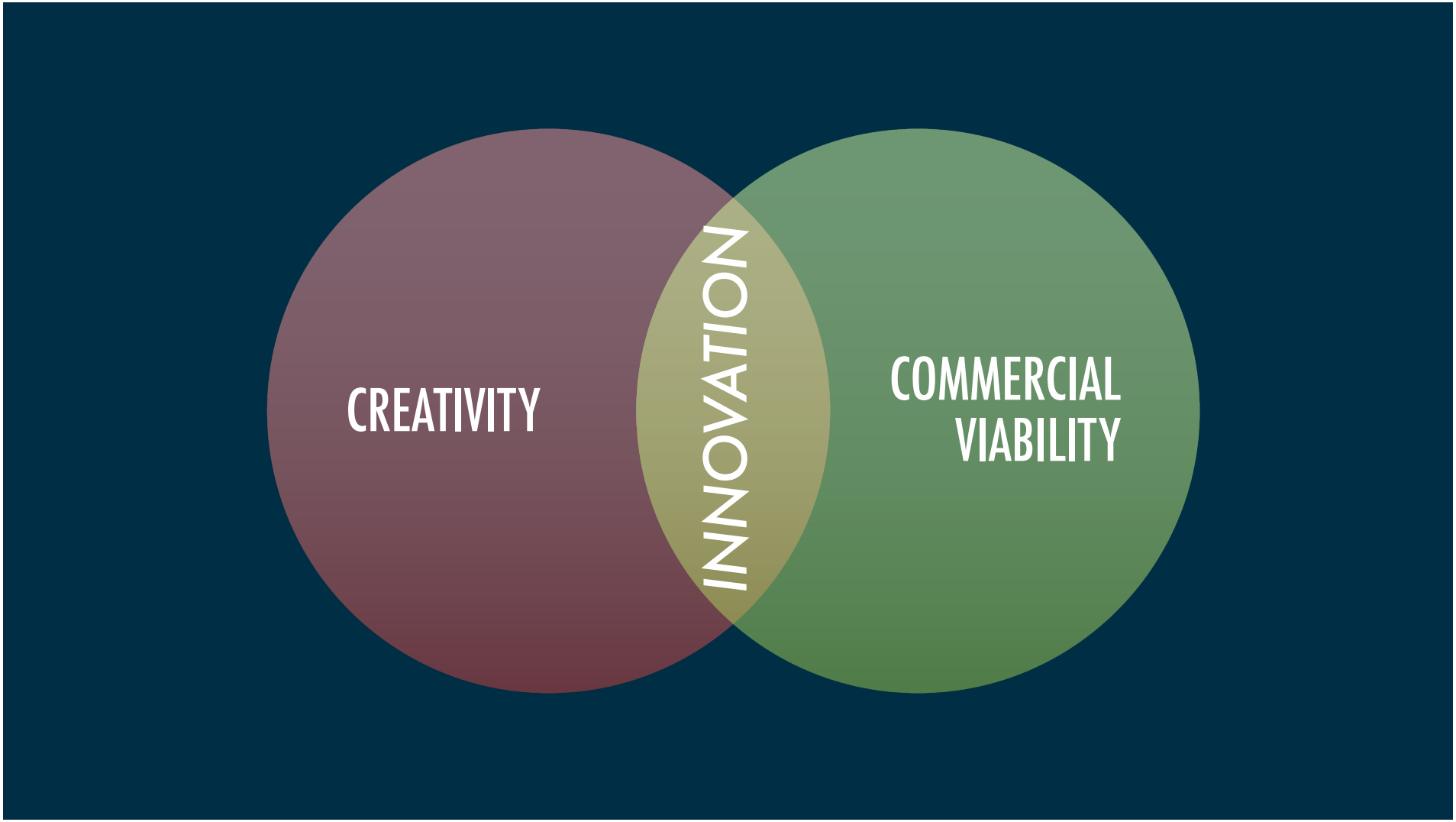
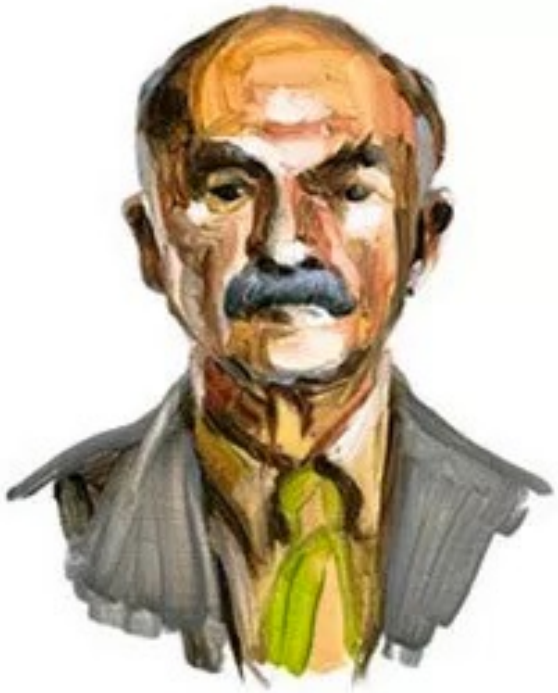
#8

INNOVATION AND CREATIVITY IN PRODUCT DEVELOPMENT

SO, WHAT IS INNOVATION?


CREATIVITY
INNOVATION
COMMERCIAL VIABILITY



"Creativity is thinking up new things. Innovation is doing new things."

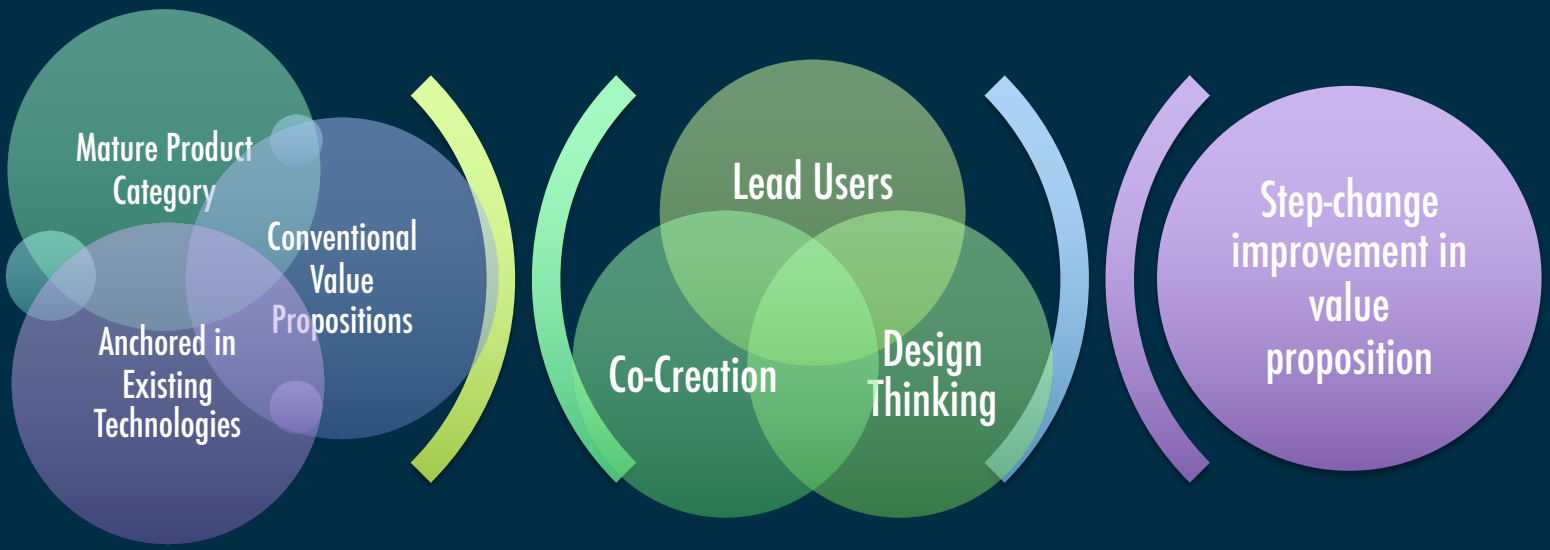
Theodore Levitt

HOLT AND CAMERON:

INNOVATION *= step change in the value proposition (or, better benefits for price)*

"Build a better mousetrap, and the world will beat a path to your door"

TRADITIONAL INNOVATION VIEW



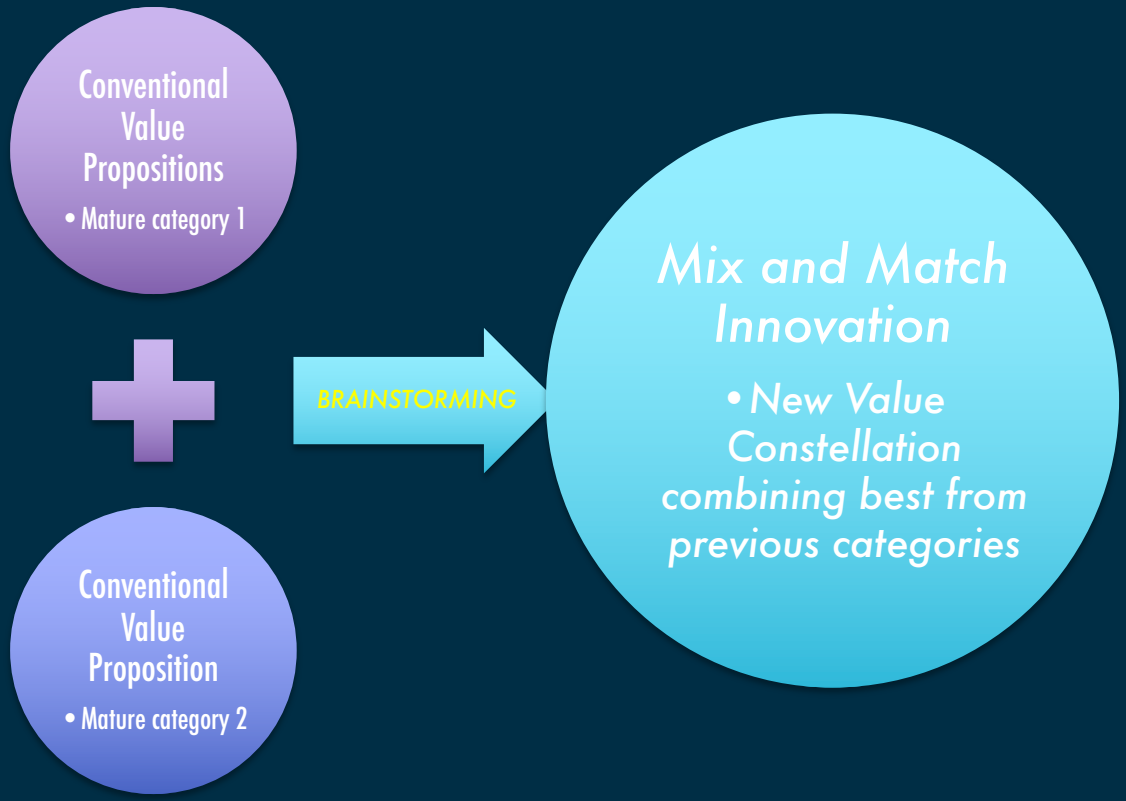
Current Market

New Technology Commercialization

Technological Innovation

TECHNOLOGICAL BREAKTHROUGHS

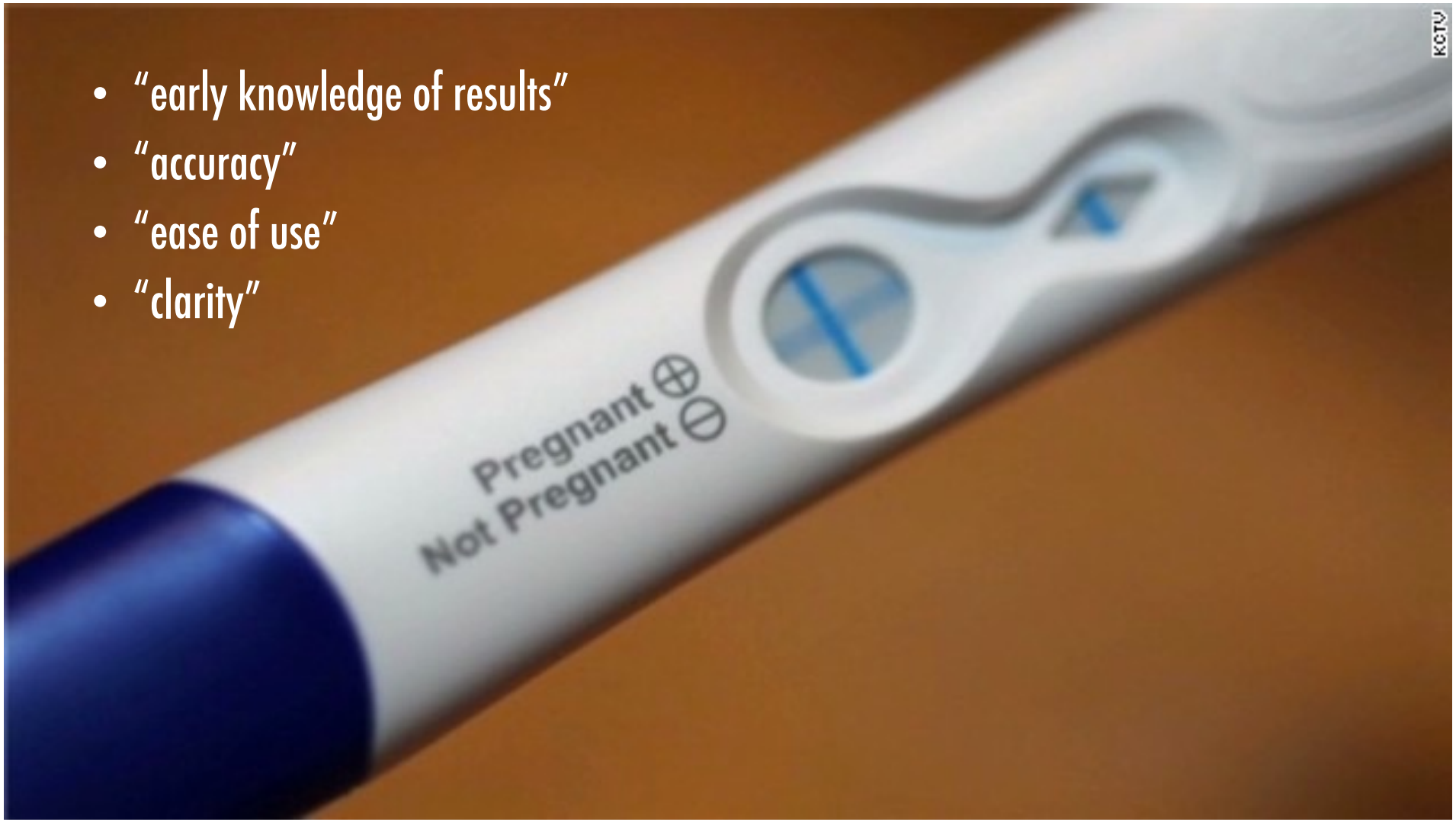
MIX N MATCH / BLUE OCEAN INNOVATION



REMINDER:

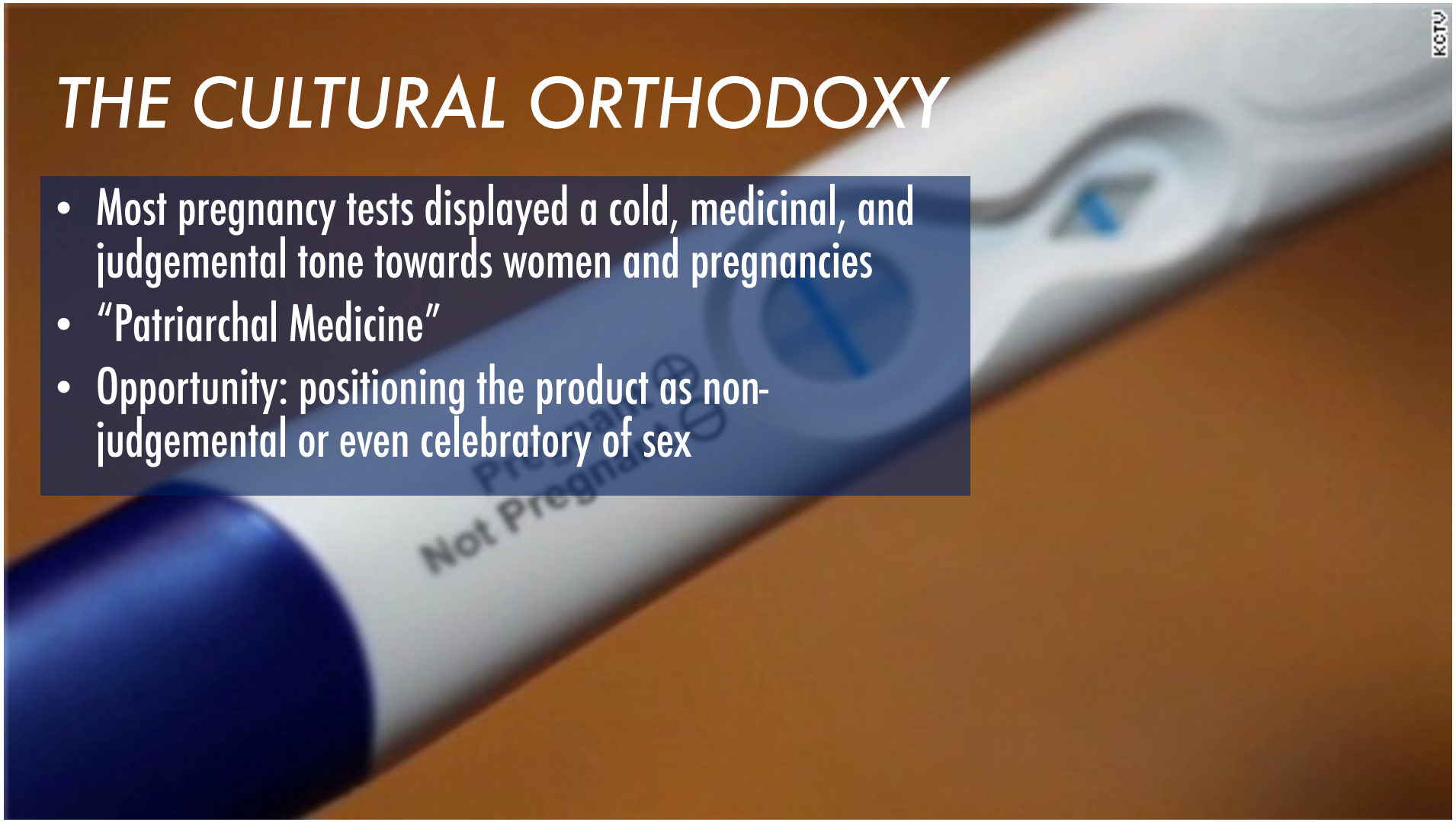
"THE BETTER MOUSETRAP" FALLACY

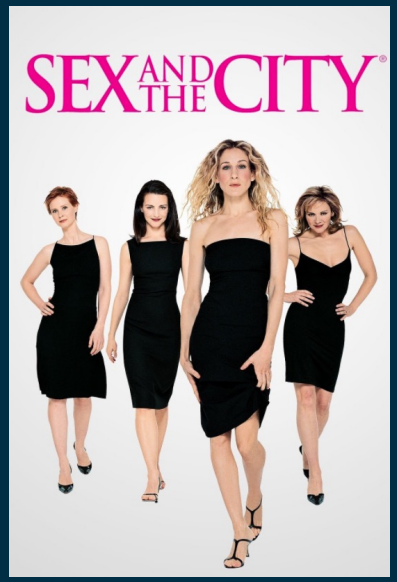
- “early knowledge of results”
- “accuracy”
- “ease of use”
- “clarity”

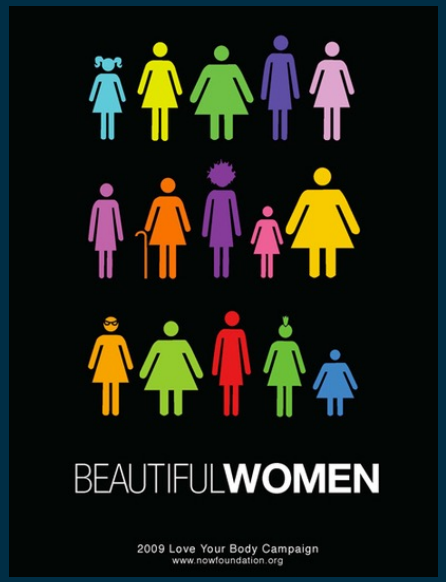


THE CULTURAL ORTHODOXY

- Most pregnancy tests displayed a cold, medicinal, and judgemental tone towards women and pregnancies
- "Patriarchal Medicine"
- Opportunity: positioning the product as non-judgemental or even celebratory of sex

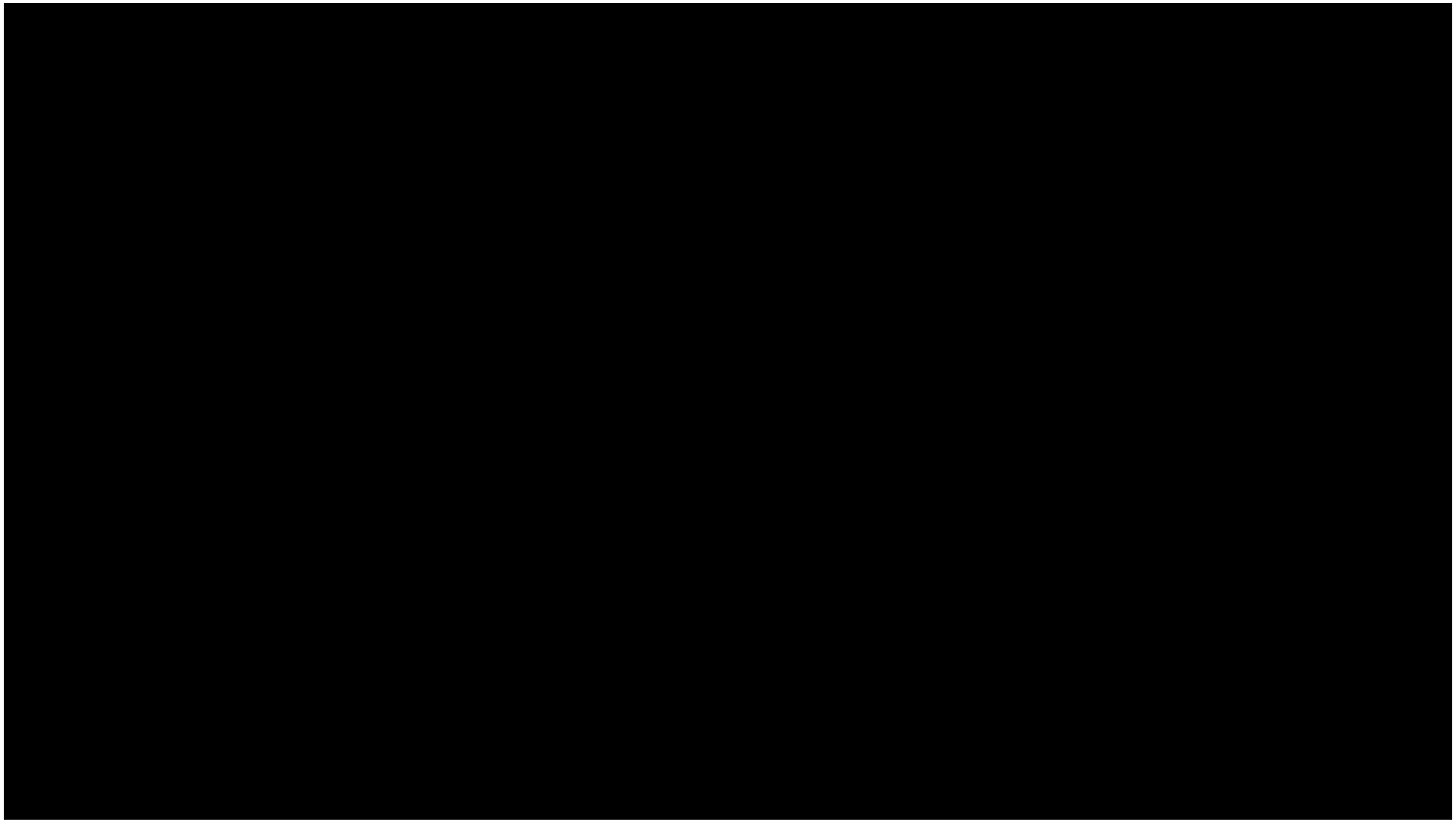






SUBCULTURAL SOURCE MATERIAL: *SEX AND BODY POSITIVE THIRD WAVE FEMINISM*

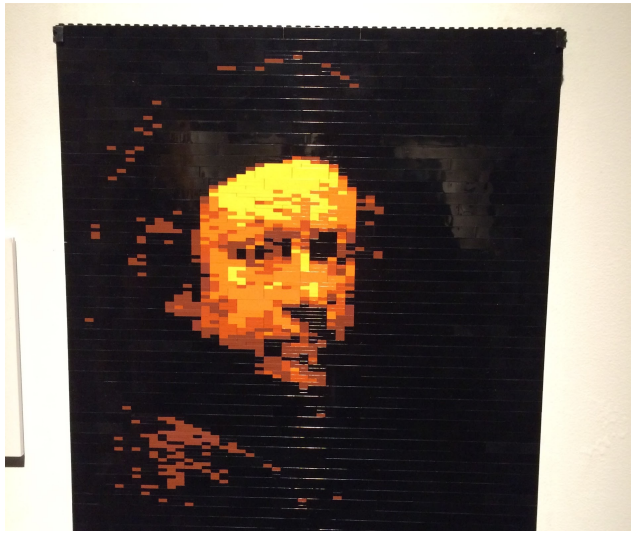
LEGO

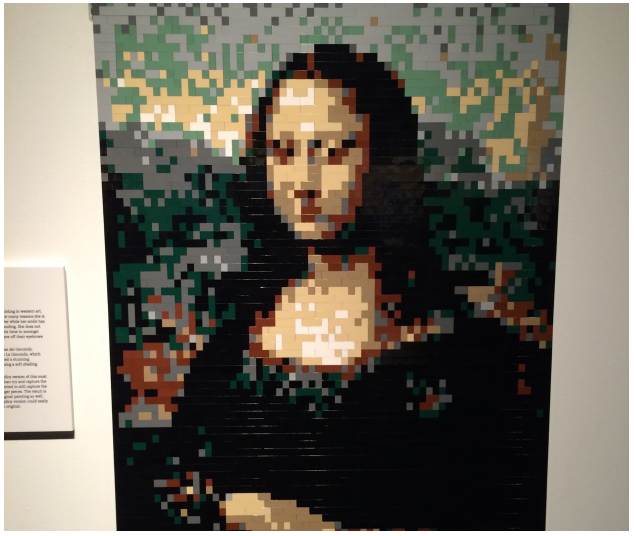


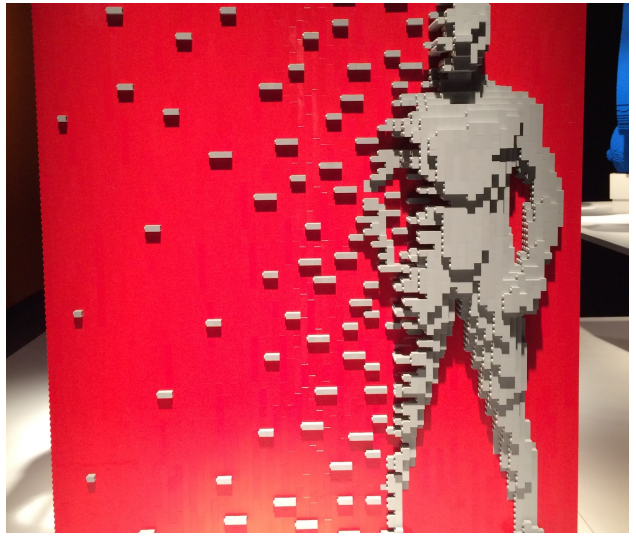
LEGO club house

PHOTO©NARWAL.NET

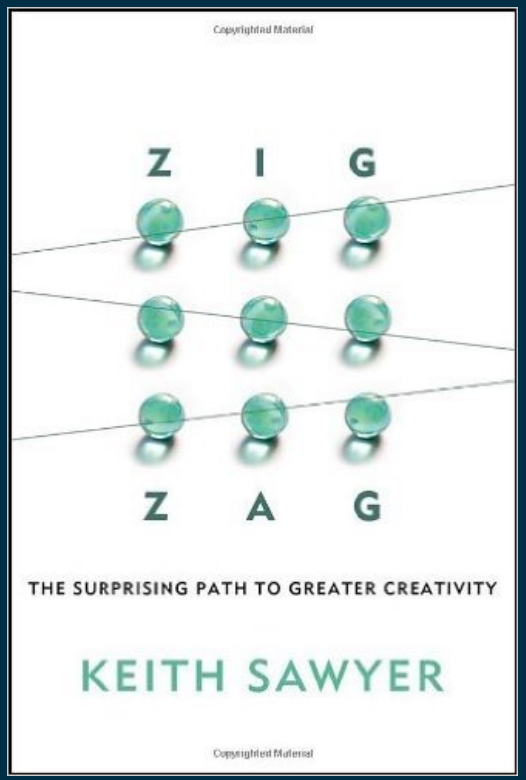
LEGO
LEGO
LEGO





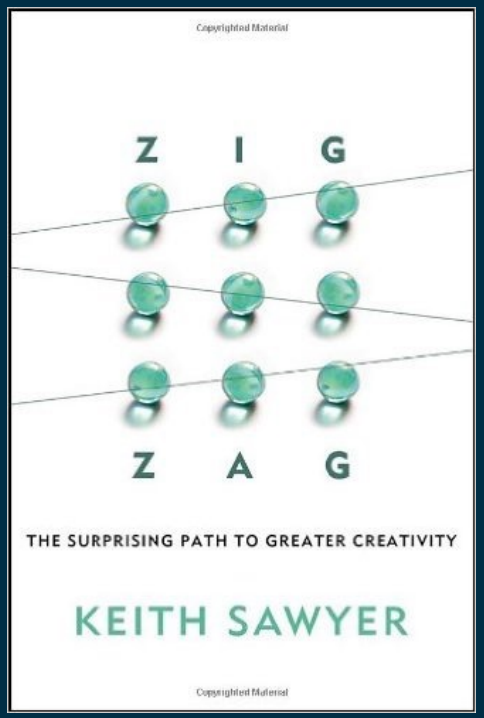


CREATIVE TECHNIQUES



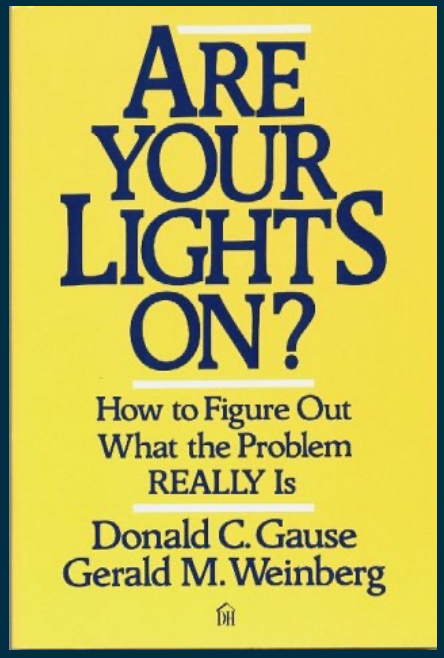
ZIG ZAG

1. Ask
2. Learn
3. Look
4. Play
5. Think
6. Fuse
7. Choose
8. Make

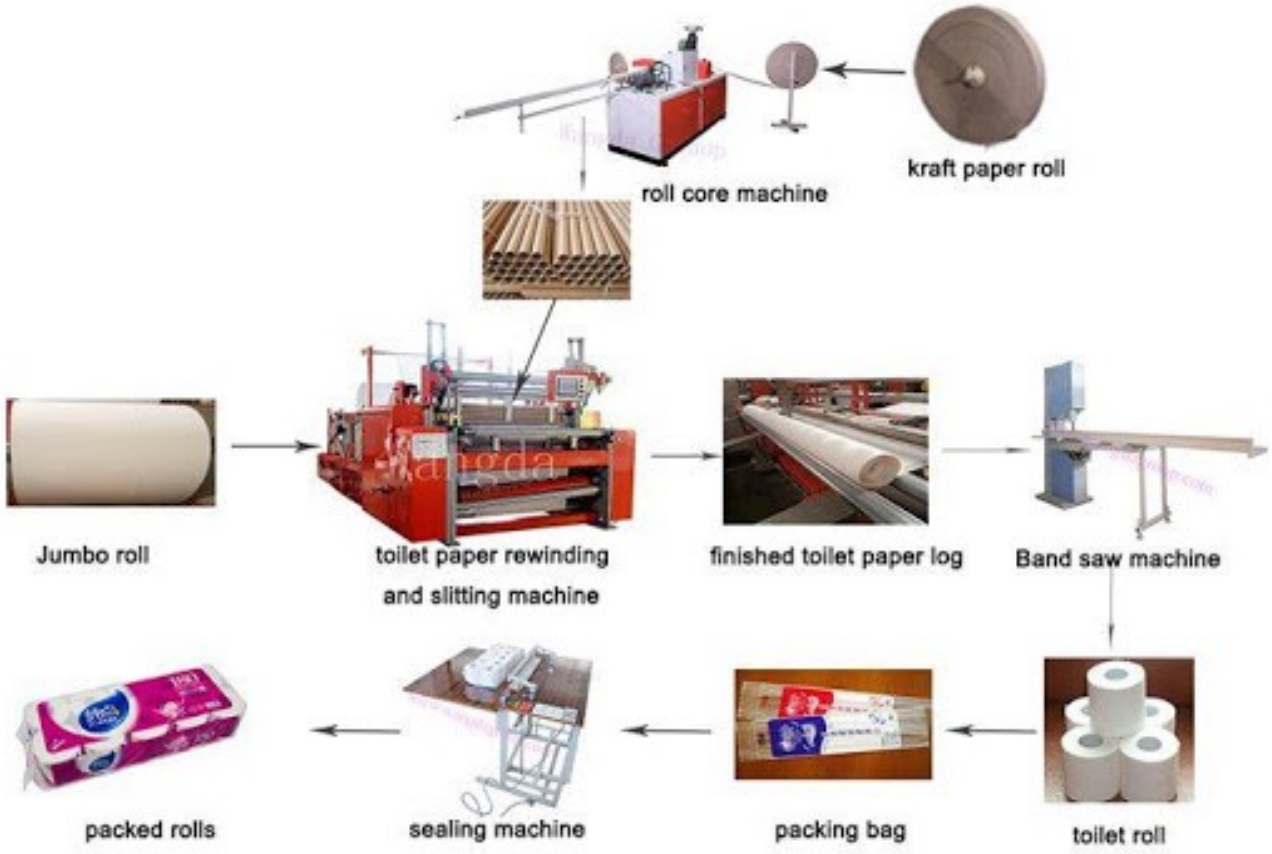


CIA'S PHOENIX METHOD

1. Why does this problem need to be solved?
2. What benefits come from solving the problem?
3. What don't you understand yet?
4. What information do you have? Is it sufficient? Is it contradictory?
5. Put a boundary around the problem – be clear about what is *not* the problem
6. What are the various parts of the problem? Identify and describe the relationships among the parts
7. What cannot be changed about this problem? (Don't assume something can't be changed when in fact it can.)
8. Think of another case of the same problem, but perhaps in a slightly different form, or in a different area altogether. Can you use the same solution, analogically? If not, can you use a component of the solution, or the method that led to that solution?

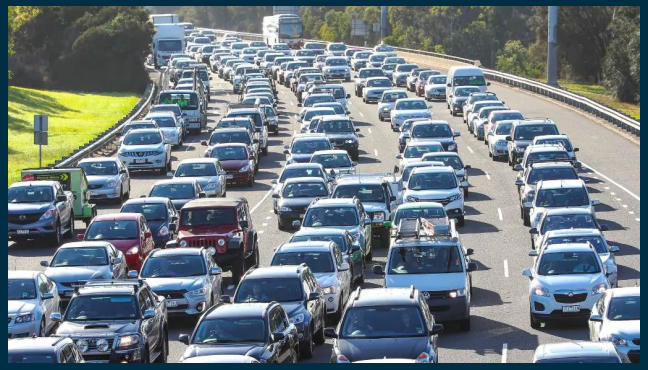


Toilet paper production flow chart



SHORT EXAMPLE: 5 "WHYS"

"I hate my job."
"Why do you hate your job?"
"Because I feel like I'm not being my best."
"Why do you feel like that?"
"Because I'm always feeling too tired to work well."
"Why are you always tired?"
"Because I have to get up at 5:30AM to be at work on time."
"Why do you have to wake up so early?"
"Because I have 50 km commute and the road can get congested in the mornings."



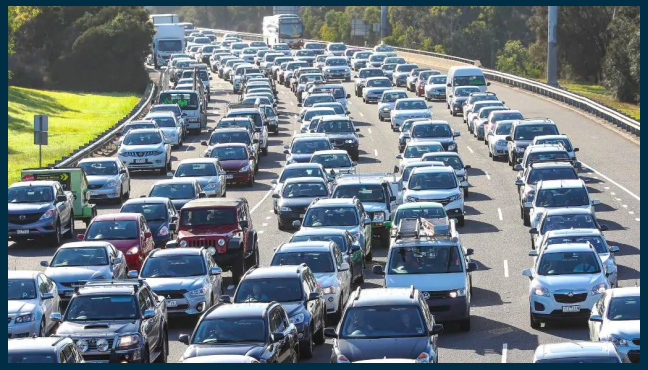
ZIGZAG:

#1 INTRODUCING CRITERIA INTO IDEA GENERATION IMPROVES CREATIVITY

#2 CHOOSING ENTAILS MAKING DECISIONS AND BREAKING CONSENSUS

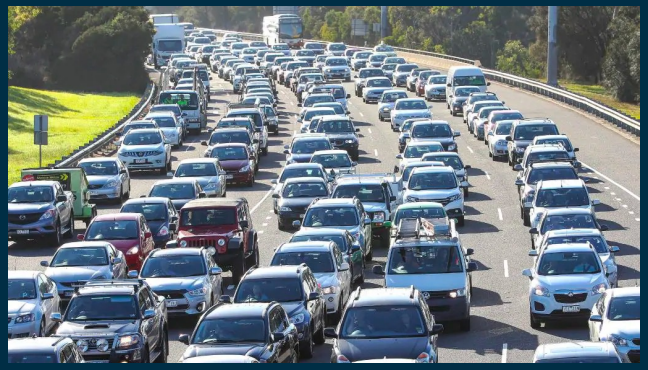
LIST ATTRIBUTES

- How can I reduce the length of my commute?
  - –Reduce
  - –Length
  - –Commute
  - –Work



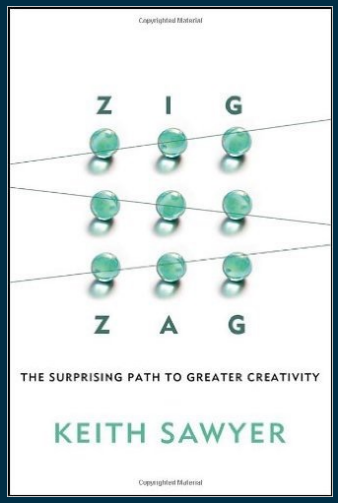
SCAMPER

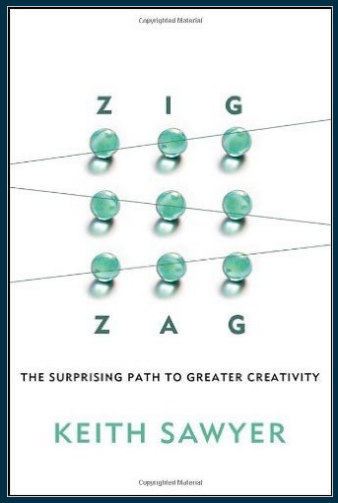
- Substitute some element
- Combine elements
- Adapt some element
- Magnify or Modify some element
- Put to other uses
- Eliminate an element
- Rearrange or Reverse the elements



FUSE

- Force-Fuse: Pick ideas or observations that you know are incompatible, and then force yourself to fuse them into one idea
- Analogies: Poetic analogy ("This school is like a zoo")"; Direct analogy ("Our problem as animal/tool/place…); Personal analogies ("How would I feel if I were a place/object relating to the problem?")
- "People Mashup": Offer your ideas to somebody else's (another group?) problem
- Associations: Connect more words; chain associations



CHOOSE

1. Simple, elegant, robust: What is the essence of the problem, doing most with least, the design works even under stress
2. Check your ideas: What need does this aim to satisfy? What obstacles exist? What resources do we need?
3. "Define greatness": What would make for a great solution?
4. Pluses, Minuses, Interesting (PMI)
5. Find the worst-case scenario, Fix the fatal flaw, and Devil's advocate