

**ASQ Greater Fort Worth  
3rd Annual Mini-Conference**

**Creative Problem Solving  
Osborn-Parnes Model**

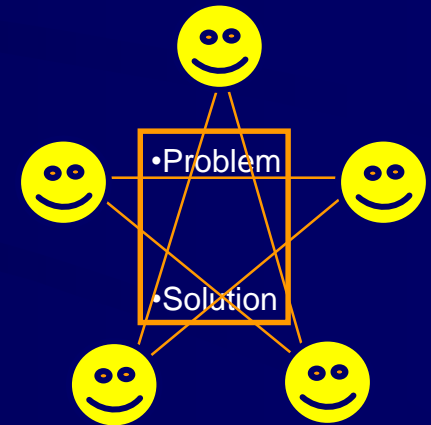
**John Breckline**

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

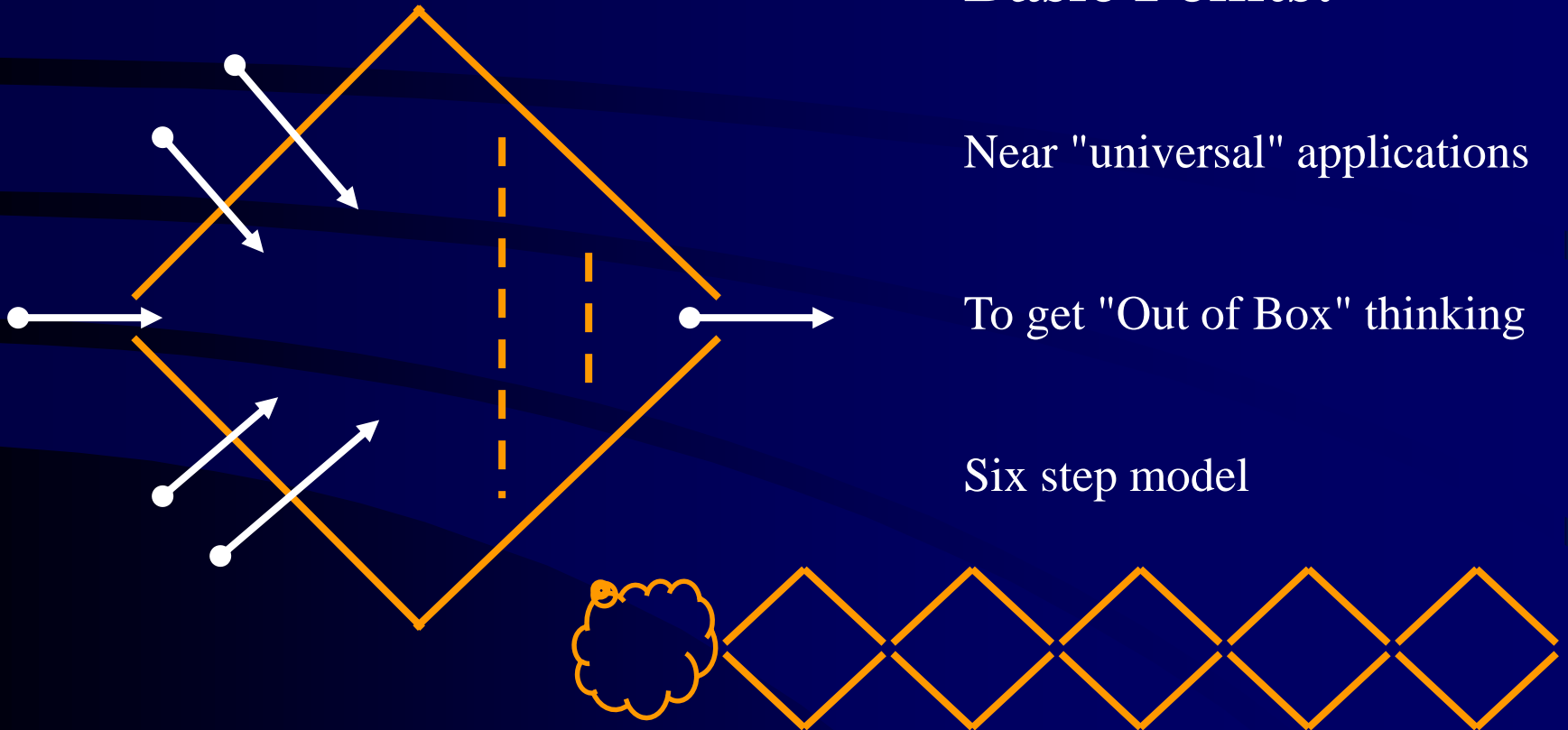
- Osborn-Parnes Model

## 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

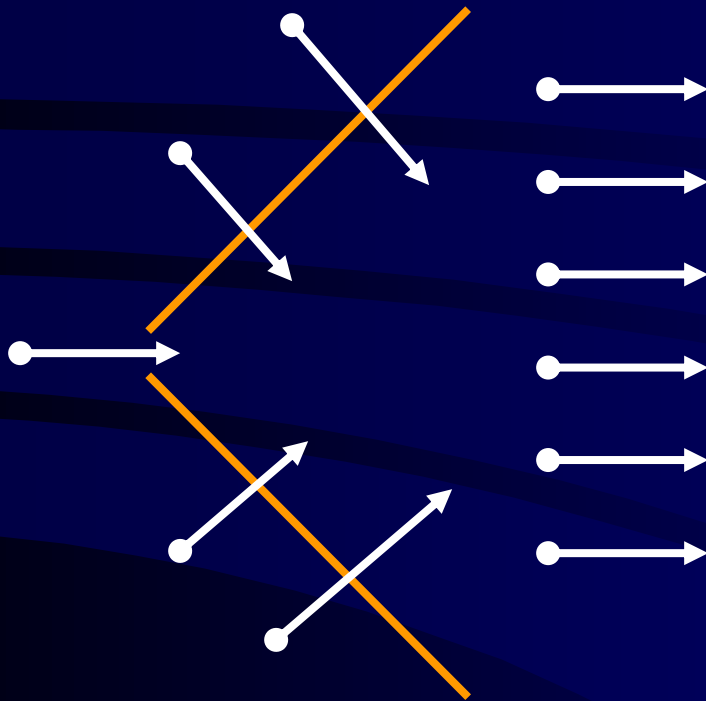
decision maker

### Resource Group

contributes ideas

expands the box

# CPS - Diverging



## **Diverging:**

Getting many ideas

Defer Judgement

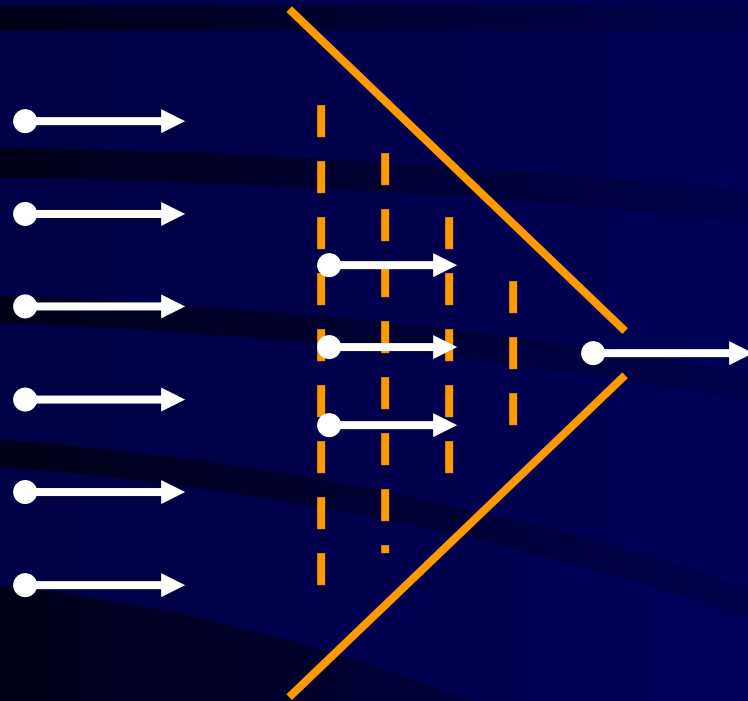
Wild & Crazy

Push the limits

Quantity vs. Quality

Brainstorming - Fishbone

# CPS - Converging



## **Converging:**

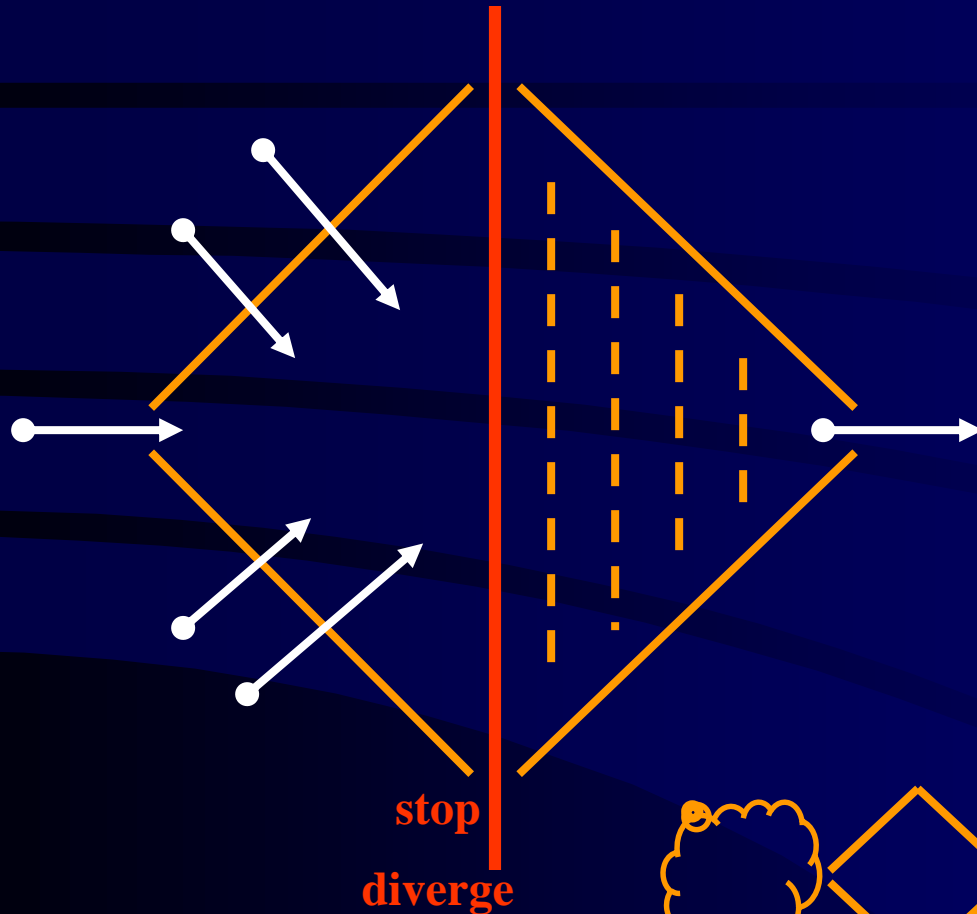
Critical evaluation

Deliberate filtering the ideas

Keeping the best to continue

Multi-Voting - Decision Matrix

# CPS - CPS Process



## CPS Process:

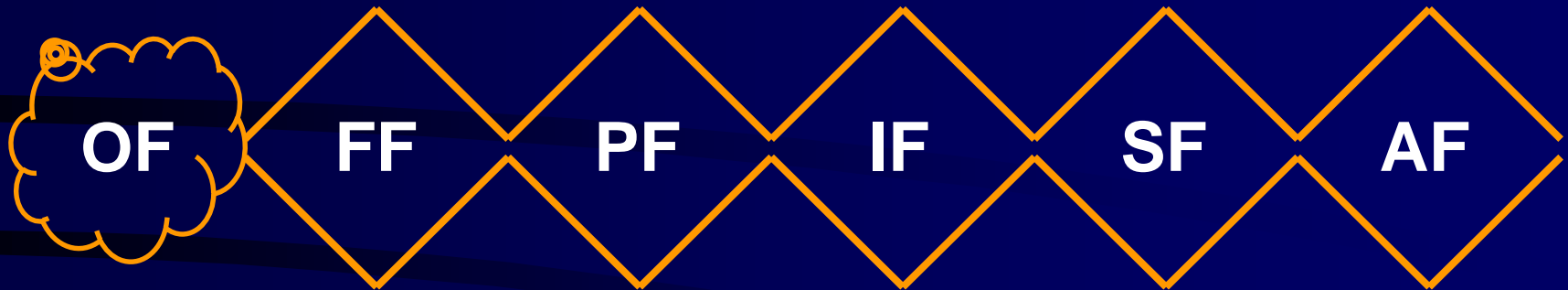
Joining diverging & converging

Progressive repeat the cycle

Six distinct steps



# CPS - Osborn-Parnes Model



**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 !

# CPS - Fact Finding



## Purpose:

Collect & Select most pertinent information related to the issue

Gather facts about the issue

WWWWWH - Five Whys

Select strongest points to help define the problem

# 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

# CPS - Idea Finding



## Purpose:

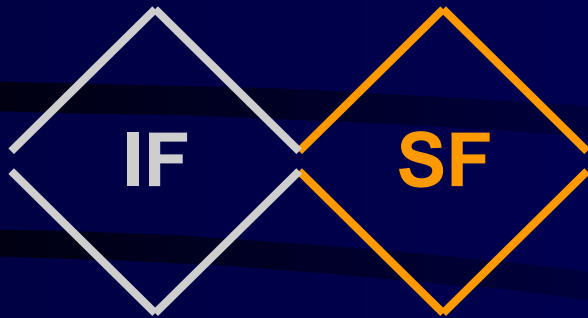
Create many ideas on how to solve the problem >> few best to continue

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

# CPS - Acceptance Finding



## Purpose:

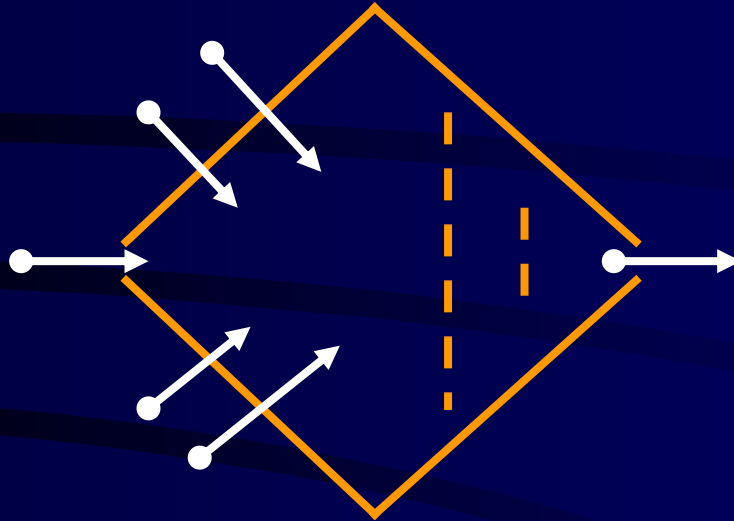
Move to implementation

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

# CPS - Questions ?



**Can you find a use  
for CPS?**

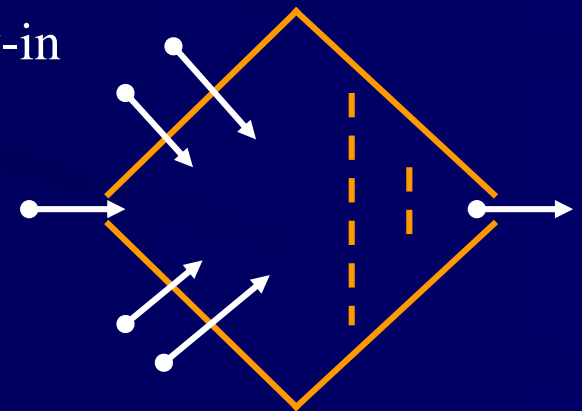
**Can you slow down  
enough to diverge?**

**Who can help your  
divergent thinking?**



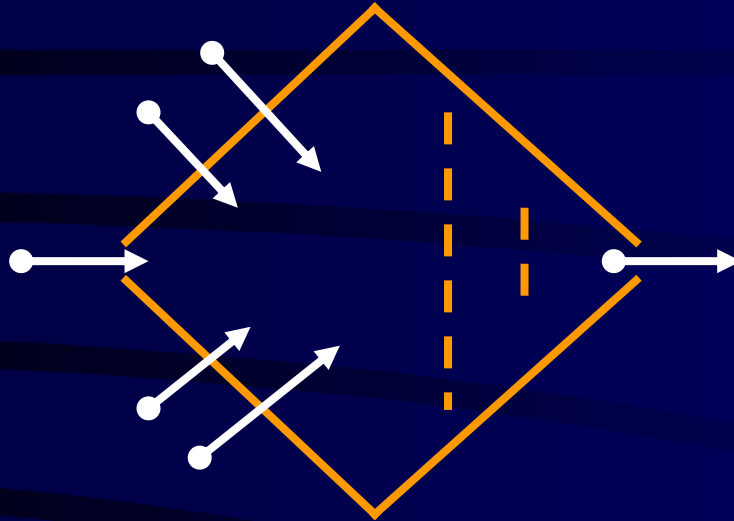
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# CPS - End !



**Thank You**



**Closing at**

**5:00**

