

# Tools for Making Decisions

- **Multivoting**
  - > Reduces long lists of ideas
  - > Identifies important items
- **Nominal Group Technique**
  - > Generates ideas
  - > Prioritizes items

# What Is Multivoting?

A group decision-making technique used to reduce a long list of items to a manageable number by means of a structured series of votes.

# Benefits of Multivoting

- Reduces a list
- Prioritizes a list
- Identifies important items

# Multivoting Procedures

Step 1 - Work from a large list

Step 2 - Assign letter to each item

Step 3 - Vote

Step 4 - Tally the votes

Step 5 - Repeat

# Multivoting Rule of Thumb

## Number on Team

5 or fewer

6 to 15

more than 15

## Eliminate items with

0, 1, or 2 votes

3 or fewer votes

4 or fewer votes

# Multivoting Example

## First Vote Tally

- |  |  |  |  |
|--|--|--|--|
|  | A. No agenda                           |  | I. Problems not mentioned                    |
|  | B. No clear objectives                 |  | J. Interrupted by phone calls                |
|  | C. Going off on tangents               |  | K. Few meaningful metrics                    |
|  | D. Extraneous topics                   |  | L. Interrupted by visitors                   |
|  | E. Too many "sea stories"              |  | M. No administrative support                 |
|  | F. Vital members missing from meeting  |  | N. Meetings extended beyond allotted time    |
|  | G. Not enough preparation for meetings |  | O. Members distracted by pressing operations |
|  | H. Too much "dog and pony"             |  | P. Unclear charts                            |

# Multivoting Example

## Second Vote Tally

- B. No clear objectives
- ⚡ F. Vital members missing from meeting
- ⚡ G. Not enough preparation for meetings
- ⚡ H. Too much "dog and pony"
- |||| J. Interrupted by phone calls
- L. Interrupted by visitors
- || N. Meetings extended beyond allotted time
- ||| O. Members distracted by pressing operations

# Multivoting Exercise 1

## SIGNS OF FEAR IN THE WORKPLACE

- |   |  |   |
|---|--|---|
| a. Flooded with detail                  | o. We vs. they                               | ac. Concern with return on investment               |
| b. "Don't rock the boat"                | p. Resisting requests                        | ad. Focus on grades, instead of learning            |
| c. Mixed messages                       | q. Tampering                                 | ae. Lack of new ideas                               |
| d. Attacks/defensiveness                | r. Staffing redundancies                     | af. Fear that some work can be done by fewer people |
| e. People afraid to say "I don't know"  | s. Constantly changing policies              | ag. Resistance to change                            |
| f. Chronic indecision                   | t. Myopic vision                             | ah. Avoidance of risk-taking                        |
| g. "This too shall pass"                | u. Isolation                                 | ai. "Just doing my job"                             |
| h. News always good                     | v. Micromanaging                             | aj. Stress  |
| i. Withholding information              | w. Goals without a plan for achieving them   | ak. Recurrent absenteeism                           |
| j. Changing subject                     | x. Blame others                              | al. Widespread dissatisfaction                      |
| k. Self-protective behaviors            | y. Denial                                    | am. Deadline anxiety                                |
| l. Hidden agenda syndrome               | z. Resistance to new knowledge               | an. Enforcement approach to rules                   |
| m. Turf battles                         | aa. People afraid to ask questions           | ao. Turnover of creative thinkers                   |
| n. Not willing to accept responsibility | ab. "This is good for my people, not for me" |   |

Source: *Managing Fear in the Workplace*, TQLO Publication No. 93-01

# Multivoting Exercise Tally Sheet

A \_\_\_\_\_

M \_\_\_\_\_

Y \_\_\_\_\_

AK \_\_\_\_\_

B \_\_\_\_\_

N \_\_\_\_\_

Z \_\_\_\_\_

AL \_\_\_\_\_

C \_\_\_\_\_

O \_\_\_\_\_

AA \_\_\_\_\_

AM \_\_\_\_\_

D \_\_\_\_\_

P \_\_\_\_\_

AB \_\_\_\_\_

AN \_\_\_\_\_

E \_\_\_\_\_

Q \_\_\_\_\_

AC \_\_\_\_\_

AO \_\_\_\_\_

F \_\_\_\_\_

R \_\_\_\_\_

AD \_\_\_\_\_

AP \_\_\_\_\_

G \_\_\_\_\_

S \_\_\_\_\_

AE \_\_\_\_\_

AQ \_\_\_\_\_

H \_\_\_\_\_

T \_\_\_\_\_

AF \_\_\_\_\_

AR \_\_\_\_\_

I \_\_\_\_\_

U \_\_\_\_\_

AG \_\_\_\_\_

AS \_\_\_\_\_

J \_\_\_\_\_

V \_\_\_\_\_

AH \_\_\_\_\_

AT \_\_\_\_\_

K \_\_\_\_\_

W \_\_\_\_\_

AI \_\_\_\_\_

AU \_\_\_\_\_

L \_\_\_\_\_

X \_\_\_\_\_

AJ \_\_\_\_\_

AV \_\_\_\_\_

# Multivoting Exercise 2

## Voting Information

Petty Officer Smith

A, B, D, I, N, R

Mr. Avery

C, D, I, N, Q, R

Lt. Tam

B, J, L, N, R, Q

Ms. Matsumoto

A, C, D, I, N, R

Sgt. Bedsole

E, G, L, N, P, Q

Petty Officer Browne

C, E, H, K, M, O

# Multivoting Exercise 2

## Tally Sheet

A = II

B = II

C = III

D = III

E = II

F = 0

G = I

H = I

I = III

J = I

K = I

L = II

M = I

N = ~~III~~

O = I

P = I

Q = III

R = IIII

# What Is Nominal Group Technique?

A weighted ranking method that allows a group to generate and prioritize a large number of issues within a structure that gives everyone an equal voice.

# Benefits of Using NGT

- Reduces the number of issues
- All team members participate
- Rank orders items

# **NGT Part I - Define the Issue and Generate Ideas**

- Define the issue
- Generate ideas
- Collect ideas
- Clarify ideas
- Combine ideas

# NGT Part II - Make the Selection

- Assign letters to ideas
- Rank ideas independently
- Collate the rankings
- Add the rankings
- Rewrite the list in priority order
- Perform a sanity check

# NGT Example 1

## Results

<b>Issue</b>	<b>PO1</b>	<b>MAJ</b>	<b>SGT</b>	<b>MR</b>	<b>ENS</b>	<b>Total</b>	<b>Priority</b>
	<b>JONES</b>	<b>SMITH</b>	<b>ABLE</b>	<b>GOOD</b>	<b>FELLER</b>		
A	7	5	1	6	5	24	2
B	2	1	6	3	2	14	6
C	6	4	5	4	4	23	3
D	1	2	3	2	3	11	7
E	5	6	4	5	6	26	1
F	3	3	2	7	7	22	4
G	4	7	7	1	1	20	5

# NGT Example 1

## Prioritization

- E. Unclear mission and objectives
- A. Ineffective organizational structure
- C. Lack of training
- F. Poor distribution of office mail
- G. Lack of feedback on reports to management
- B. Poor communications outside the office
- D. Poor communications within the office

# NGT Example 2

## Ranking and Prioritization

### RANKING:

A. Haven't set the anchor properly

$$6, 7, 6, 4, 4, 7, 4 = \textcircled{38}$$

B. Not enough chain out

$$5, 5, 7, 5, 5, 6, 7 = \textcircled{4}$$

C. Bottom not assessed properly

$$7, 6, 5, 6, 7, 5, 6 = \textcircled{42}$$

D. Ship isn't steaming at anchor properly

$$1, 1, 1, 2, 1, 2, 1 = \textcircled{9}$$

E. Piling too much anchor chain on the flukes

$$2, 2, 4, 3, 3, 3, 3 = \textcircled{20}$$

F. Inadequate navigational fixes

$$3, 4, 3, 7, 6, 4, 2 = \textcircled{29}$$

G. QMs not notifying CDO of weather changes

$$4, 3, 2, 1, 2, 1, 5 = \textcircled{18}$$

### PRIORITIZATION:

C, B, A, F, E, G, D