

# The Limits of “I’ll Know It When I See It”

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Sean Murphy ([www.skmurphy.com](http://www.skmurphy.com))

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# Overview

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- Individual Expertise
- Effective Delegation
- Blending Expertise In a Team

# Questions for Audience: Role

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- Individual Contributor
- Manager / Project Manager
- Consultant
- Solo Entrepreneur
- Startup Founding Team

# Questions for Audience: Discipline

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- Engineering
- Sales & Marketing
- Finance & Operations
- Executive Management

# Individual Expertise

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- I'll Know It  
When I See It"
  - Unconscious Competence
  - Not Available To Introspection



# “I’ll Know It When I See It”

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## □ Examples

- Reading A Pap Smear
- A Gestalt: Whole Is More Than Sum Of Parts
- A Detail You See That Is Often Overlooked

# What is Expertise?

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"Experts perceive things that are invisible to novices, such as the characteristics of a typical situation. They make high-quality decisions under extreme time pressure. When difficulties arise, experts find opportunities for improvising solutions."

Gary Klein "Sources of Power"

# Example Of Expertise: Physician

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1. Elicit Symptoms (May Include Tests)
2. Offer a Diagnosis (Root Cause Analysis)
3. Explain Differentials (Sensitivity Analysis)
4. Suggest a Prescription (Course of Action)
5. Outline Prognosis (Likely Outcomes)
6. Use Outcomes to Refine Rules & Models



# Expertise: Personal Mastery

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- Master Not Only The Technical
  - But Also Emotional Aspects Of a Problem
  - Self-Debugging
- Deliberate Practice
  - Predict Outcomes of a Decision & Follow-Up
  - 10,000 Hour Rule (Ericsson)

“They Can Because They Think They Can” Virgil

# Expertise: Holistic Intuition

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- Unconscious Competence
- Pattern Recognition
- Muscle Memory
- Backtracking & Self-Evaluation

# What's The Difference Between

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- Talented Contributor & Effective Manager
- Solo Entrepreneur & Entrepreneurial CEO

## Effective Delegation

# Two Types of Delegation

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- Crystallize & Codify
- Form A Small Team With A Shared Mission

# Crystallize & Codify

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- ❑ Externalize Insights
- ❑ Formalize Approach
- ❑ Thought Process Available For Evaluation
  - Basis for Self-Improvement
- ❑ Defined and Repeatable Process



# Approaches To Crystallize & Codify

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- Sketch A Drawing
- Run A Google Search
- Craft A Metaphor – (e.g. Computer Virus)
- Write A Program To Solve Part Of Problem
- Build A Spreadsheet

# Examples of Crystallize & Codify

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- Rules Of Thumb
- Checklists
- Recipes
- Model or Simulation

# Now That It's Out Of Your Head

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## □ You Can Have Conversations

- Solicit Suggestions For Improvement
- Compare Notes With Other Experts
- Refine Based On Broader Experience





# Questions For Audience: Crystallize

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- How Do You Capture Your Expertise?
  - I Will Jot Or Sketch On a 3x5 Card
- Anyone Want to Offer an Example?

# Recap: The Difference Between

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- ❑ Talented Contributor & Effective Manager
- ❑ Solo Entrepreneur & Entrepreneurial CEO

## Effective Delegation

# Two Types of Delegation

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- ✓ Crystallize & Codify
- ❑ Form A Small Team With A Shared Mission



# Keys To Forming A Small Team

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- A Common Mission or Desired End
- Metrics For Measuring Progress
- Shared Situational Awareness
- Each Member Can Link Actions to Goals

# Limit of “I’ll Know It When I See It”

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- ❑ Problem Grows Bigger Than One Person
- ❑ You Need a Team
  - Often With Several Experts

# Product Team Example

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- ❑ One Table / Two-Pizza Meeting
- ❑ Need Different Engineering Experts
  - Power, Mechanical, Software, ...
- ❑ Engineering Is About Tradeoffs
  - Cost, Performance, Development Time

# Individual Expertise vs. Team Decision Making

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- Two Key Differences
  - Trust
  - Shared Situational Awareness
- New Challenge:

## Blending Expertise On A Team

# Models That Blend Expertise For Team Decision Making

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- ❑ Recognition Primed Decisions - Klein
- ❑ Principles of Maneuver Warfare - Lind
- ❑ Decision Tree Model – Howard
- ❑ Analysis of Competing Hypotheses - Heuer



# Recognition Primed Decision

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- Useful in Emergencies and Crises
  - Depth-First Search of Possibilities
- Agree On a Model of Situation
- Generate Possible Courses of Action
- Select First One That Works

Klein "Sources of Power" & "Intuition"

# Principles of Maneuver Warfare

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- Useful For Rapid Decision Making
- One Mission / One Main Effort
- Push Decisions Down (Close to Facts)
- Reconnaissance Pull: Guided By Facts

Lind “Principles of Maneuver Warfare”

# Decision Tree Model

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- ❑ Used to Organize Sequence of Decisions
- ❑ Helps Bound Uncertainty
- ❑ Identify Choices and Probable Outcomes
- ❑ Each Outcome In Term has New Choices
- ❑ Example: Fault & Diagnostic Trees

Howard “Decision Analysis”

# Analysis of Competing Hypotheses

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- Offers Clarity on Facts & Key Hypotheses
  - Avoids “A vs. B” Thinking; More Options
- Make a Table
  - Hypotheses In Columns, Facts in Rows
  - Cell: Fact Supports, Contradicts, or No Effect
- Shifts Focus to Getting New Facts

Heuer "Psychology of Intelligence Analysis"

# Improving Team Decisions

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- Gary Klein's Pre-Mortem Technique
  - Assume Project Has Failed
  - Identify Possible Sources of Failure
  - Add Risk Mitigation Efforts to Address
- Russell Ackoff's Decision Record
  - Each Participant Writes Down Separately
  - Reasons for Decision, Likely Outcome(s).
  - Review As Impacts Become Clear

# Limits of “I’ll Know It When I See It?”

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- ❑ Moving Beyond Personal Expertise
- ❑ Two Types of Delegation
  - Crystallize & Codify
  - Form A Small Team With A Shared Mission
- ❑ Effective Teams Have Many Experts
  - Requires Clarity on Facts and Hypotheses

# SKMurphy – What We Do

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- We Offer Customer Development Services
  - New Technology Introduction
  - Focus: Early Customers & Early Revenue
- We Assist On Strategic Decisions
  - Niche Identification and Selection
  - Pricing
  - Negotiation Sequence and Framework

# Please Turn In Evaluations

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- Help Us Improve The Recipe for This Talk



# BACKUP

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