Creative Problem Solving
Osborn-Parnes Model

John Breckline
Nokia Mobile Phones
Six Sigma Manager
Problem Solving

• Corrective Action Systems
  – Actions: Immediate – Temporary – Permanent (preventive)
  – Detection - Correction - Prevention

• Team Approach
  – Skills - View Points - Stakeholders - Buy-in

• Problem Solving Steps
  – Identify Problem/s - Select One
  – Define Problem - Break It Down
  – Investigate Problem (data/facts)
  – Analyze Problem - Possible > > True Root Cause
  – Solve Problem - Alternatives > > Best Fix - Implement
  – Confirm Results - Monitor - Maintain the Gain
Creative Problem Solving

- Osborn-Parnes Model

Basic Points:

- Near "universal" applications
- To get "Out of Box" thinking
- Six step model
CPS - Terminology & Roles

Terminology:

Divergent Thinking
  getting more ideas
Convergent Thinking
  choosing best to keep
CPS
  Creative Problem Solving
  the "process"

Roles:

Facilitator
  works the process
Client
  problem owner
decision maker
Resource Group
  contributes ideas
  expands the box
CPS - Diverging

Diverging:
- Getting many ideas
- Defer Judgement
- Wild & Crazy
- Push the limits
- Quantity vs. Quality
- Brainstorming - Fishbone
CPS - Converging

Converging:
Critical evaluation
Deliberate filtering the ideas
Keeping the best to continue

Multi-Voting - Decision Matrix
CPS - CPS Process

CPS Process:

Joining diverging & converging

Progressive repeat the cycle

Six distinct steps
CPS - Osborn-Parnes Model

CPS - Osborn-Parnes Model

OF  FF  PF  IF  SF  AF

Objective Finding  Idea Finding

Fact Finding  Solution Finding

Problem Finding  Acceptance Finding
CPS - Objective Finding

Purpose:
What do you wish?  What if?
What do you want?

I wish …  I want …  What if …

Pick one!

Try it
CPS - Fact Finding

Purpose:
- Collect & Select most pertinent information related to the issue
- Gather facts about the issue
- WWWW - Five Whys
- Select strongest points to help define the problem

OF

FF

Try it
CPS - Problem Finding

Purpose:

- Define a clear problem statement
- Propose various problem statements
- In What Way Might I… How to...
- Key words word-smithed into a Succinct problem statement

Try it
CPS - Idea Finding

Purpose:
Create many ideas on how to solve the problem >> few best to continue

Ideas - Stretch - Out of Box Thinking
Brainstorming - SCAMPER

Select best ideas to develop into solutions - Multi-Voting
CPS - Solution Finding

Purpose:
- Develop ideas into a feasible solution
- Develop ideas into a complete solution
- Six Hats Thinking
- Select best choice to implement
- Determine decision criteria to use in Decision Matrix

IF  SF

Try it
CPS - Acceptance Finding

Purpose:
- Move to implementation
- What are barriers - what are support - what things need to be done
- Create Action Plan
  - What are immediate first steps to get moving on your plan

Try it
CPS - Questions?

Can you find a use for CPS?

Can you slow down enough to diverge?

Who can help your divergent thinking?
Problem Solving - CPS

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CPS - End!

Thank You

Closing at

5:00