on the current situation. Questions to be answered:

- **What is the history?**
- **What are the symptoms that this is a problem or issues that need to be addressed?**
- **Where do the symptoms or issues appear or not appear?**

DATA VS INFORMATION

- ***DATA:*** **are raw, non-summarized, unanalyzed facts. Requires proper organization to produce meaningful information.**
- ***INFORMATION:*** **is data that are meaningful and alter the receiver's understanding.**

STEP 3: DEVELOP ALTERNATIVE SOLUTIONS

- **Research possible solutions through other agencies or other supervisors.**
- **Programmed decision solutions are easy to identify and may already be available within the organizations rules/policies/procedures.**
- **Nonprogrammed decisions require developing new courses of action. Rule of thumb: Should always have at least 2 recommended solutions if someone else is making the final decision.**

STEP 4: SELECTION OF DESIRED SOLUTION

- **The best alternative is one in which the solution best fits the overall goals of the organization and achieves the desired results using the fewest resources.**

The group/team OR individual should select solutions with least amount of risk and uncertainty.

STEP 4: SELECTION OF DESIRED SOLUTION (CONT.)

- **DECISION MATRIX:**

  Commonly used statistical tool to systematically evaluate the potential effectiveness of the solutions under consideration through specific criteria and weighted values.

2 TYPES OF CRITERIA:

MUSTS: Requirements the solution has to meet and should be measurable.

WANTS: Requirements that help the solution to be the best choice.

DECISION MATRIX EXAMPLE

Criteria	Explorer	Expedition	Tahoe	Durango	Escape
Cost: Under $37,000	5	2	2	$39,400*	5
Police Package	5	3	5		3
MPG	4	2	3		5
Drive Train	5	3	3		5
Warranty	3	3	3		3
Interior Space	4	5	5		3
Cargo Space	4	5	5		3
Engine	5	4	4		3
Public Safety Equipment Transfer	3	3	3		1
Total	38	30	33		31

STEP 5: IMPLEMENTATION OF CHOSEN SOLUTION

Plan of Action

- **ACQUIREMENT AND/OR DISBURSEMENT OF RESOURCES**
- **INDIVIDUAL ROLES AND RESPONSIBILITIES**
- **TIME PLOTS/DEADLINES**

PLAN OF ACTION
2026 NEW MOBILE TABLETS

TIME	TASKS	WHO
11/01/25	Specs, send out bids	Sgt. Kerrin
11/27/25	Select Vendor	Cpt. Scott
11/30/25	Secure Funds –notify personnel of selection	Cpt. Scott
12/15/25 12/20/25	Collect, Inventory and Disperse Cameras Pay vendor	Sgt. Kerrin Cpt. Scott
12/21/25	Train	Sgt. Vinny
01/15/26	Make-up Training	Sgt. Vinny
02/15/26	Evaluate and Close Project	Sgt. Kerrin

STEP 6: EVALUATION, FEEDBACK AND MONITORING

Decision makers gather information that tells them how well the decision was implemented and whether it was effective in achieving its goals.

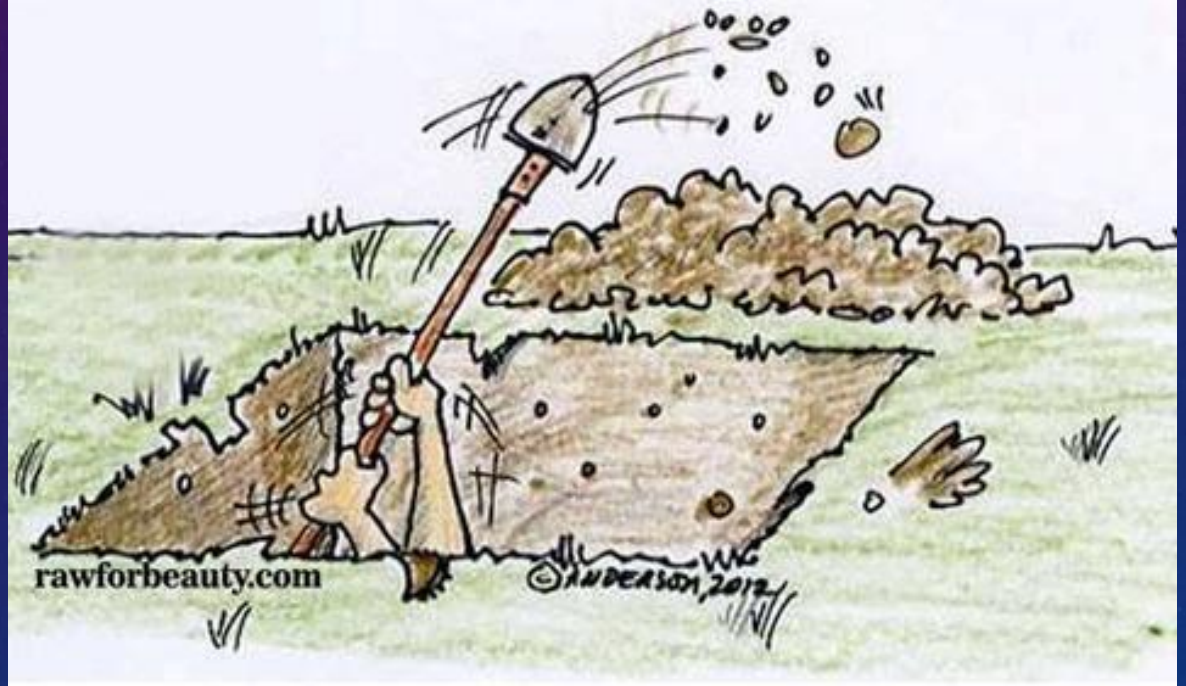
- **Never ending process**
- **Solutions may need to be altered or revised**

ESCALATION OF COMMITMENT

The tendency to continue to support a failing course of action.

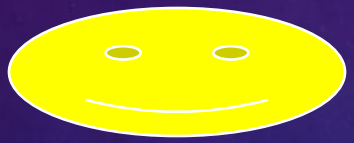
IF YOU FIND YOURSELF IN A HOLE, THE FIRST THING TO DO IS STOP DIGGING.

– WILL ROGERS



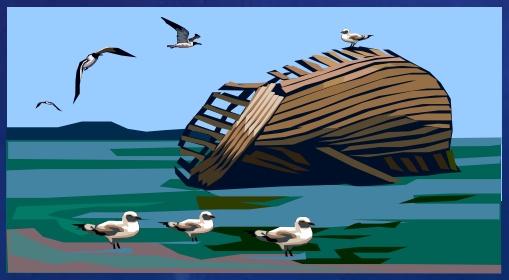
WHY DOES IT OCCUR?

humans dislike inconsistency



optimism

control



sunk costs

ONLY HUMANS REFUSE TO “CUT BAIT”

HOW TO DEAL WITH IT…

Split responsibility for decisions

Provide individuals with a graceful exit

Let them save FACE

WHAT TO DO.....?

1. Own up to the bad decision, no excuses please.
2. Be transparent – let others see you're human, and how to handle it.
3. Decide whether to "fix" or "pivot".
    - Override with a new solution or fix the old one?
4. Know when there's no lesson to learn.
    - Decision fatigue is real – not everything is a "teachable moment".
    - Get moving, stop stalling.
5. Make the lesson (if there is one) part of the culture.
    - A cautionary tale.
    - But don't dwell on it, move on.

BRAINSTORMING

- 4 rules
  1. Expressiveness
     - Anything & Everything
     - Freewheel, not constrained or timid
     - No “dumb idea”
  2. Non-Evaluation
     - All ideas valuable
     - No criticism
     - No negative ways of “that won’t work”
  3. Quantity
     - Want MANY ideas
     - Volume is key
  4. Building
     - Combine & Refine ideas

QUANTITY = QUALITY

In scientific studies of 4 groups: #1 control (do whatever), #2 told to focus on both quantity & quality, # 3 told to focus on quality alone & # 4 told to focus on quantity alone (just generate a high number of ideas)…….

Group # 4 ended up with BOTH the highest number of ideas (because that is what they were told to do) but ALSO the highest number of GOOD ideas as assessed /scored by a neutral team of evaluators!

So ----- you want a lot of high quality ideas? Brainstorm!

Like a table full of sand, gravel & rocks……..with a few diamonds here & there!!!

NOMINAL GROUP TECHNIQUE (BRAIN-WRITING)

Brainstorming/decision making process by which group members identify alternative solutions ***privately*** and then share, evaluate and decide on a solution as a group.

** On 3 x 5 cards, not attributed to any person, anonymous, a true meritocracy of IDEAS

****Then everyone gets 5 post its to "vote" on the ideas they like the best

Question: Advantages / Dis-Advantages?

NOMINAL GROUP TECHNIQUE

- Efficient
- Rank alternative solutions
- Discuss
- Re-rank
- Repeat the process
- BETTER than Brainstorming!?!

MANAGING GROUPS

- Effective Group Leaders:
  - Participates, but doesn't dominate
  - Unifies
  - Facilitates communication & interaction
  - Coaches
  - Supports & advocates
  - Keeps focus on the goal

MANAGING GROUPS

- Group problem solving:
  - Takes time
  - Generates more ideas
  - Generates “buy-in” (manipulative?)
  - Makes implementation easier

COMMON MEETING COMPLAINTS

- No agenda
- Drifting off subject
- Poor preparation
- Questionable effectiveness
- Lack of attention by attendees
- Verbose people
- Too long (starts late – ends late, not respectful of time)
- Lack of attendee participation – not playing "nice" in the proverbial SANDBOX

MEETINGS

Key to success = preparation

- Makes them productive
- Consider topics
- Consider attendees
- Make sure technology works
- Pre-meetings to build support, test ideas
- 60 minutes – THAT's It!
- Breakfast?
  - Lunch?
  - 60 minutes before end of shift?
  - First thing in the morning?

COMMON DECISION MAKING PITFALLS

- Procrastination
- Surrendering
  - Give up
  - Give to somebody else
- Hiding behind information
  - Too much data
  - Need more data

COMMON DECISION MAKING PITFALLS

- Saying “yes” to everything

- Unnecessarily seeking input
  - No need for additional information
  - No need for “buy-in”
  - Manipulative, disingenuous to ask if the decision has been made?

YOUR FINAL DECISION

- No solution – start over
- Using intuition is acceptable
- *No decision is a bad decision!*
  - *Makes the individual look weak and ineffective*
  - *Poor example for others*
  - *Could put safety at risk*
  - *We PAY you to make decisions!*

UNIQUE PROBLEMS IN POLICING

- Complicating Factors for Committees
  - Lack of knowledge
  - Time (24 x 7 x 365 schedule)
  - Resources
  - Cost ($45 an hour with benefits x 6 people x 2 hours?)
  - Low motivation
  - Costs emotionally

MANAGING FAILURE

- Facts
  - Mistakes will occur
  - Supervisor's response – major influence on future attempts
  - Failures "teach"
  - Utilize a teamwork approach

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