

Solve Your Problems on Demand Part 2



SIT
Systematic
Inventive
Thinking

Allon Sasson





Today's Agenda

- Learn something new about innovation
- Learn and practice a new tool for solving problems

You

- Active role in this session
- Take notes if you want

Me

- 22 years in Israeli Prime Minister Office
- Active in helping kids, young entrepreneurs and companies to innovate
- MBA focusing on entrepreneurship and VC



**What's in your
pocket?**

5 learnings so far

About problem solving



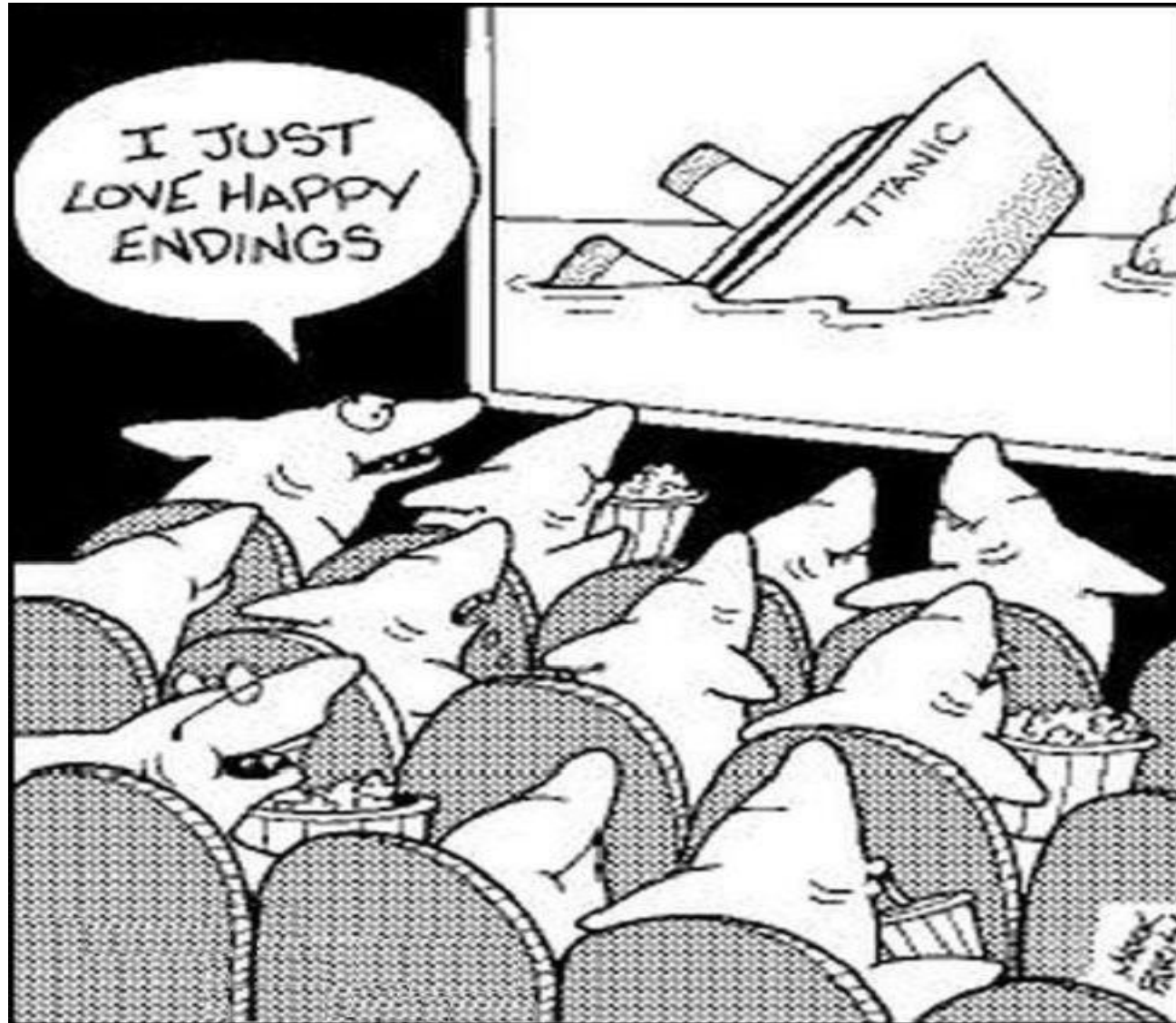
#1: Where to begin?

Define
“the cause” of
“the problem”

VS.

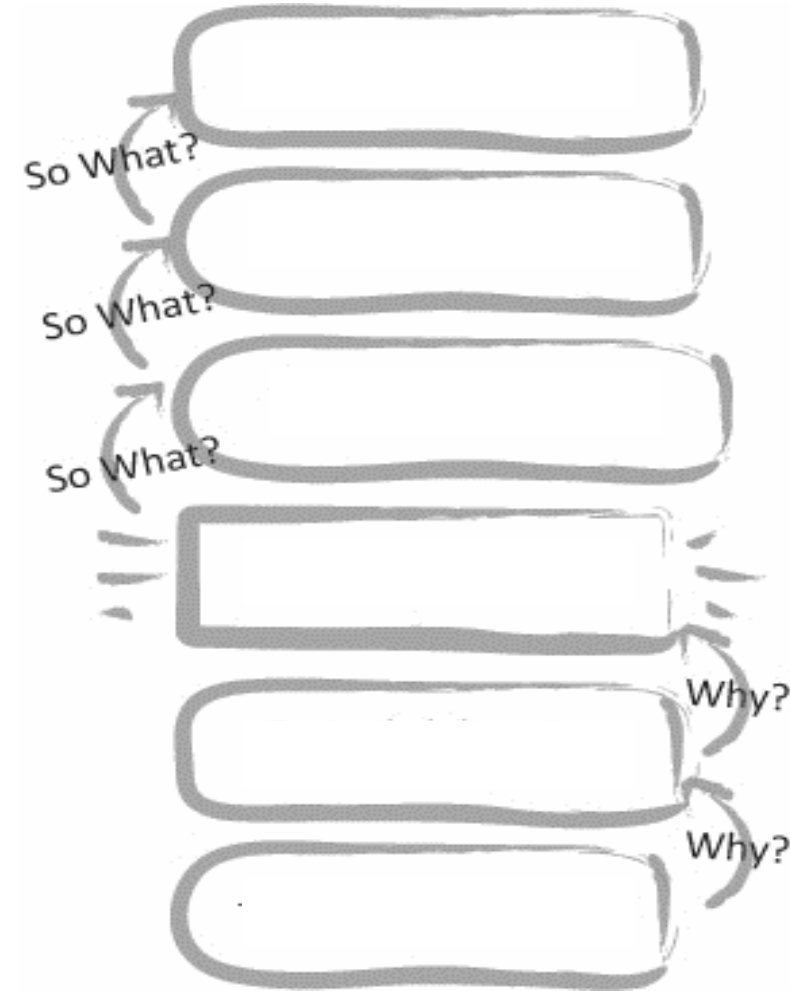
Describe
the “problematic situation”

#2: The Owner's point of view



#3: A chain of Undesired Phenomena (UDP)

A **logical description** of the problematic situation, composed of a sequence of **cause-and-effect chain**



#4: Desired Actions can be used to trigger solutions

The Desired Action should be:



Simple

Active

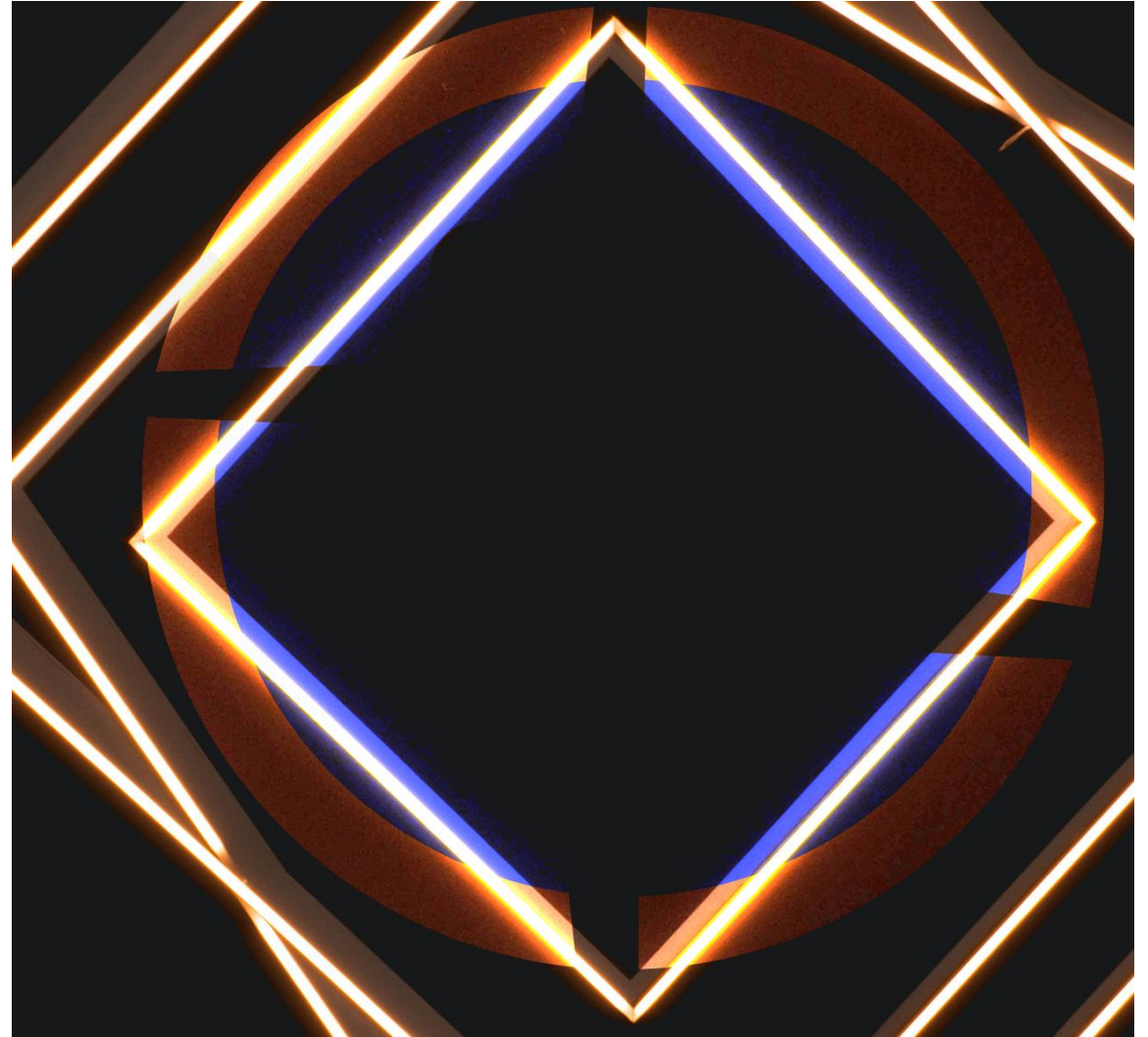
Doesn't
suggest
specific
solutions

#5: The Closed World



The CLOSED WORLD principle dictates that when innovating, we make use only of elements existing within the system or its immediate environment

Fixedness



A photograph showing the lower half of a person standing on a concrete ledge. They are wearing blue denim jeans with the cuffs rolled up and bright red sneakers with white laces and white soles. The background is a blurred cityscape with buildings and a clear sky.

**Why is it difficult
to innovate?**

Cognitive Fixedness

A state of mind in which an object or situation are perceived in one specific way, to the exclusion of any alternative



Karl Dunker's Experiment, 1920's



Karl Dunker's Experiment, 1920's

Group #1



Group #2



Using only the objects shown in the picture,
mount the candle to the wall and light it

Karl Dunker's Experiment, 1920's

The match box
can also be used
as a shelf



Functional Fixedness

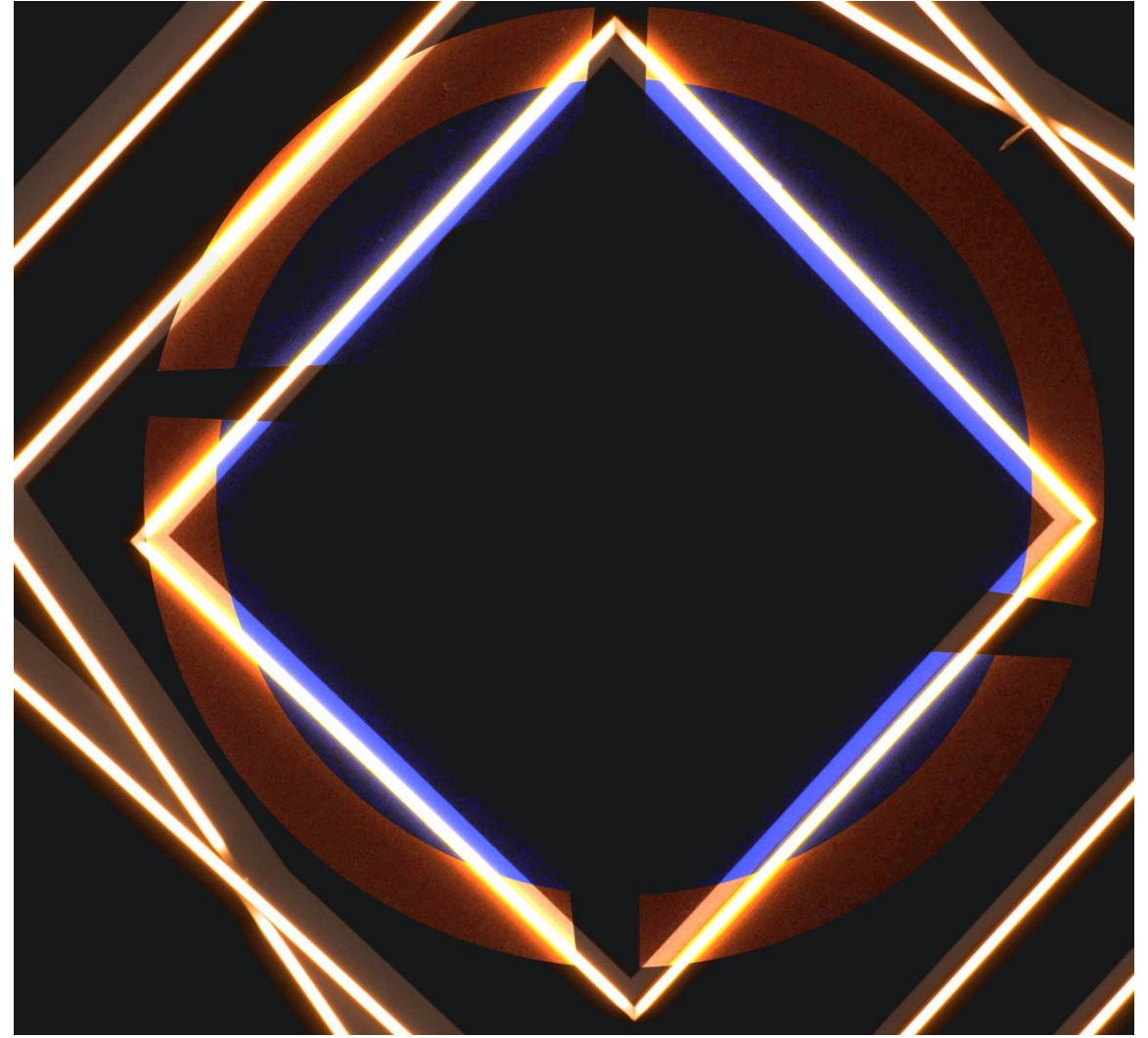
The tendency to create a strong association between an element and its designated function, resulting in an inability to consider additional functions for that element





Breaking Fixedness can open the door for innovation

Task Unification



PullClean



The Play Pump



Task Unification

**Assigning a new & additional task
to an existing resource in our
Closed World**



**within resources that are
available in the system**

Closed World elements = resources

Useful categories

IT / Technology	Physical structures	People	Events / Processes

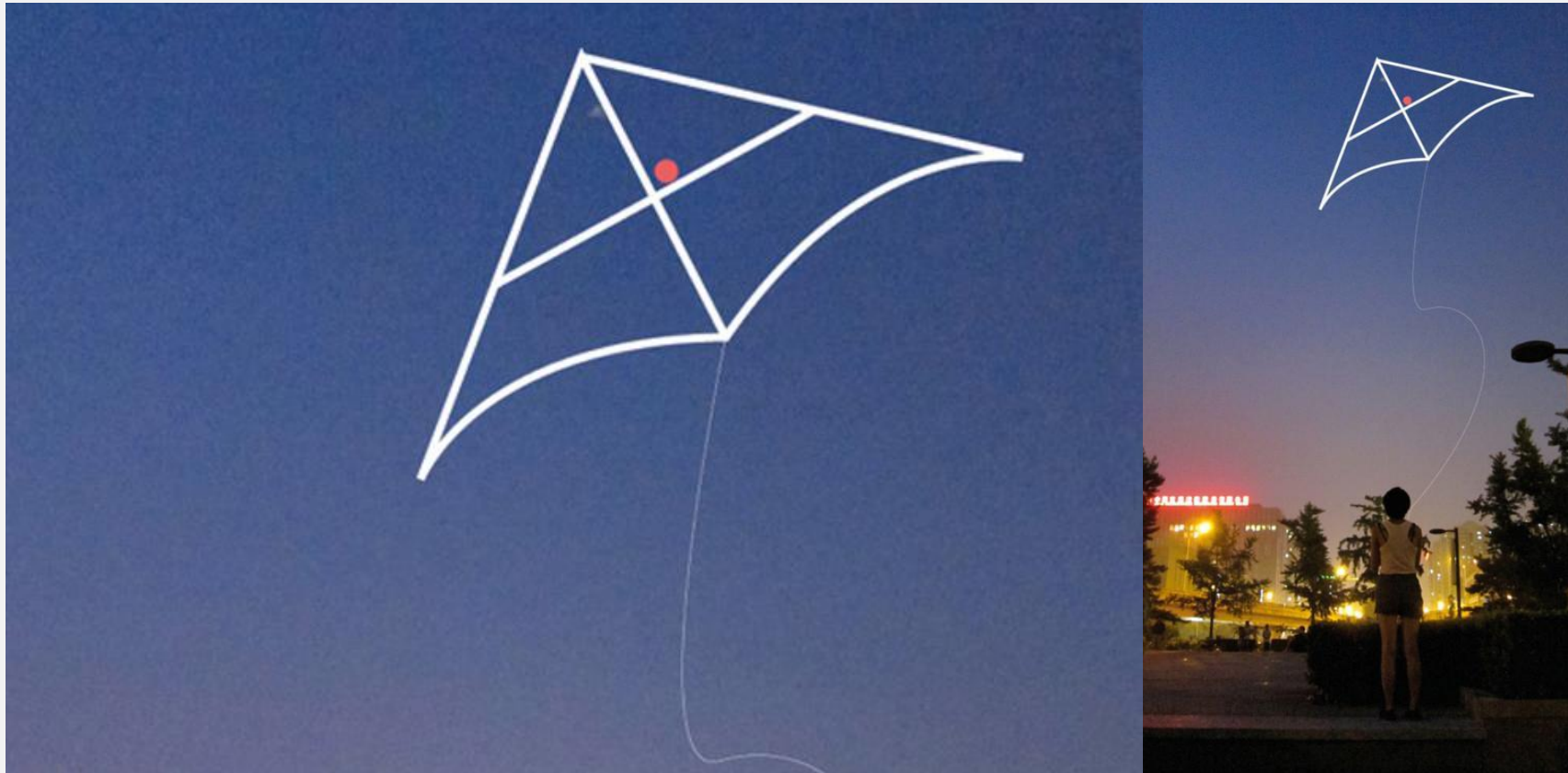
Thermometer pacifier



Electricity-generating road



FLOAT - Beijing pollution monitored with kite-mounted sensors



Friendship Bench, Zimbabwe

Creating safe spaces



TED

Self checkout



Thailand: Waiting in line



Applying Task Unification in advertising



Applying Task Unification in advertising



Applying Task Unification in Problem Solving

Problem Solving

Desired Action



Task Unification

Additional task

Closed world

How can <component X from the closed world>

Deliver <Desired Action Y>

Applying Task Unification in Problem Solving

How can <component X from the closed world>

Deliver <Desired Action Y>

Let's see how it works – The rock concert story

choose one
Desired Actions

Security personnel
handle the crowd

The barrier is flexible

The barrier is strong

The barrier is stable

The crowd is far from
the barrier

The crowd is not
moving

Closed World elements

IT / Technology	Physical structures	People / Roles	Events / Processes
Mobile phones	Stage	Band	Selling drinks
Sound system	Barrier	Fans	Offering first aid
PA system	Musical Instruments	Security Personnel	Purchasing tickets
Screens	Water bottles	Video crew	

Virtual Solutions

<Water bottles> will ensure that <the barrier is stable>

<The band> will ensure that <the barrier is stable>

<Mobile phones> will ensure that <the barrier is stable>

<Purchasing tickets> will ensure that <the barrier is stable>

How to apply Task Unification



1. Define the task
2. List the Closed World components
3. Systematically assign the task to one of the Closed World components:

Technology	Physical structures	People	Events / Processes

How can component X perform the task Y?

4. Explain the situation / solution you have created
5. State benefits and then challenges
6. Capture the idea
7. Go to step 3

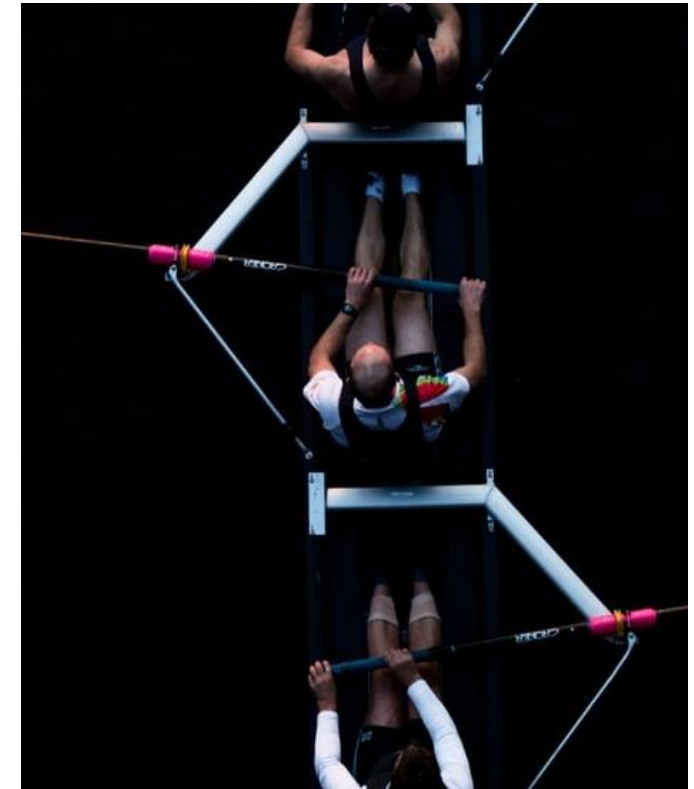
Let's practice

Applying Task Unification



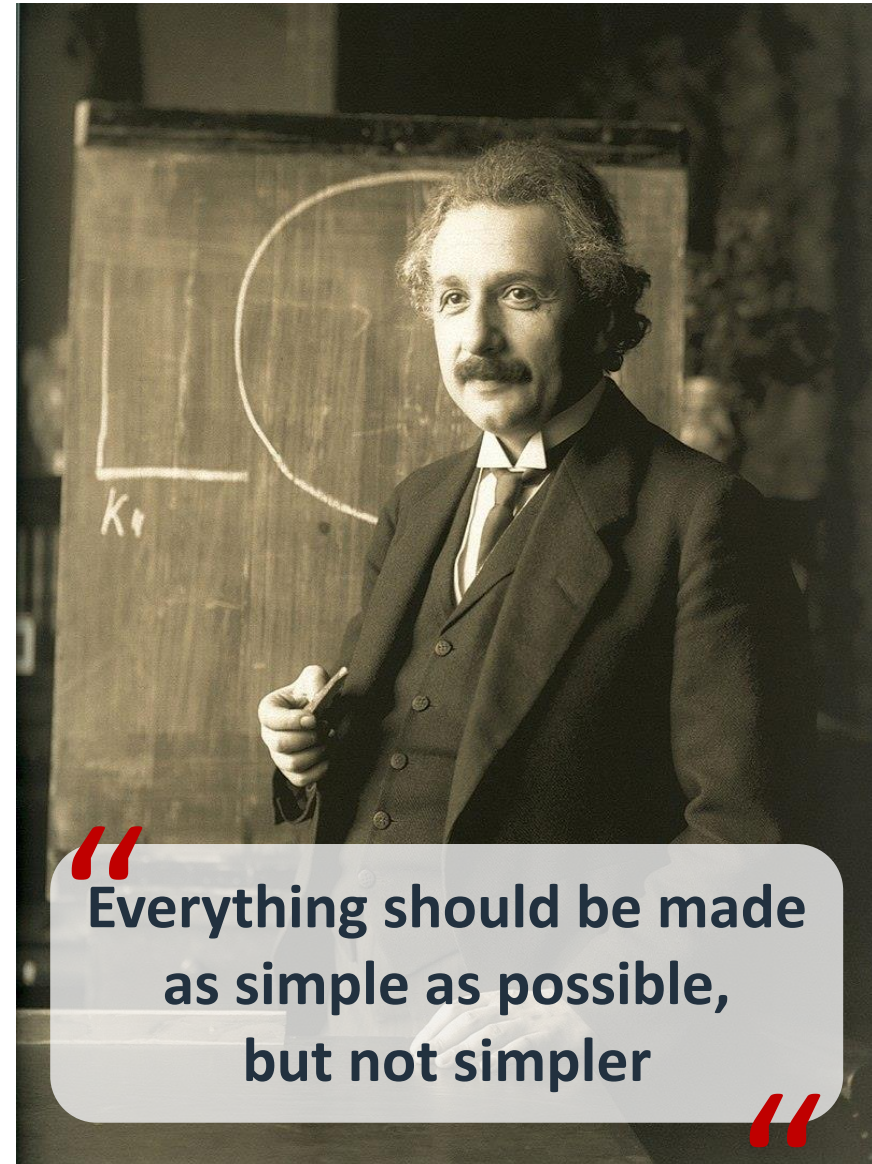
In your teams – practice on rock concert story

- Define one **desired action** – the task
- Choose one **component** of the closed world
- Use the Task Unification formula:
How can **component X** help deliver **desired action Y**?
- Write your solution

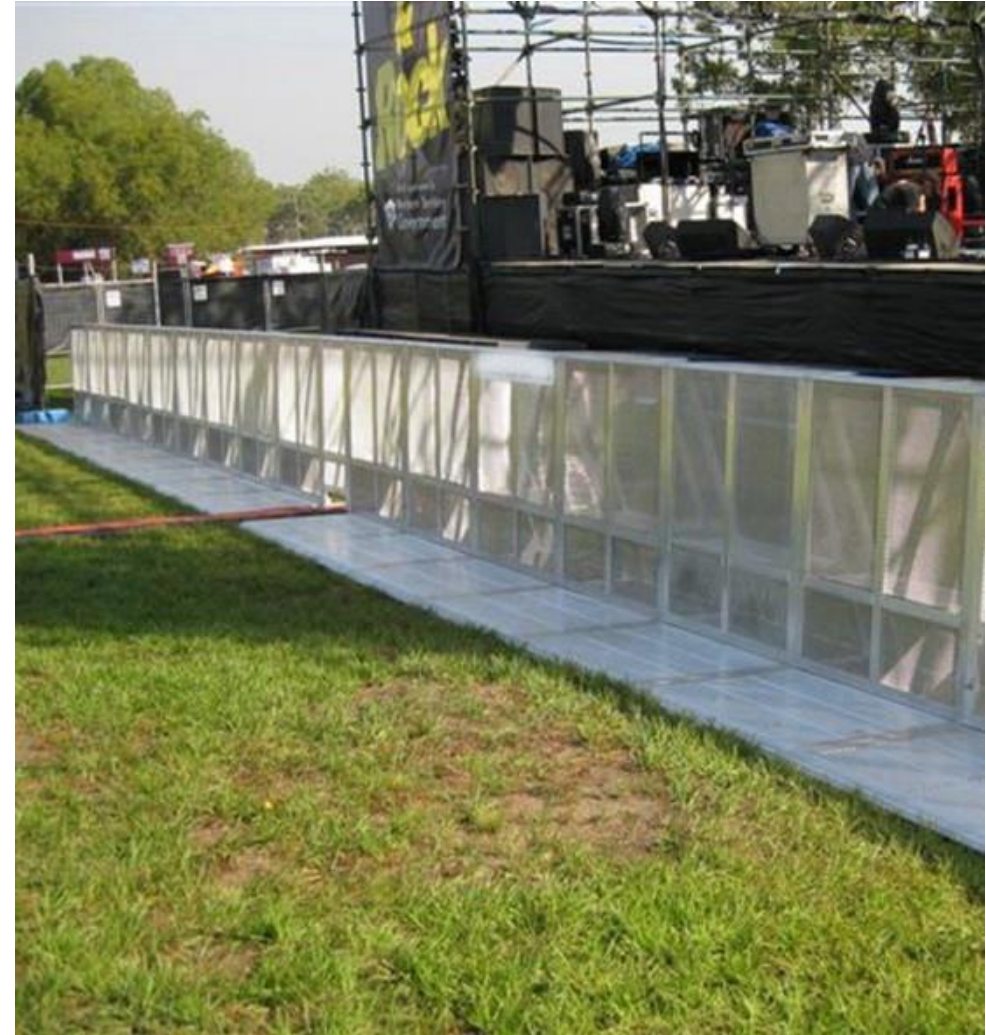


Let's share!

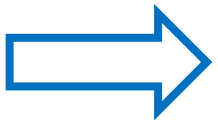
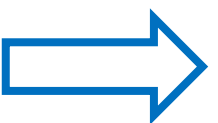
Any questions?



Reversing the effect



Reminder: From UDP to Task Unification

UDPs  Desired Actions  Apply Task Unification

1

The crowd reaches the stage

There is a conflict between the crowd and security personnel

The barrier collapses

The crowd applies force on the barrier

The crowd pushes against the barrier

The crowd is at the bottom of the stage

The crowd is far from the stage

The security personnel are happy

The barrier is stable

The crowd is far away from the barrier

The crowd is not moving

2

Component list

1. Fans
2. Band
3. Musical instruments
4. Stage
5. Barrier
6. Security personnel
7. Arena/stadium
8. First aid
9. Water bottles
10. Audio systems
11. Video crew

3 **Component X from the closed world will deliver Desired Action Y**

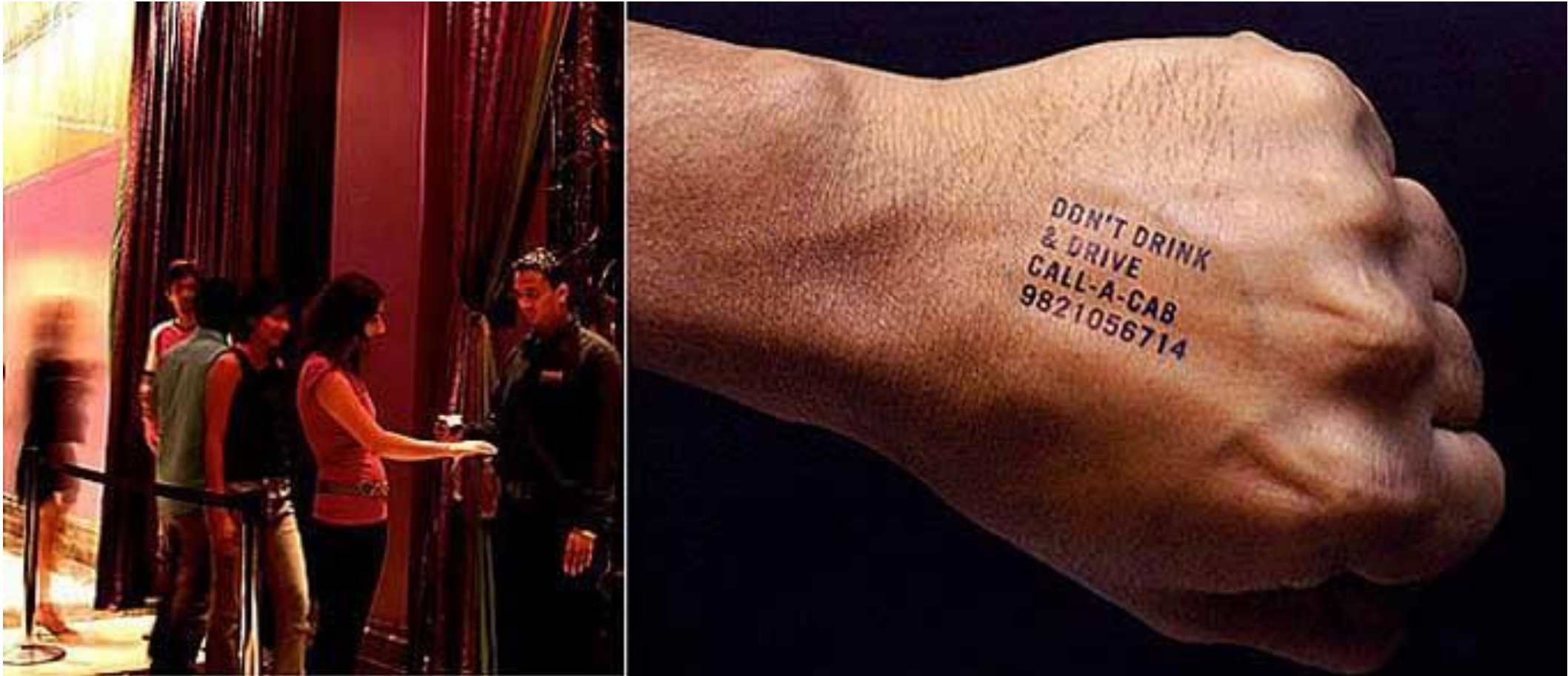
Don't Drink and Drive



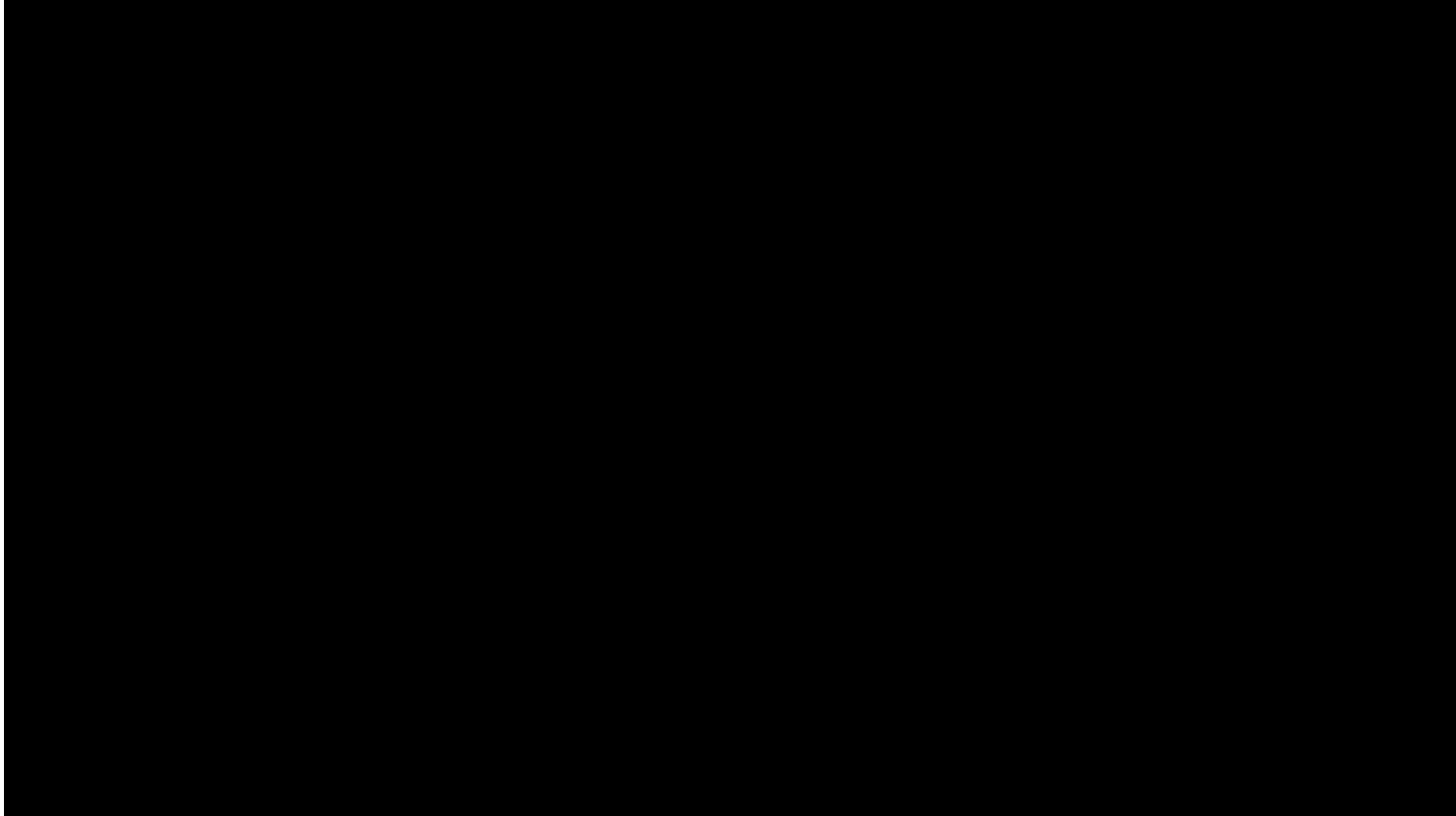
Don't drink and drive



Don't drink and drive



The drunk valet



Bucharest urinal stickers



Don't drink and drive



Task Unification Metacognition



Thank you!

