

WHAT DOES

IT MEAN

TO BE

INNOVATIVE?

@MRHOOKER

CARL HOOKER



What if....

You took song lyrics  
and then added  
them to an  
A.I. Image  
generator?

karAIoke

















# MY Numbers

**25** YEARS IN EDUCATION

**8**-TIME AUTHOR

**5**-TIME PODCAST HOST

**4**-TIME ENTREPRENEUR

**2**-TIME BAR OWNER

**3**-TIME FATHER

**1**-TIME HUSBAND

@MIRRHOKER

CARL HOOKER

February 4, 2018







2001 CASEY ELEMENTARY SCHOOL 2002

## CHALLENGE #1

In 2 minutes - Get with a partner or small group and list as many social media sites/apps you can think of.

0



A large crowd of sheep, all wearing dark sunglasses, filling the background of the image. The sheep are densely packed and appear to be moving in a uniform direction, symbolizing conformity and compliance.

How do we change schools from  
places of **conformity** and **compliance**  
to environments that foster **risk-taking**  
and **innovation**?

# Top 10 Job Skills - World Economic Forum

## 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgement & Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

## 2027

1. Creative thinking
2. Analytical thinking
3. Digital literacy
4. Curiosity and lifelong learning
5. Resilience, flexibility and agility
6. Systemic thinking
7. Artificial intelligence & big data
8. Motivation and self-awareness
9. Talent management
10. Service Orientation & customer service



# GAME OF SCHOOL







*recipe*

SERVES 10-12    TIME: 1 hour    FROM THE KITCHEN OF: Carolyn

**Raspberry Citrus Bars**

**INGREDIENTS:**

1 cup butter  
1/2 cup sifted powder sugar

**DIRECTIONS:**

**Crust:** beat butter on med. speed for 30 sec until  
to soften. Add the 3/4 c. powdered sugar &  
until combined. Add 2 cups flour - beat &  
combined. Press dough on bottom of  
pan at 350°  
filling combined  
flour



**Panasonic**

VHS

M50

HI8 HI-FI MOVIE CAMERA VPM50

Panasonic

Panasonic



Did you follow your directions?

# Game menu

Back to Game

Achievements

Statistics

Options...

Open to LAN

Save and Quit to Title



-  **L**eaders
-  **E**emotionally Intelligent
-  **A**cademically Prepared
-  **R**esilient
-  **iN**novators
-  **E**quity Minded
-  **R**eflective

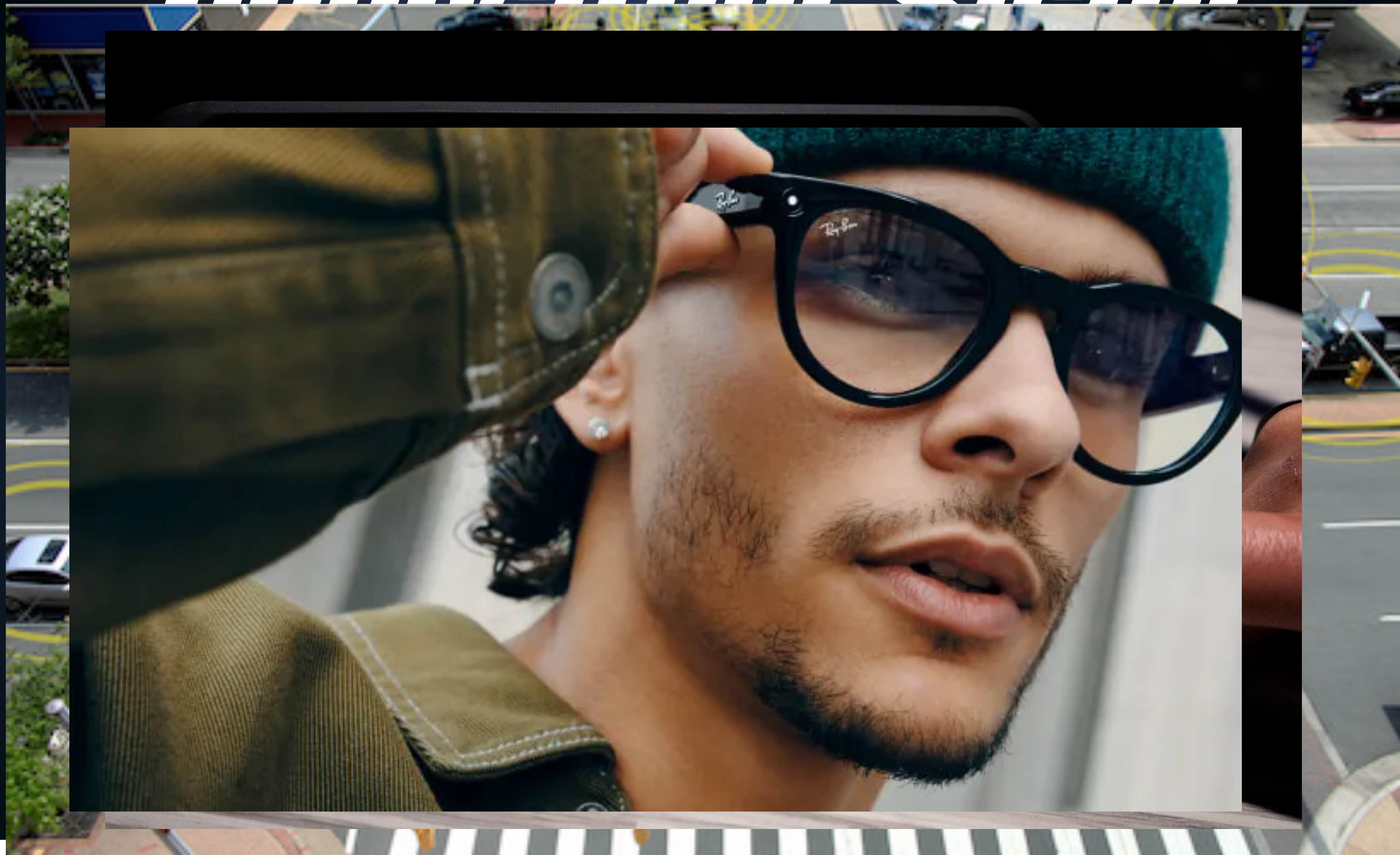




# ***Innovation***

The process of bringing about new ideas, methods, products, services or solutions that have significant positive impact and value.

# *Innovation Goals*



Value

Impact



# ***4 Keys to Innovation***

1. Keep an open mind
2. Collaboration is key
3. Evolution is essential
4. Enhances Student  
experience



***Innovation  
Exercise***

The Power of  
**YES, And....**

# Inventing a new gadget for the classroom of the future

**Person 1** - "I've got an idea! Let's invent            for the classroom of the future!"

**Person 2** - "Yes, And..."

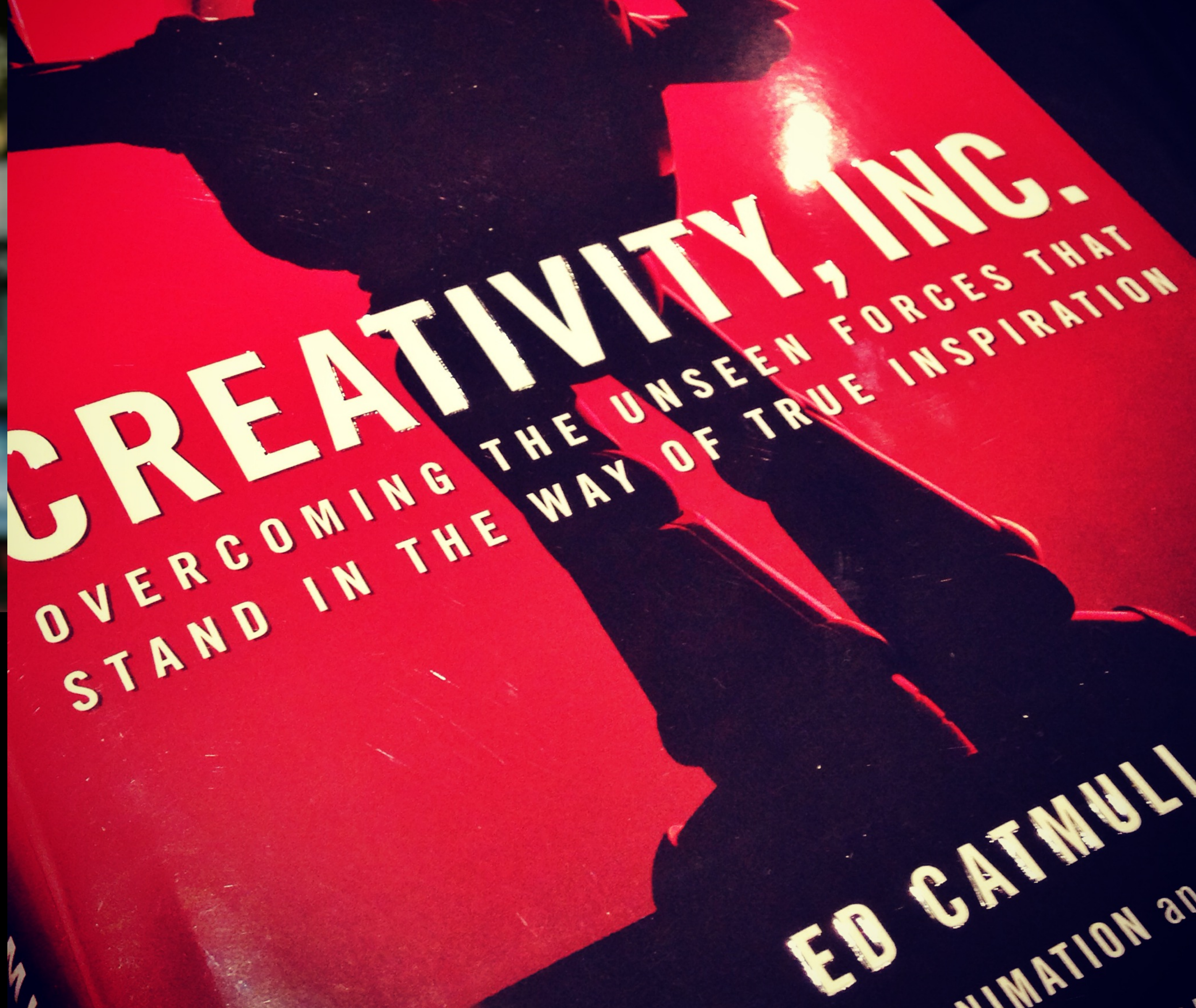


**WHY CHANGE  
AND TAKE A RISK  
WHEN WE'VE  
BEEN  
SUCCESSFUL?**



**Ed Catmull**

President  
of Pixar



Recorded 8/11/16





**WHY CHANGE  
AND TAKE A RISK  
WHEN WE'VE  
BEEN  
SUCCESSFUL?**



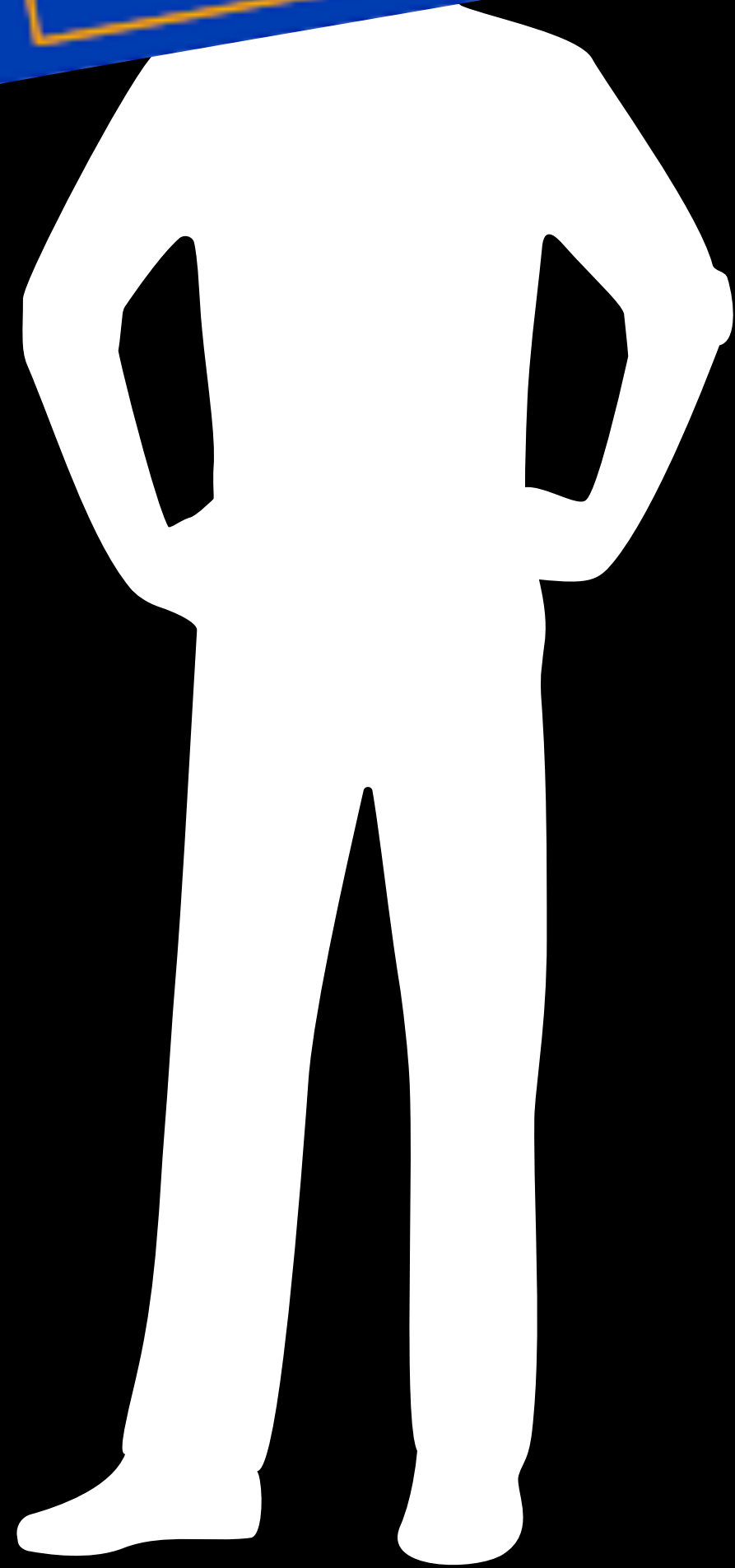
**MY KIDS WILL NEVER KNOW  
THAT AWFUL FEELING**

**OF REALIZING THERE'S NO  
VHS TAPE BEHIND THE BOX  
AT THE VIDEO STORE**





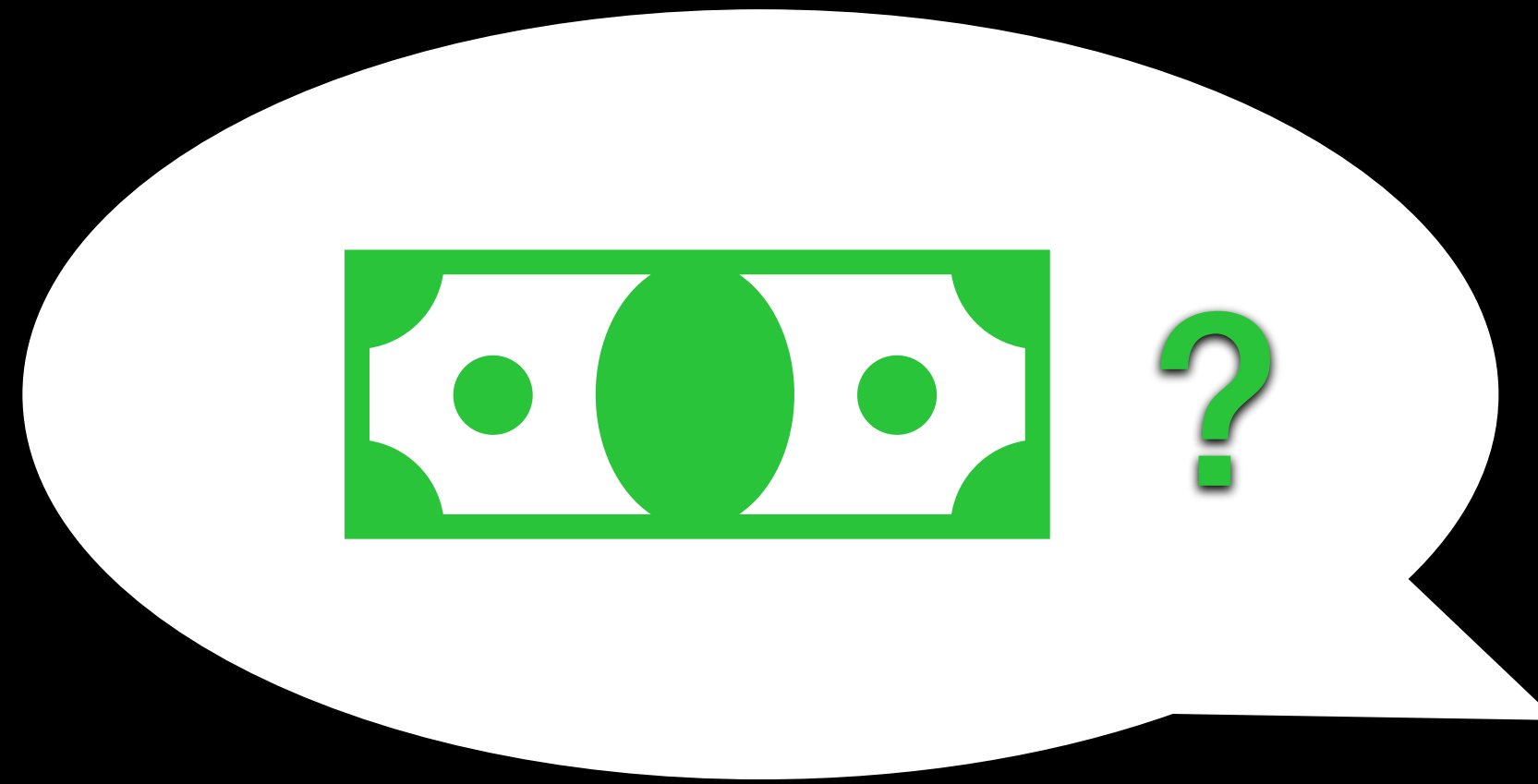
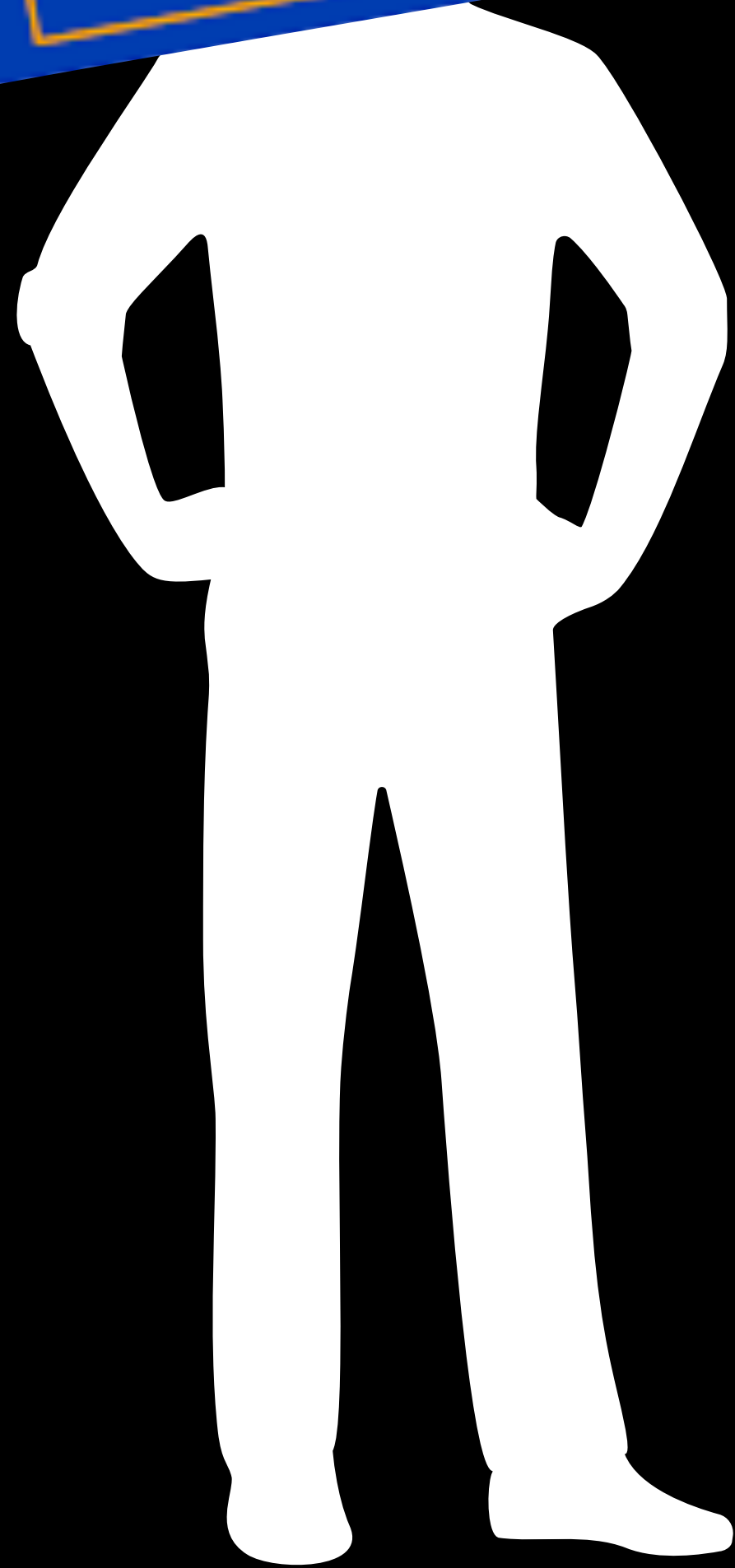
**BLOCKBUSTER**



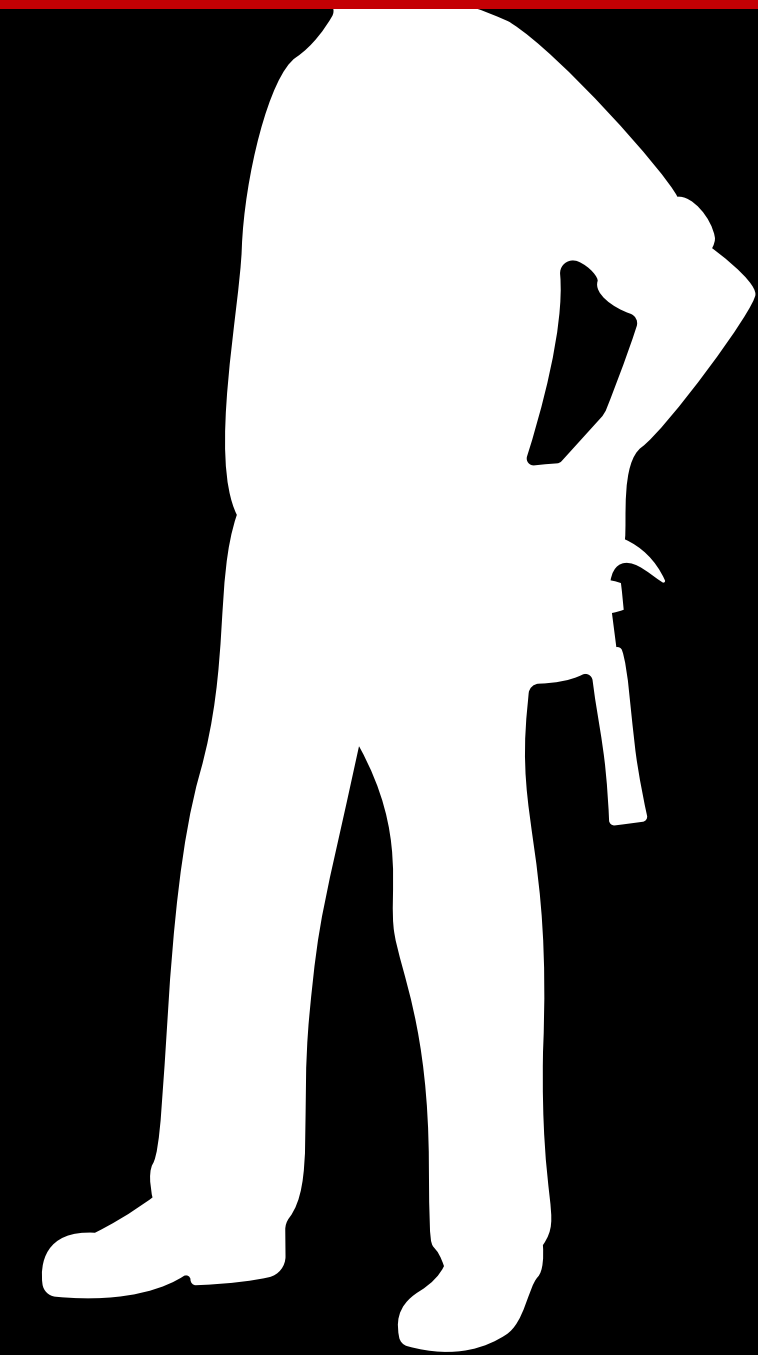
**NETFLIX**

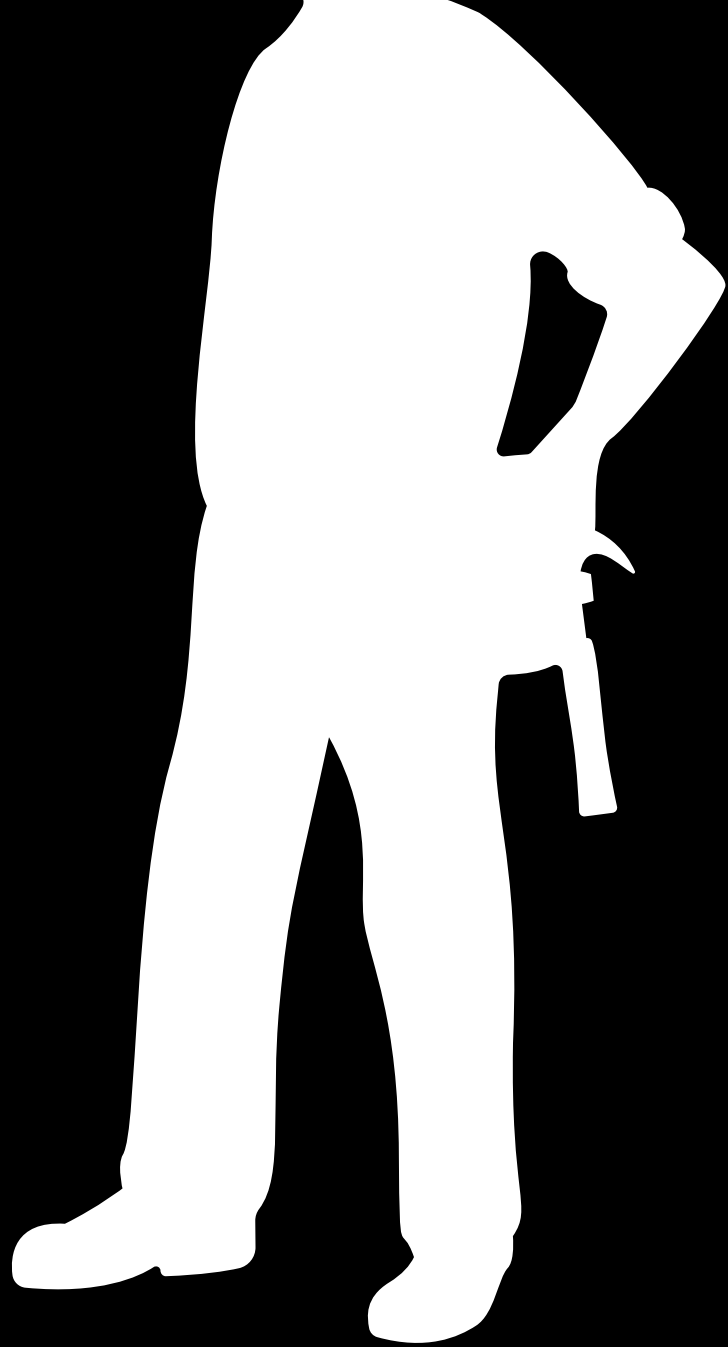
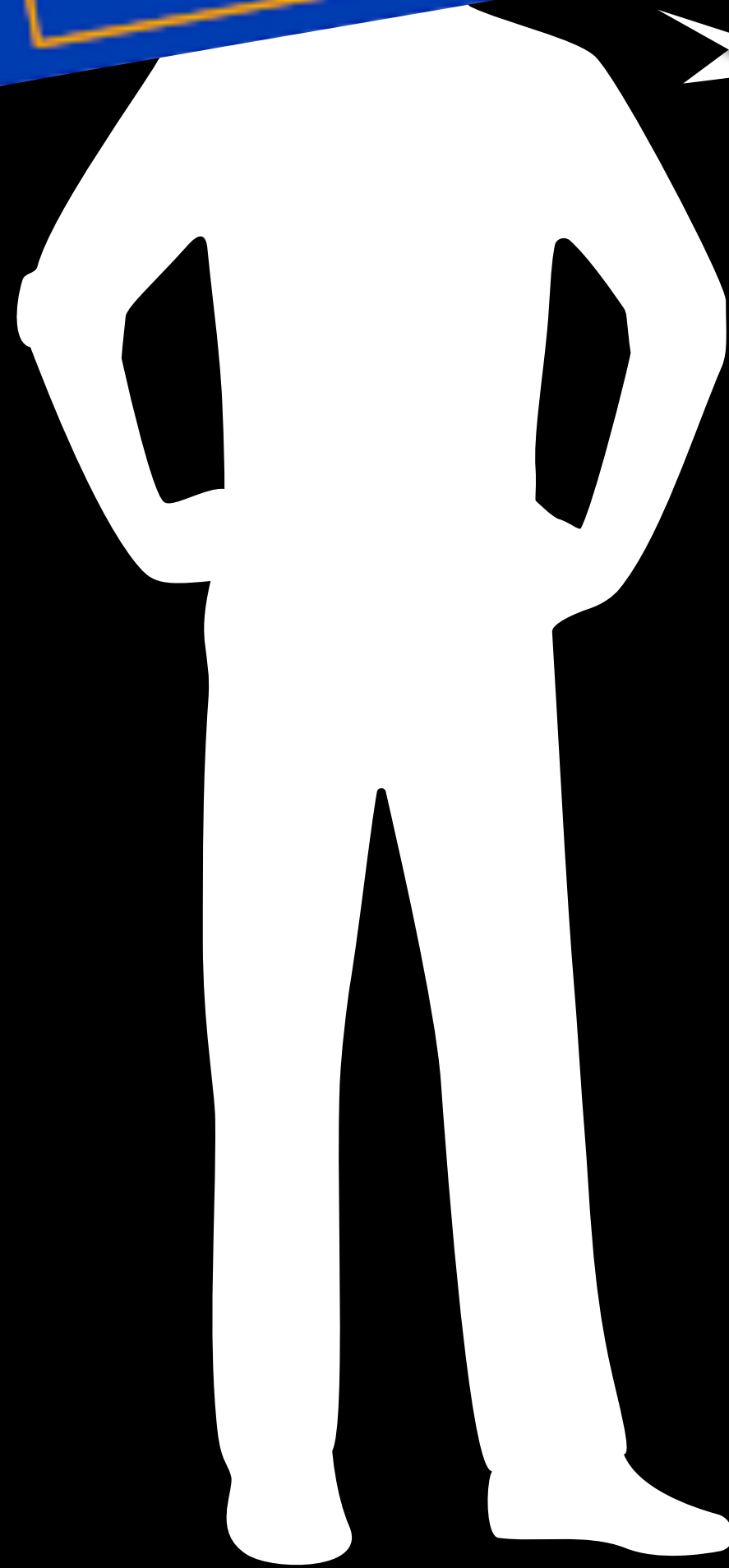


**BLOCKBUSTER**



**NETFLIX**

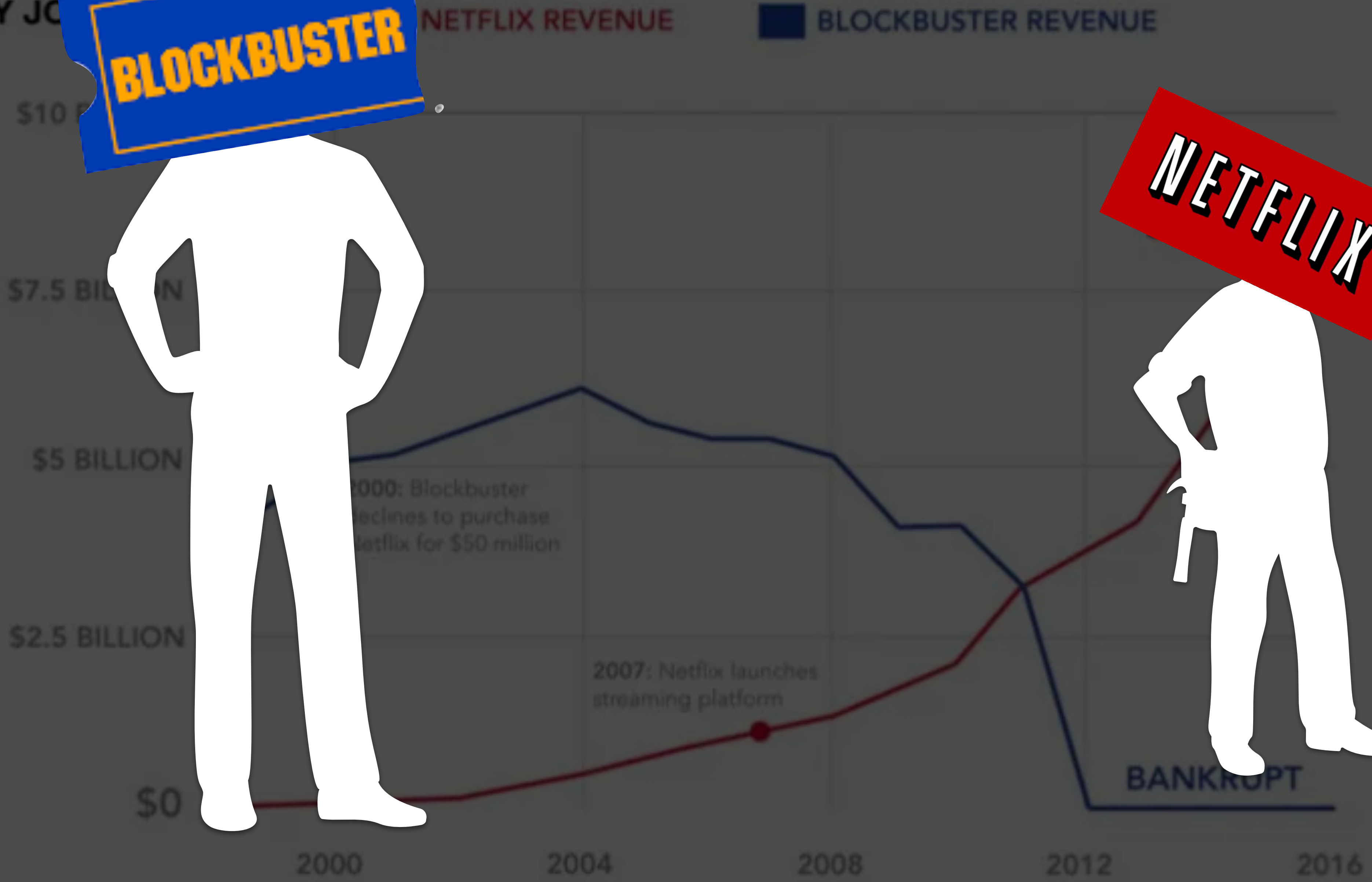
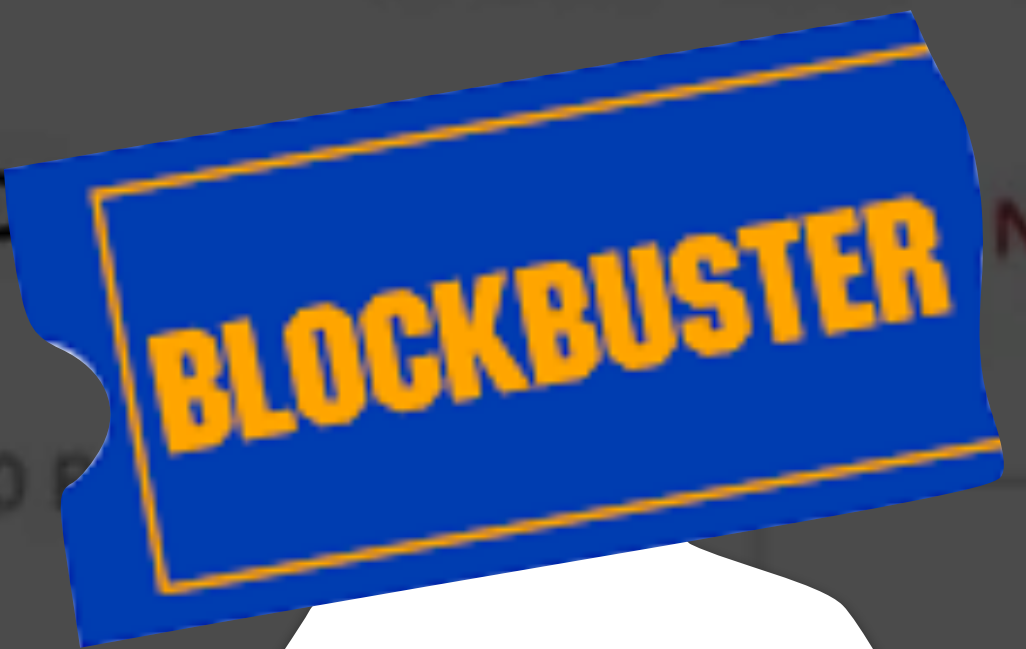




# NETFLIX VS. BLOCKBUSTER (1998 - 2016)

source:

THE STRATEGY JO





Time heals all wounds but the scars are  
a constant reminder



Detroit Steel

Blockbuster

Toys R Us

General Foods

Compaq

TWA

American Motors

Woolworth's

Polaroid

Companies that no  
longer exist

Zenith's

DeLorean

Tower Records

Enron

Border's Books

Continental Airlines

Circuit City

Pan Am

MCI WorldCom

amazon go

amazon go

amazon go

amazon go  
Breakfast  
in a flash.



JUST  
WALK  
OUT  
SHOPPING

AMAZON

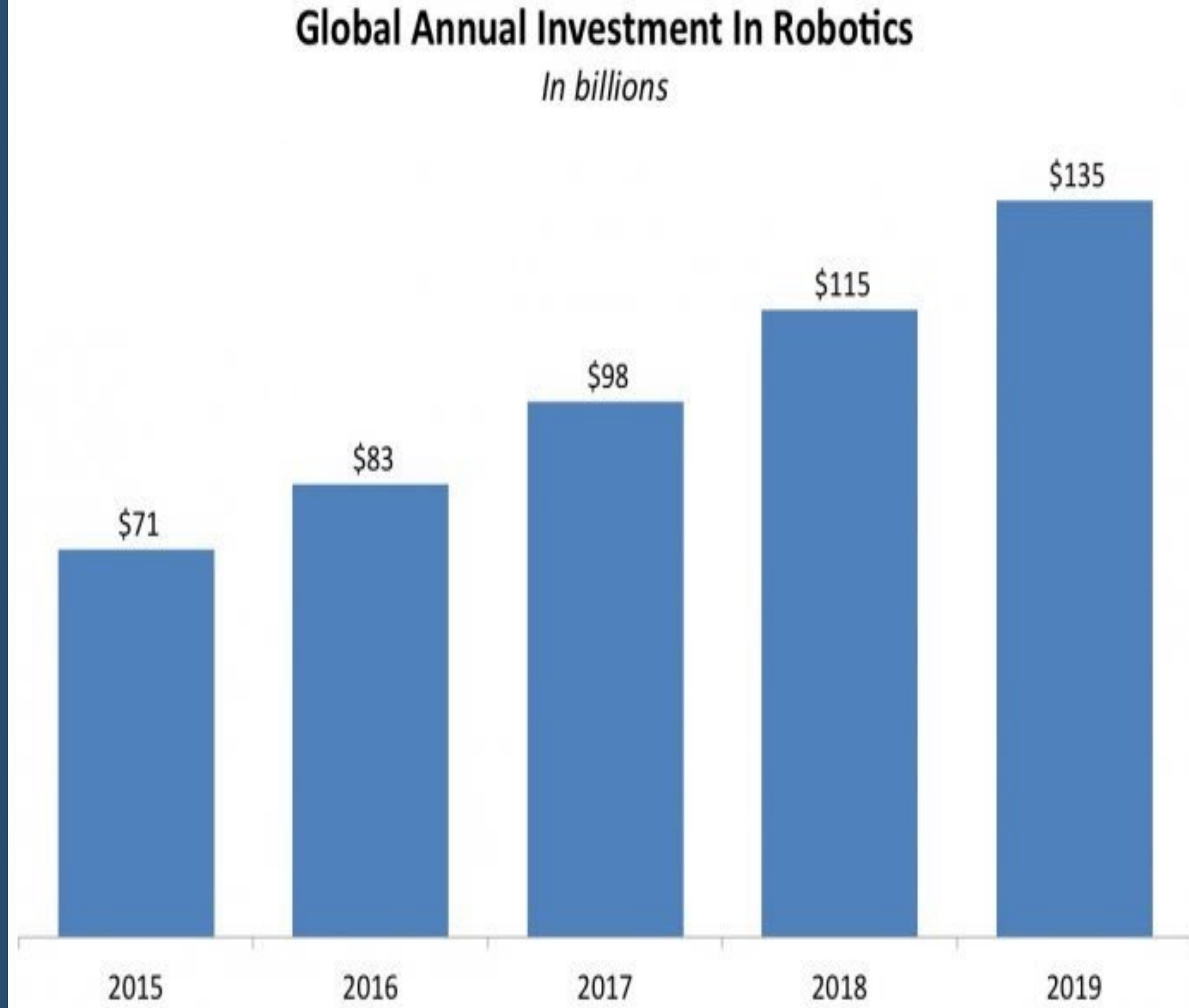
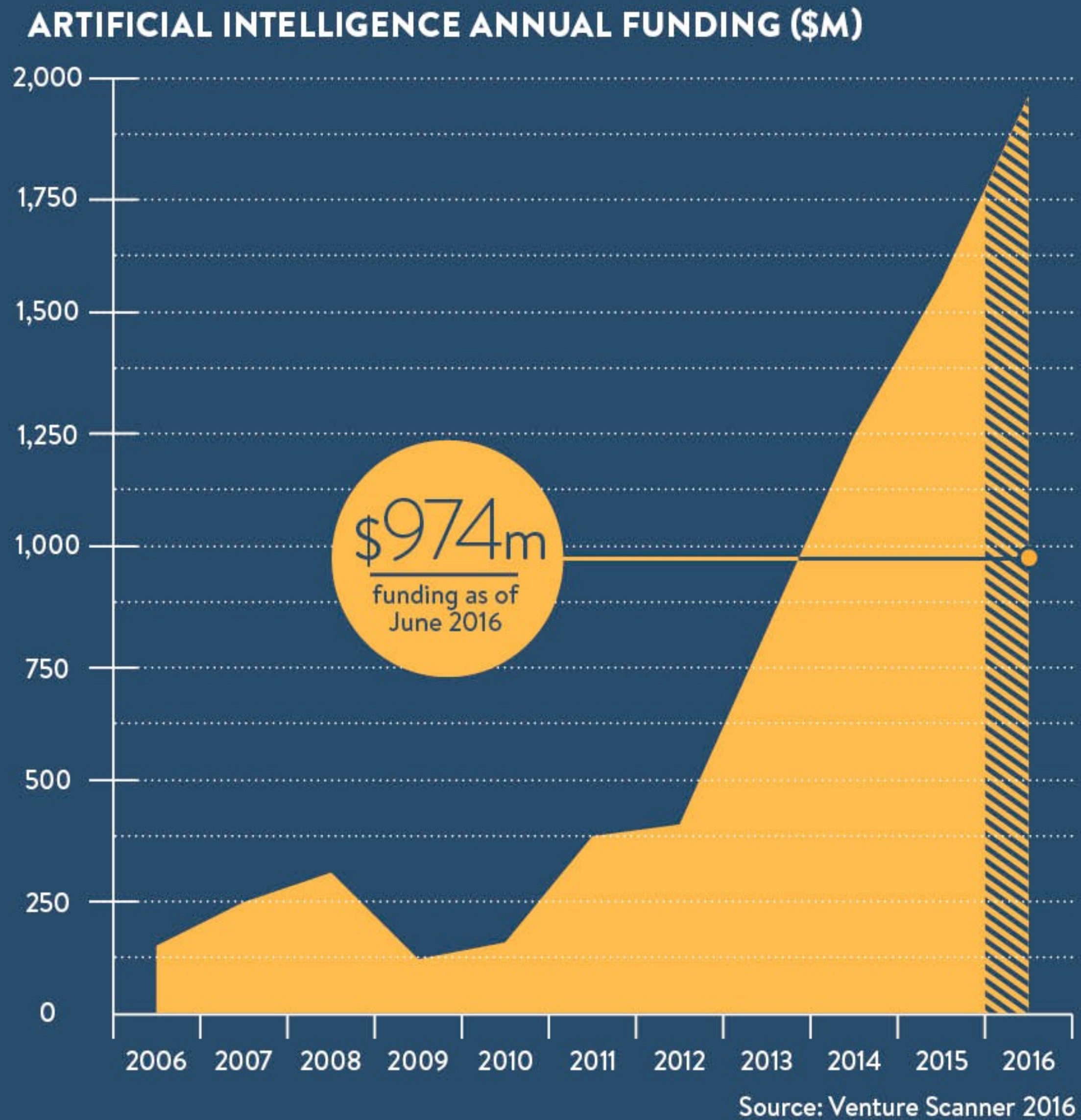


*“Machines  
could take 50%  
of jobs in the  
next 30 years.”*

Dr. Moshe Vardi  
Rice University

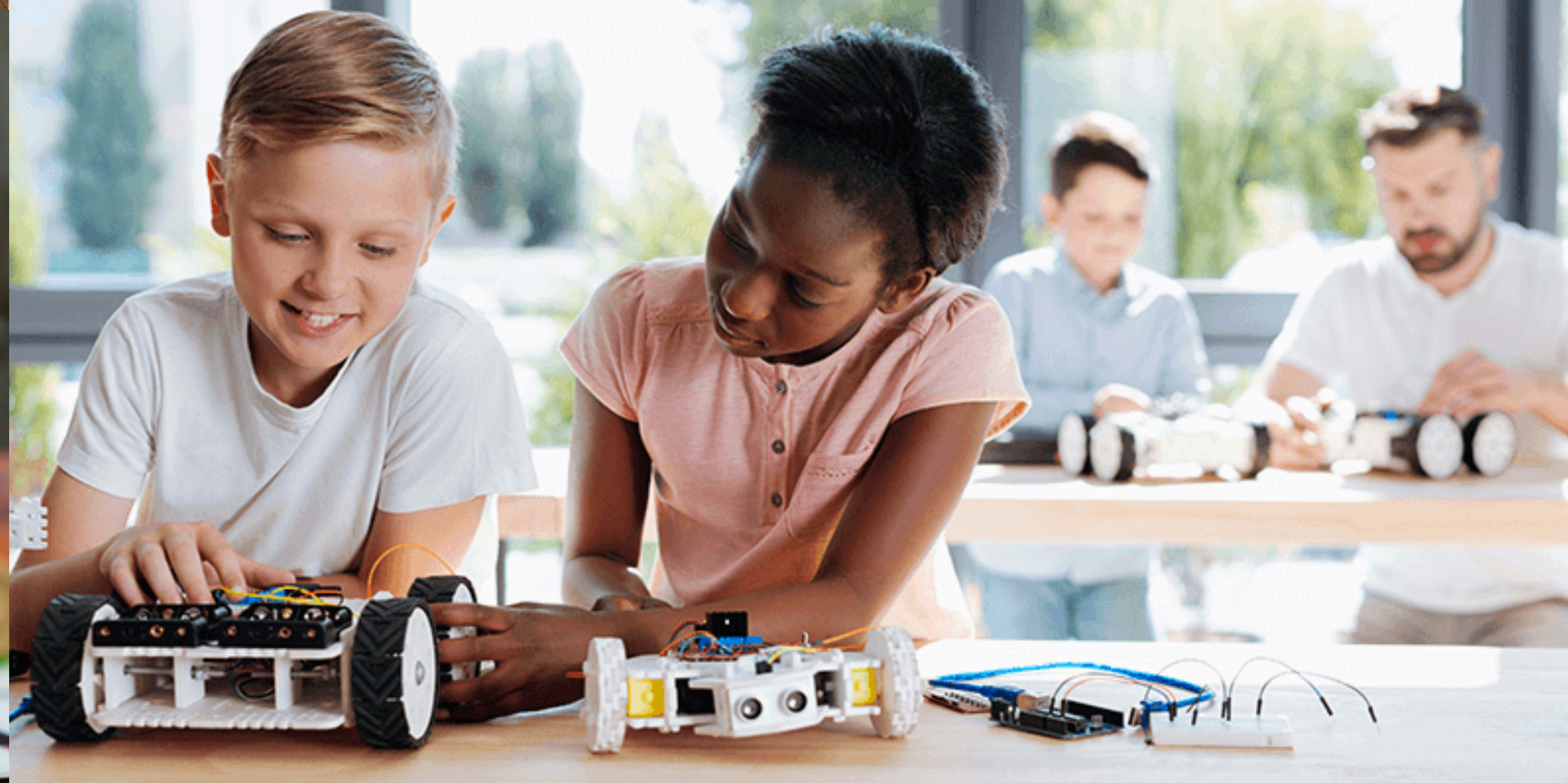


# Money invested in AI & Robotics



Source: IDC, BI Intelligence Estimates, 2016

# Robotics in Schools



# AI in Schools



Overview

Documentation

Examples

Playground

Upgrade

**Playground**

Load a preset...

Save

View

W|

Submit



1



# WillRobotsTakeMyJob.com

**WILL ROBOTS TAKE MY JOB?**

Enter your job

or show [random example](#)

# Top 10 Job Skills - World Economic Forum

## 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgement & Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

## 2027

1. Creative thinking
2. Analytical thinking
3. Digital literacy
4. Curiosity and lifelong learning
5. Resilience, flexibility and agility
6. Systemic thinking
7. Artificial intelligence & big data
8. Motivation and self-awareness
9. Talent management
10. Service orientation & customer service



-  **L**eaders
-  **E**emotionally Intelligent
-  **A**cademically Prepared
-  **R**esilient
-  **iN**novators
-  **E**quity Minded
-  **R**eflective



WHY IS  
**FAILURE**  
IMPORTANT  
FOR  
INNOVATION?

# THOUGHTS ON FAILURE

**FAILURE** builds character  
**FAILURE** creates opportunity  
**FAILURE** is a great teacher  
**FAILURE** instills courage  
**FAILURE** teaches perseverance  
**FAILURE** spawns creativity  
**FAILING** requires motivation  
**FAILURE** is acceptable

@MRHOOKER

CARL HOOKER

# Zone of Learning

## Mistakes

You got lucky and succeeded despite your mistakes.

## Experiments

You tried something new that worked and learned from it.

## Practices

You tried something new and practiced it over and over again until it turned into a success.

You failed as a result of your mistakes and effort.

You tried something new that didn't work and you learned from it.

You practiced but failed due to bad luck.

**OUTCOME**

**Success**

**Failure**

**Success**

**Failure**

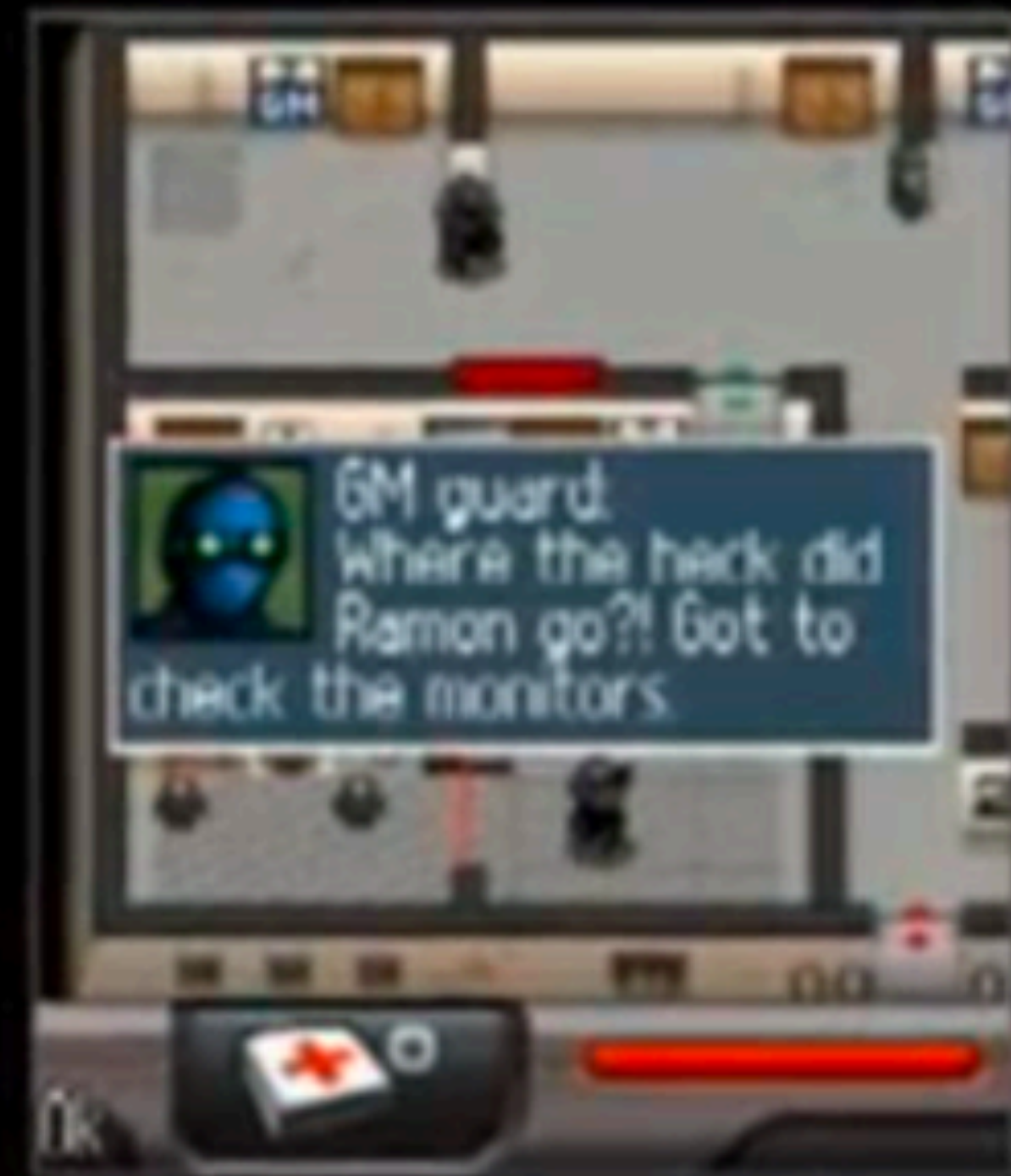
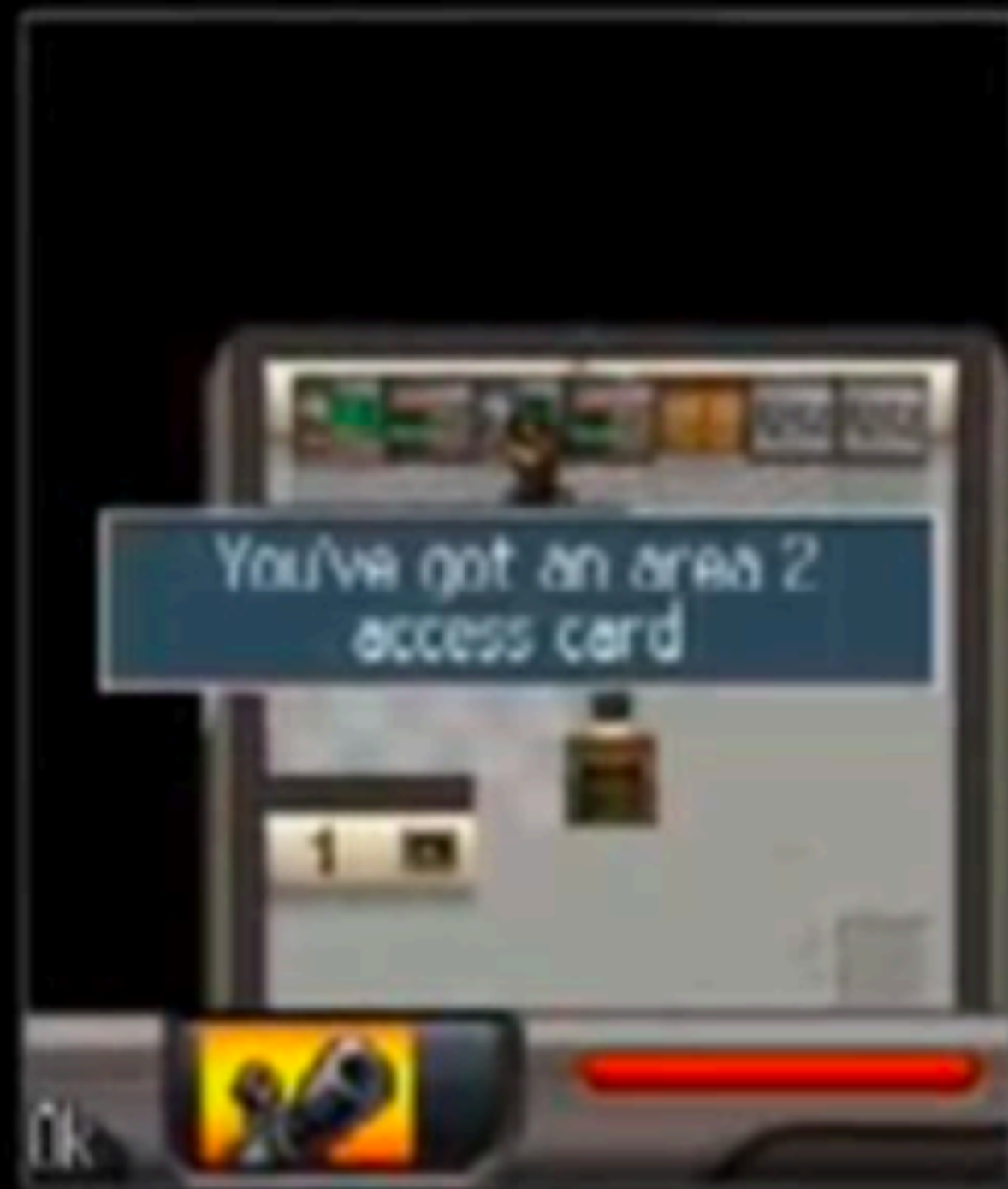
**BEHAVIOR**

**If you're not  
prepared to  
be wrong,  
you'll never  
come up with  
anything  
original.**

***-Sir Ken Robinson***



# ROVIO







ROVIO CLASSICS

**ANGRY BIRDS**™

# DISNEY



WALT DISNEY'S

# FANTASIA

## The Ups and Downs of Disney's 'Fantasia'

1940 Movie With Stokowski, an Artistic Success but Financial Failure, May Make Money at Last

John Malleson

NEW YORK, Dec. 3

LEOPOLD STOKOWSKI calls it "Fantazemah," and his pronunciation would have ruined the jingle. "Fantasia" will amaze you," created in 1940 when the Walt Disney film was briefly revived in a condensed version for the mass market.

That effort at revival, plus several others, failed to pull "Fantasia" into the black. Produced at a cost of \$4,000,000—twice the price of its full-length animated precursors, "Snow White" and "Pinocchio"—it remains Disney's only financial flop. But in a test run in six cities earlier this year, "Fantasia" outdrew everything else except possibly "Chopinera." And in a current revival in 35 cities, it has displayed such strength that "Fantasia," at the age of 23, may at last be on the road to fortune. Fame, of course, it has always had.

It opened in New York at the Broadway Theatre on Nov. 13, 1940, and many papers sent both their movie and music reviewers to appraise so extraordinary a cinema event. Europe had been at war for more than a year, and the front pages on that day for a change carried optimistic headlines announcing that the British had tipped the balance of power in the Mediterranean by sinking half the Italian fleet at Taranto.



The start of the filming of "Fantasia" in 1940. The opening scene shows only the shadows of conductor Leopold Stokowski and his musicians on the screen.

For Disney and Stokowski, the inside news was also favorable—"Fantasia" had been seen, heard and enjoyed by some of the toughest critics in the business. Disney nearly went bankrupt on the success.

"Fantasia" ran for about a year in New York, but the Broadway was the only theater within a radius of 100 miles (so the ads said) that could and would play the picture. Across the country there was a similar excitement, based primarily on the fact that "thrilling Fantasia-sound" (no one would have dreamed of separating the noun from its adjective) required re-wiring the entire theater and introduction of expensive sound gear.

About five years ago, Disney

a theater owner in Ohio asking what on earth he was to do with his Fantasia-sound equipment. It had been idle since 1941.

Nearly everyone admitted that Fantasia-sound was impressive. But more than a few spectators, who were unaccustomed in those days to hi-fi reproduction from a battery of wonders and wonders, found their eardrums almost too thrilled. Thrilling Fantasia-sound came at you from all directions. A sudden sizzling on the kettle drums or a roar from the horns emanating from a point that was apparently right under the seat could make an unprepared listener jump out of his chair.

"Fantasia" was not the first picture to bring great music to the screen. There had been a Disney short in which Mickey Mouse conducted the "William Tell" overture. And Stokowski

was not used in Bach's Toccata and Fugue in D Minor (instead there were abstract designs). And all convention was cast aside in the plans for Stravinsky's "The Rite of Spring," the symphony depicting nothing less than the creation of the world.

Stokowski was an almost inevitable choice to lead the orchestra in a sound spectacular. As Virgil Thomson, then music critic of the New York Herald Tribune, said at the time: "Among successful symphonic conductors, he has given himself the trouble to find out something about musical reproduction techniques and to adapt these to the problems of orchestral execution. Among the famous musicians who have worked in the films, he has found the speed-

showings do indeed have Fantasia-sound, but it has been somewhat modified to keep the architecture in its traditional place in the front of the theater, and to produce the "normal blend" of instruments expected by today's sophisticated stereo listeners.

Perhaps Stokowski will have to go to the theater himself and hear what has happened. The Disney people insist that all of the original tracks have been retained, and that the sound is better than ever.

Stokowski said he was consulted at every turn about the animation that went with the music.

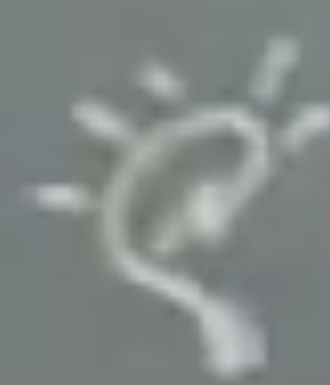
"The artists loved working on the picture, because Disney gave them a free hand," he stated. "Each part of the picture had its own room, and all the walls around were covered with artists' sketches and suggestions. Disney and I used to go and look at them, and try to see what would fit in best with the line and the rhythm and the quality of the music."

Asked if he was satisfied with the result, Stokowski said: "A musician who becomes satisfied is on the way to the corruption of his artistic life. There is no such thing as music as perfection; there is only finer and finer and higher and higher."

Stokowski's search for the higher and higher, a Disney spokesman said, reckoned the budget of "Fantasia" \$1,000,000 above its original estimate. The eventual \$4,000,000 spent on the picture was less than the unprecedented \$5,000,000 for "Gone With the Wind," but far above the \$100,000 cost of an Artaire-Rogers musical, which was considered more than a healthy sum for a movie in the final years of the great depression.

Stokowski said he hoped Disney would carry the idea of "Fantasia" still further, using both live photography and animation to join pictures and great music in cinematic expression that would introduce musical masterpieces to millions of people who never go into a concert hall. But a successor to "Fantasia" does not seem to be in the cards.

Disney estimated a few weeks ago that a second revival of

 Newton

# APPLE'S NEWTON

• Untitled notes

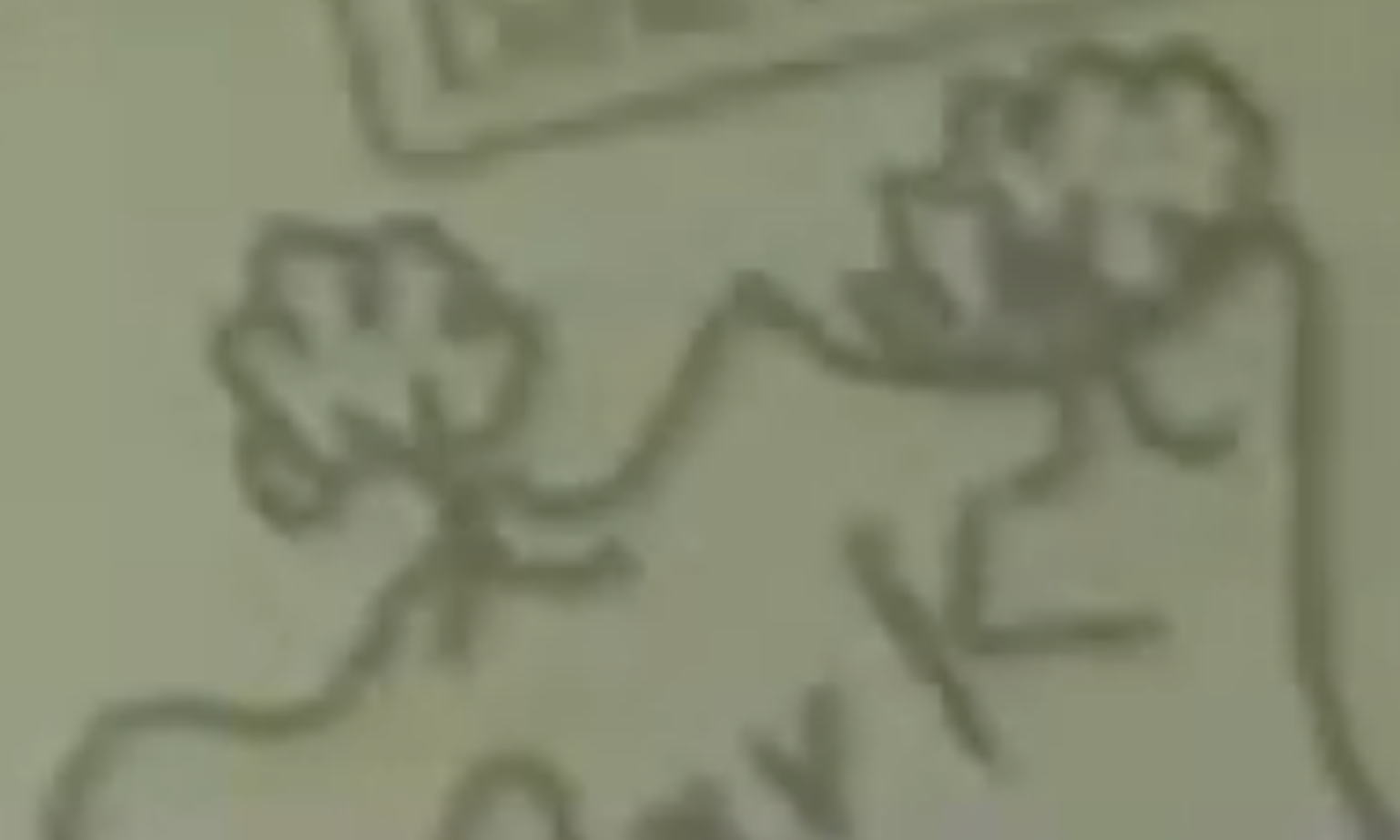
garet: Here

p to the rest

Format menu

- Font
- Style
- Color
- Align
- Justify
- Indent
- Outdent
- Undo
- Redo
- Copy
- Paste
- Delete

East Vay



# FRITO-LAYS



# NEW COKE



# PEPSI CLEAR



**MILLI VANILLI**



**RISK**

**FAILLURE**





-  **L**eaders
-  **E**emotionally Intelligent
-  **A**cademically Prepared
-  **R**esilient
-  **iN**novators
-  **E**quity Minded
-  **R**eflective









EXPERIMENT

INDIVIDUAL

RISK-TAKING VS.

SHARED

RISK-TAKING

IS SOMEONE OUT

"THERE READY TO

"TAKE A

**RISE?**

1

2

3

NOW LET'S TRY A  
SHARED **RISK** AND  
**FAILURE**

**Stand Up**



1

2

3



STOP

COLLABORATE

& LISTEN



XSFCOM

1

2

3

**[clap]**

**2**

**3**



STOP

COLLABORATE

& LISTEN



XSF.COM



**[clap]**

**2**

**3**

**[clap]**

**[stomp]**

**3**



STOP

COLLABORATE

& LISTEN





**[clap]**

**[stomp]**

**3**

**[clap]**

**[stomp]**

**[snap]**



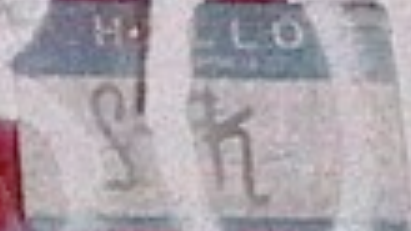
STOP

COLLABORATE

& LISTEN



XSF.COM



1

2

3

[clap]

[stomp]

[snap]

# REFLECT



WHAT IS SOMETHING  
THAT STOPS YOU  
FROM TAKING RISKS  
AND BEING  
INNOVATIVE?



**FEAR**

# 6 **Barriers** TO INNOVATION

#1

**DISCOMFORT** WITH  
"THE UNKNOWN"





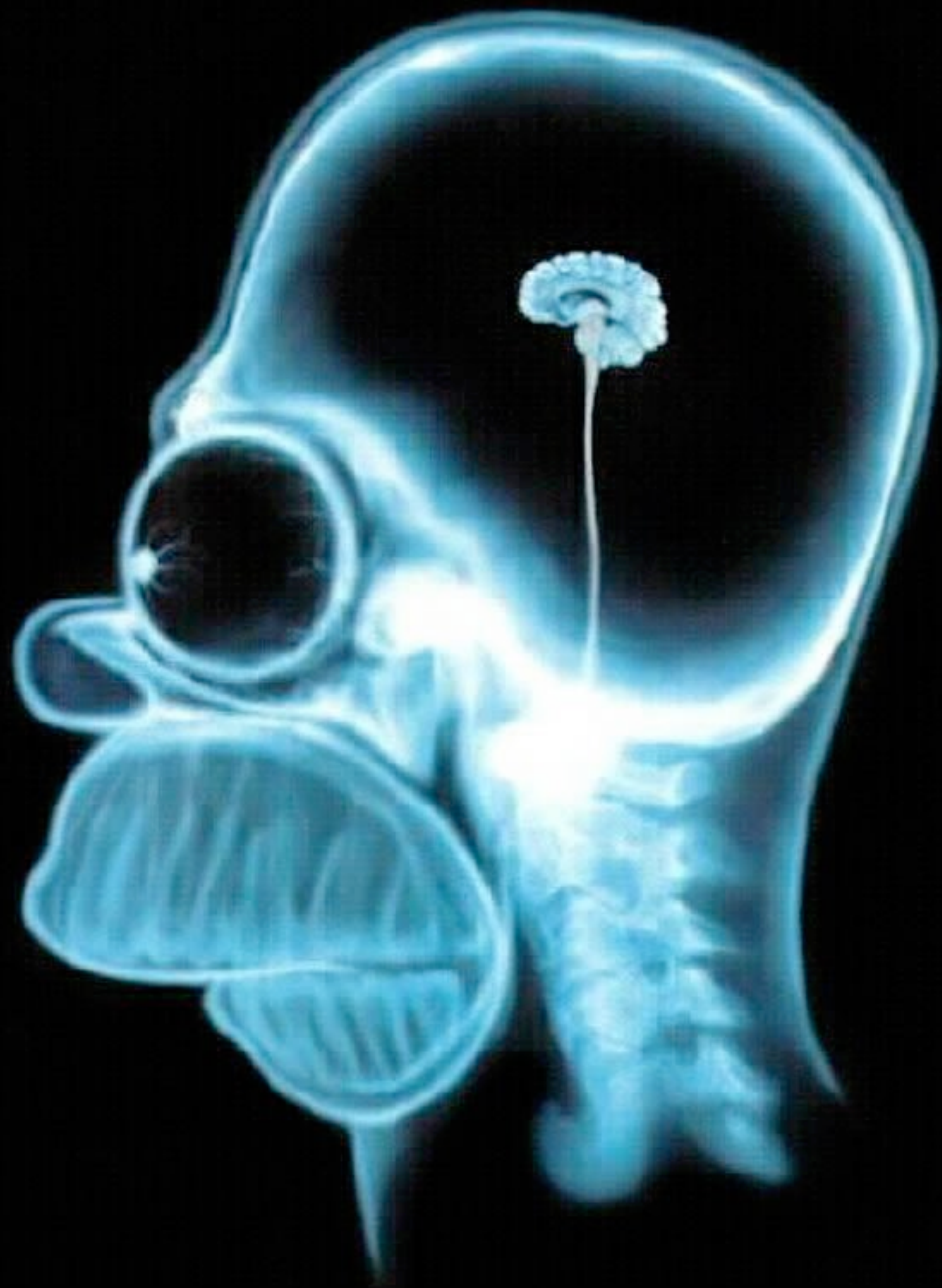
# 6 **Barriers** TO INNOVATION

#2

"TREATING

"NOT KNOWING" AS A

PERMANENT CONDITION



# 6 **Barriers** TO INNOVATION

#3

RISKING **EXPOSURE** AND  
BEING **JUDGED**

UTOMOTIVE  
REPAIR

20TH CENTURY  
POETRY

ULUS

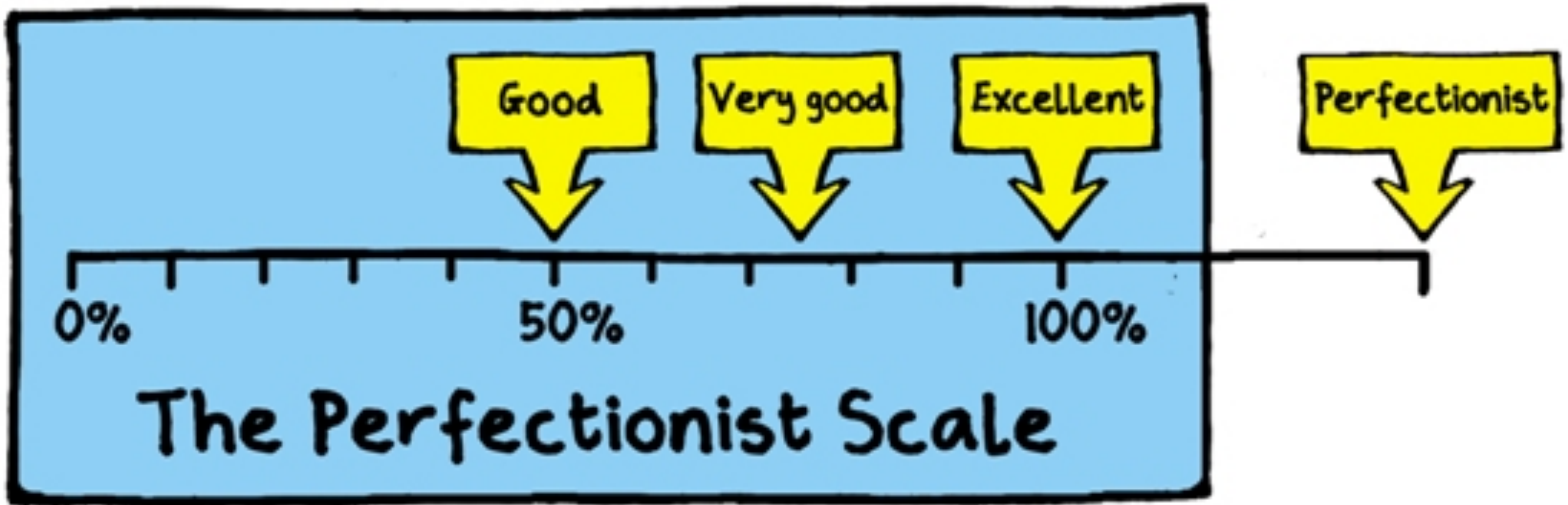
BUSINESS  
ETHICS

SHAKESPEAR

# 6 **Barriers** TO INNOVATION

#4

DEMANDING **PERFECTION**  
FROM YOURSELF



# 6 **Barriers** TO INNOVATION

#5

"TREATING  
**FAILURE**

AS WASTED TIME

When something doesn't work, it's not a **failure**. It's an **experiment** that gave some data. The only way it ever becomes a **failure** is if you don't **learn** what you can from it.

- Charles Duhigg  
*The Power of Habits*



# 6 **Barriers** TO INNOVATION

#6

FEAR OF HAVING  
YOUR IDEA **REJECTED**

RISK



REJECTION

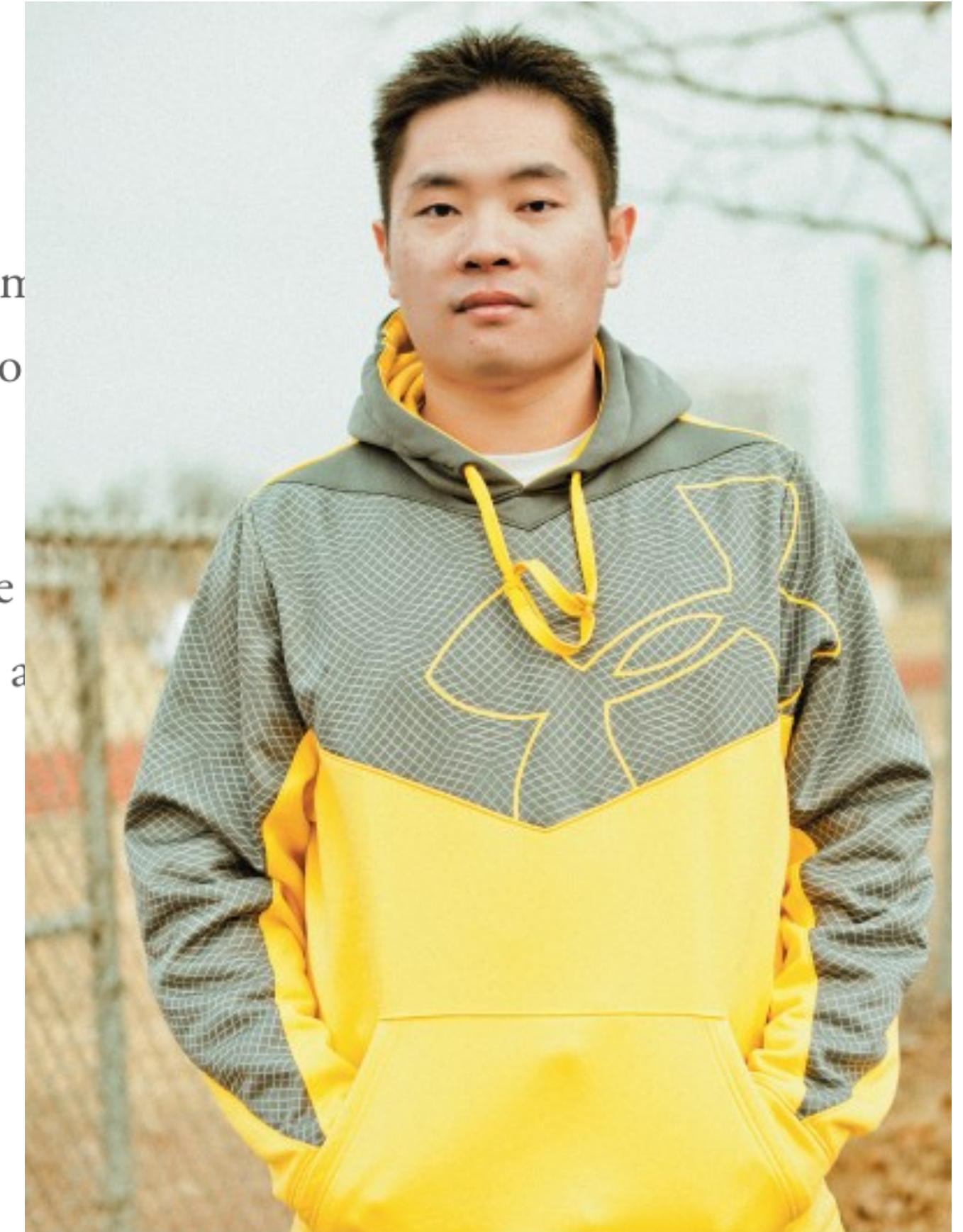
# 100 DAYS OF REJECTION THERAPY

These are the 100 days of Rejection Therapy that started it all. My goal was to desensitize myself from my fear (I explain my reason why here in my [TED talk](#)). Three criteria I set for myself: 1. Ethical (no Legal 3. Doesn't defy the law of physics.

Because so many people have been inspired to also try out these rejection attempts on their own, I've [Mobile App \(beta\)](#), so you can experience Rejection Therapy with the latest technology. Because the a appreciate you giving me feedback at [support@rejectiontherapy.com](mailto:support@rejectiontherapy.com).

[Click here](#) to beta test the app!

- [Rejection 1: Borrow \\$100 from a Stranger](#)
- [Rejection 2: Request a "Burger Refill"](#)
- [<fav> Rejection 3: Ask For Olympic Symbol Doughnuts](#)
- [Rejection 4: Deliver Pizza for Domino's](#)



Rejection  
therapy

WITH JIA JIANG

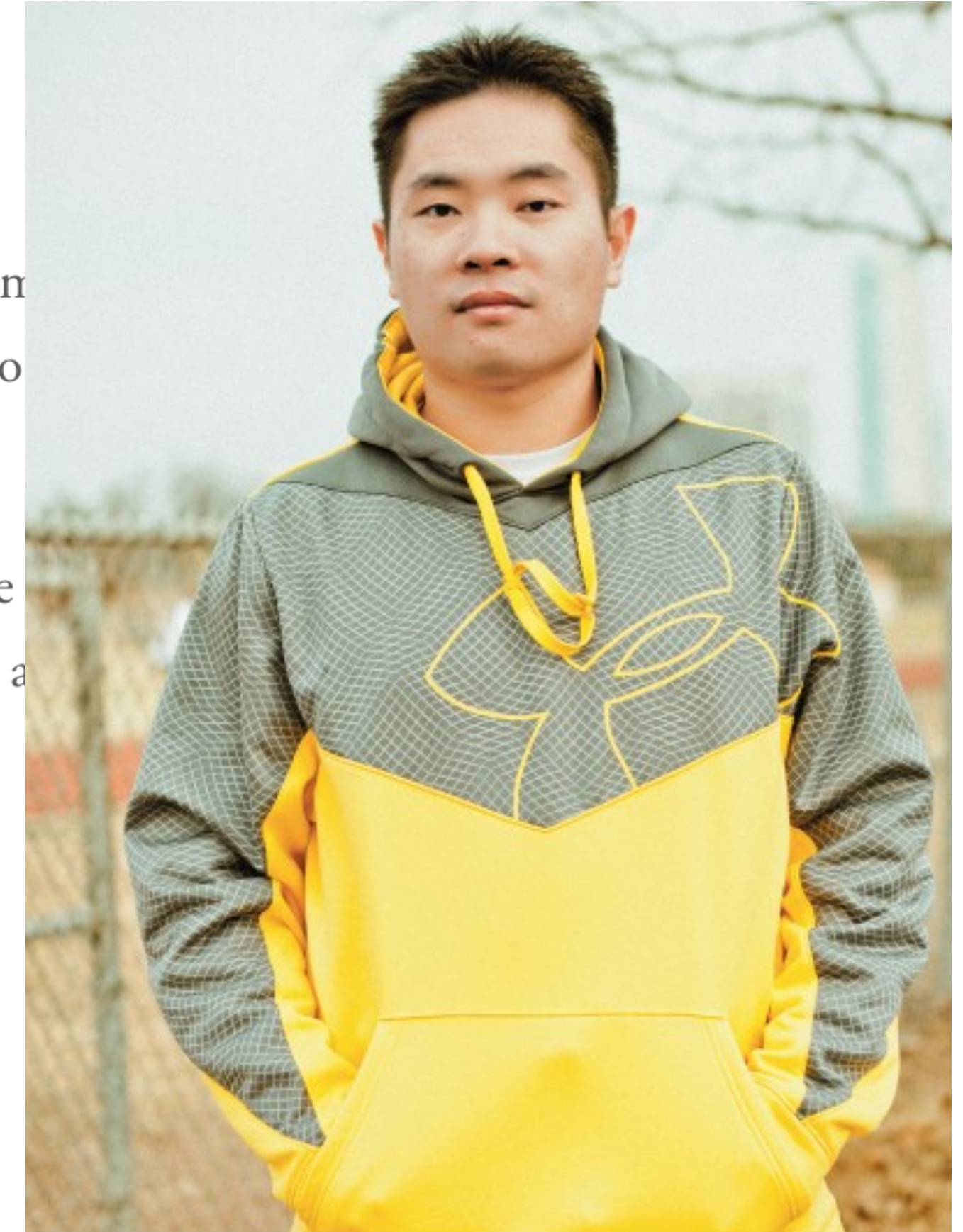
# 100 DAYS OF REJECTION THERAPY

These are the 100 days of Rejection Therapy that started it all. My goal was to desensitize myself from my fear (I explain my reason why here in my [TED talk](#)). Three criteria I set for myself: 1. Ethical (no Legal 3. Doesn't defy the law of physics.

Because so many people have been inspired to also try out these rejection attempts on their own, I've [Mobile App \(beta\)](#), so you can experience Rejection Therapy with the latest technology. Because the a appreciate you giving me feedback at [support@rejectiontherapy.com](mailto:support@rejectiontherapy.com).

[Click here](#) to beta test the app!

- [Rejection 1: Borrow \\$100 from a Stranger](#)
- [Rejection 2: Request a "Burger Refill"](#)
- [<fav> Rejection 3: Ask For Olympic Symbol Doughnuts](#)
- [Rejection 4: Deliver Pizza for Domino's](#)



# 6 BARRIERS TO CREATIVITY



- **Discomfort** with the unknown
- Treating “**not knowing**” as a permanent condition
- **Risking** exposure, risking being **judged**
- Demanding **perfection** from yourself
- Treating **failure** as “wasted time”
- Fear of **rejection**

# 6 BARRIERS TO CREATIVITY



**Discomfort**

**not knowing**

**Risking**

**rejection      judged**

**failure**

**perfection**





# 15 SECOND DE-STRESSING TECHNIQUE

**STAND UP**

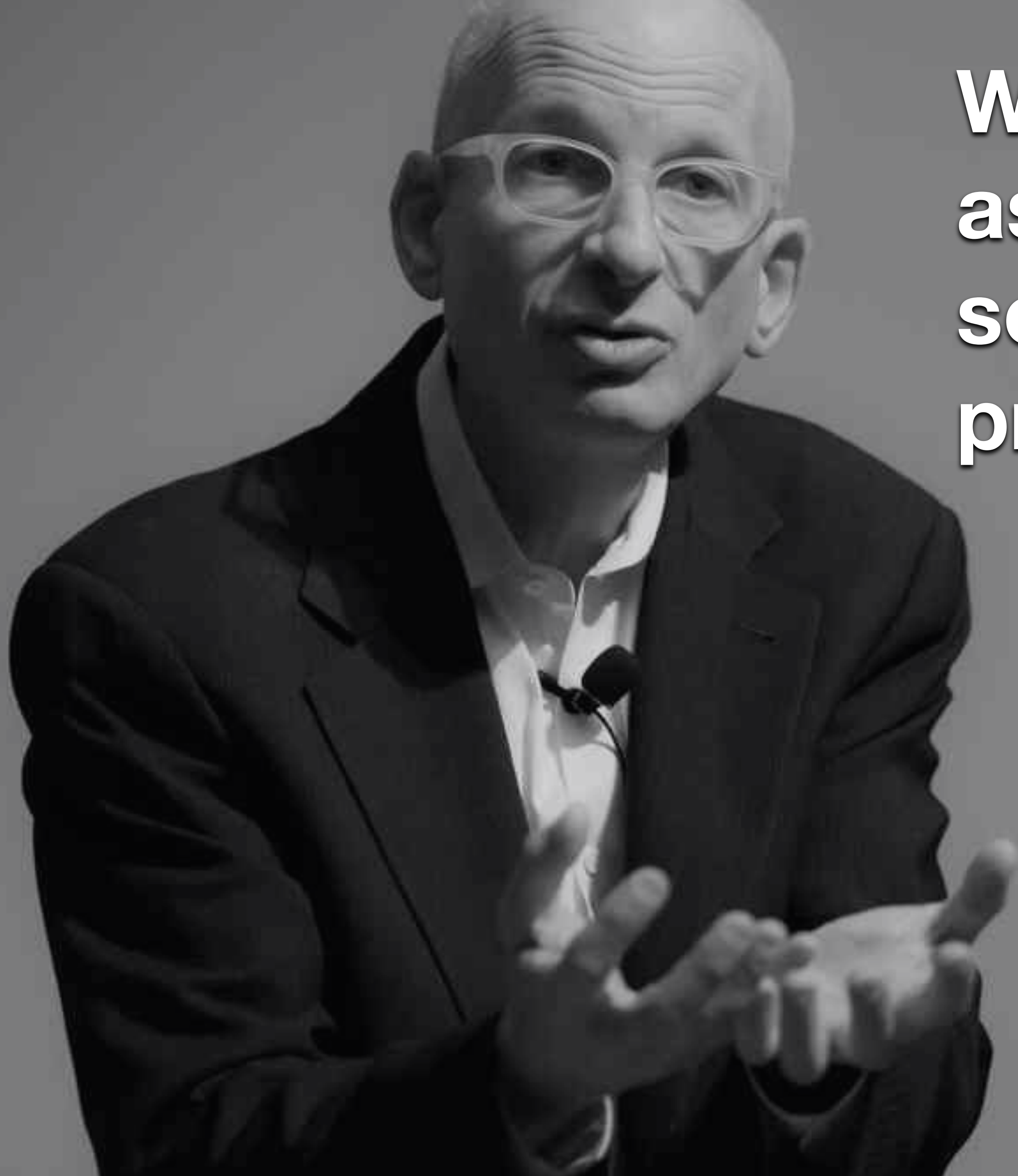
Dr. Yeltsa Kcir



**15 SECOND DE-STRESSING TECHNIQUE**

**RICK ASTLEY**

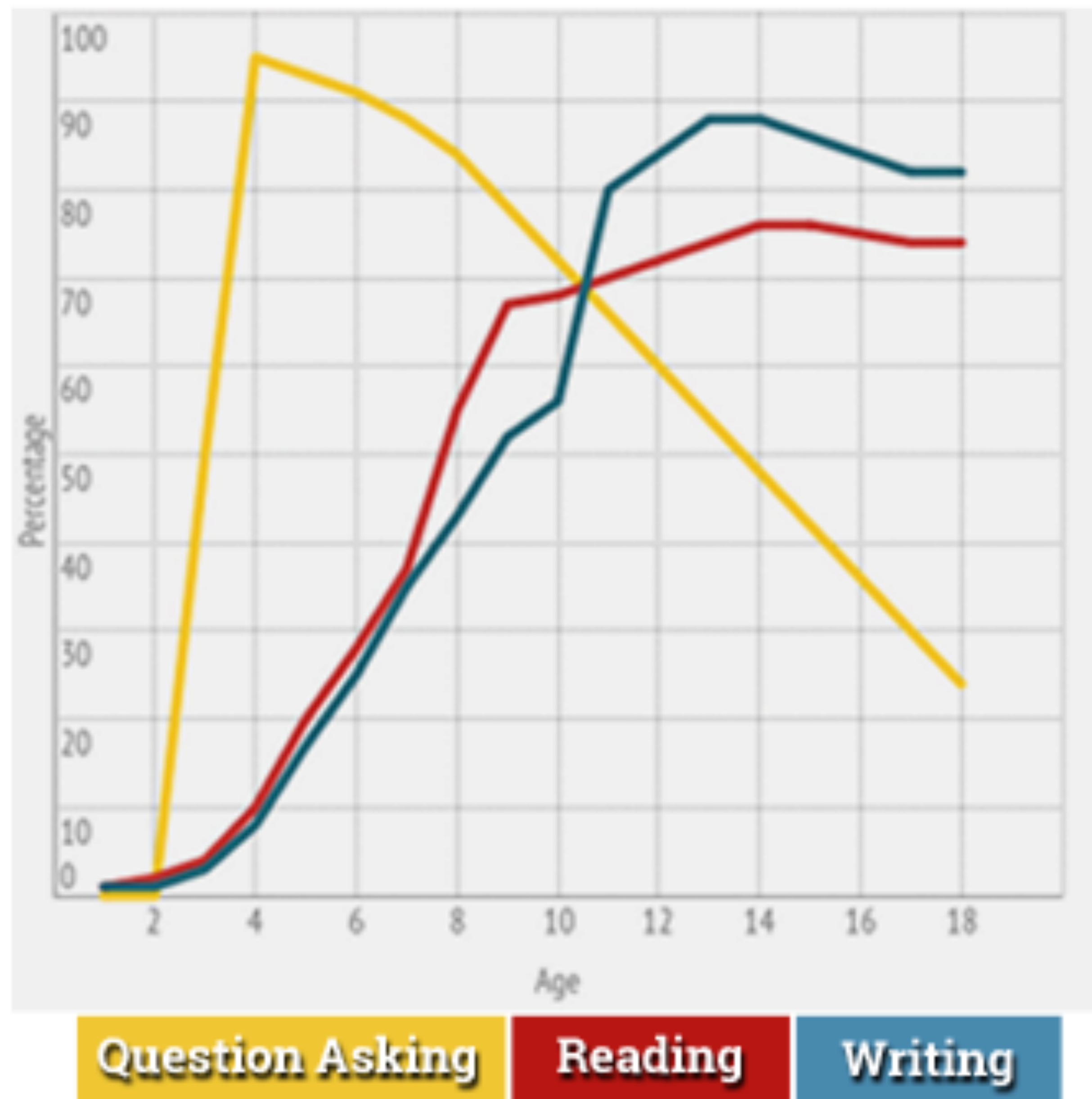
Dr. Yeltsa Kcir



We need to be  
asking our kids to  
solve **interesting**  
problems...

...and we need  
to be ok if they  
get it **wrong**  
- Seth Godin

## Why does kids' questioning drop off after age 3?

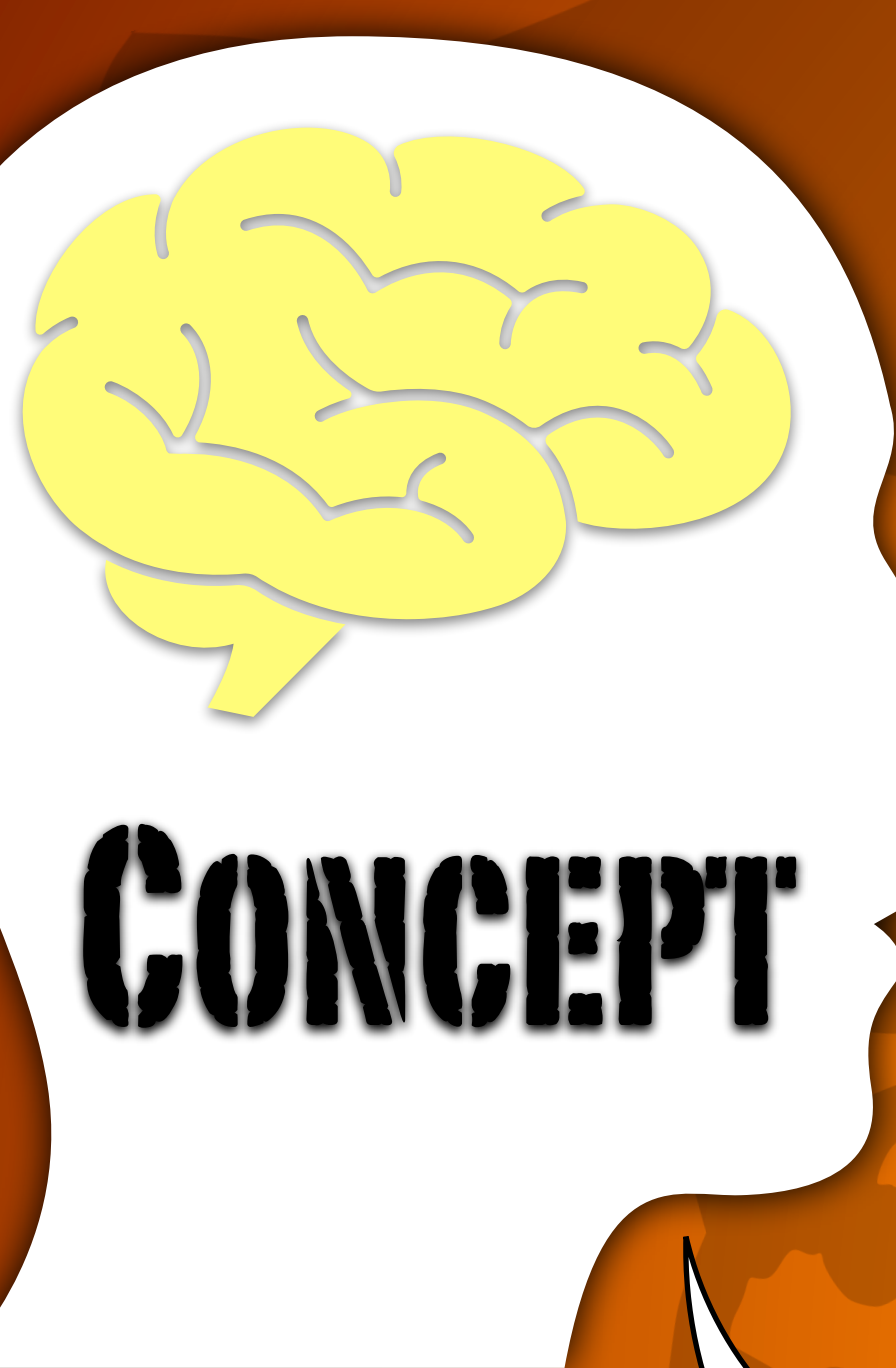


How do we keep this look of  
**curiosity** in our students?

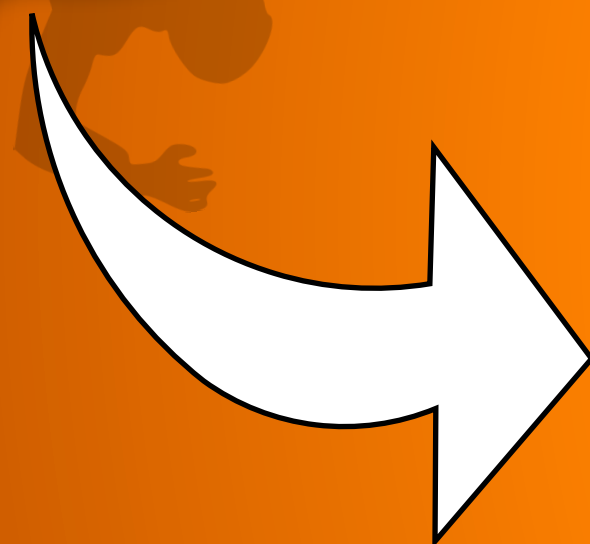


HOW DO WE CREATE  
ENVIRONNMENTS IN SCHOOLS  
WHERE **RISK-TAKING** AND  
**INNOVATION** ARE A PART OF  
THE **LEARNING** PROCESS?

# ITERATIVE PROCESS



**CONCEPT**



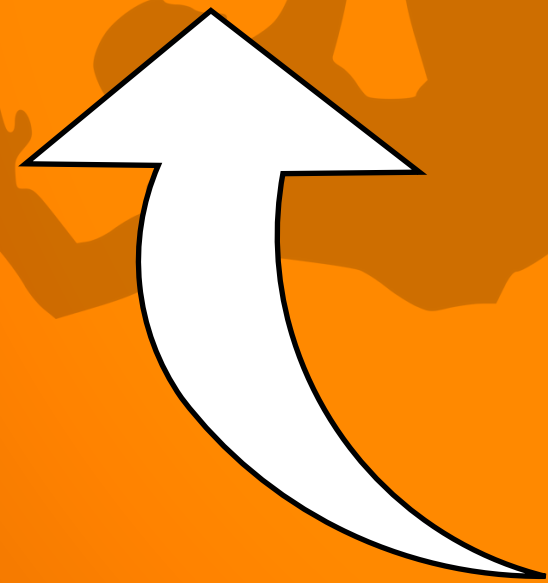
**DESIGN**



**BUILD**



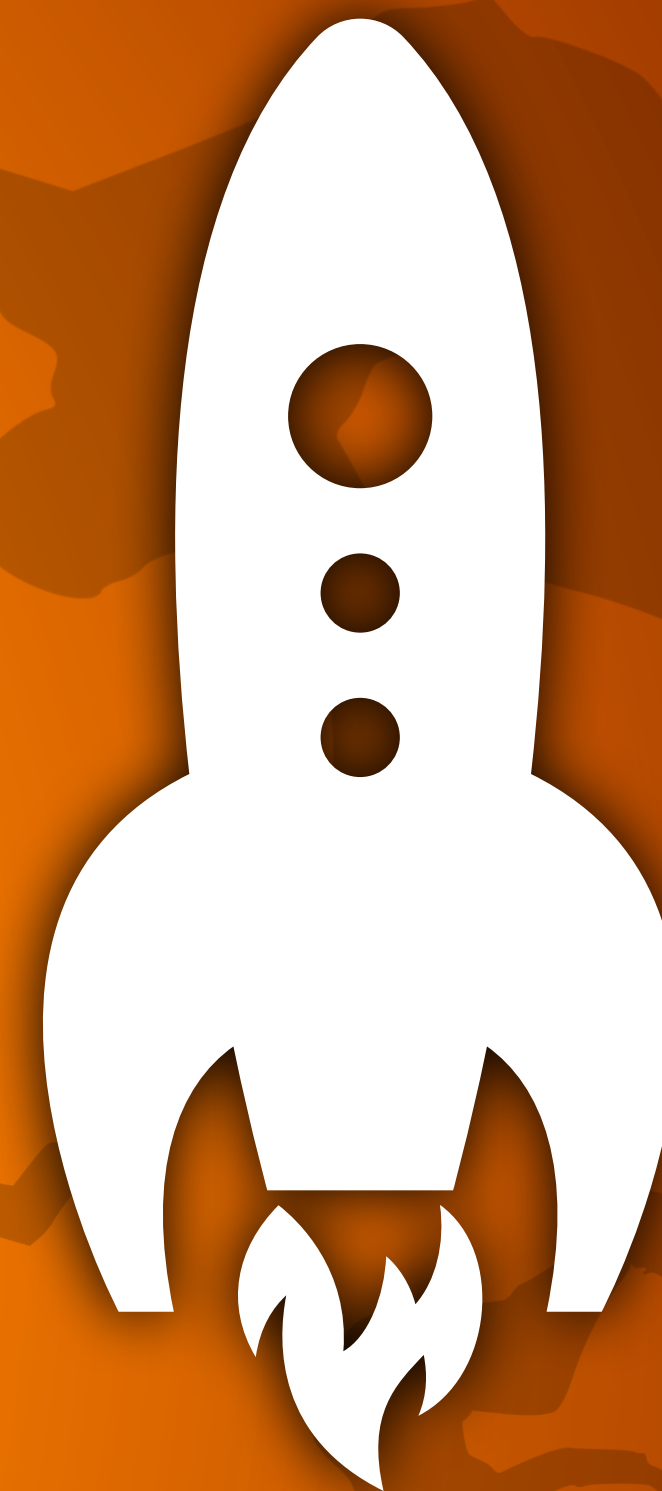
**TEST**



**FAIL!**



**LAUNCH**



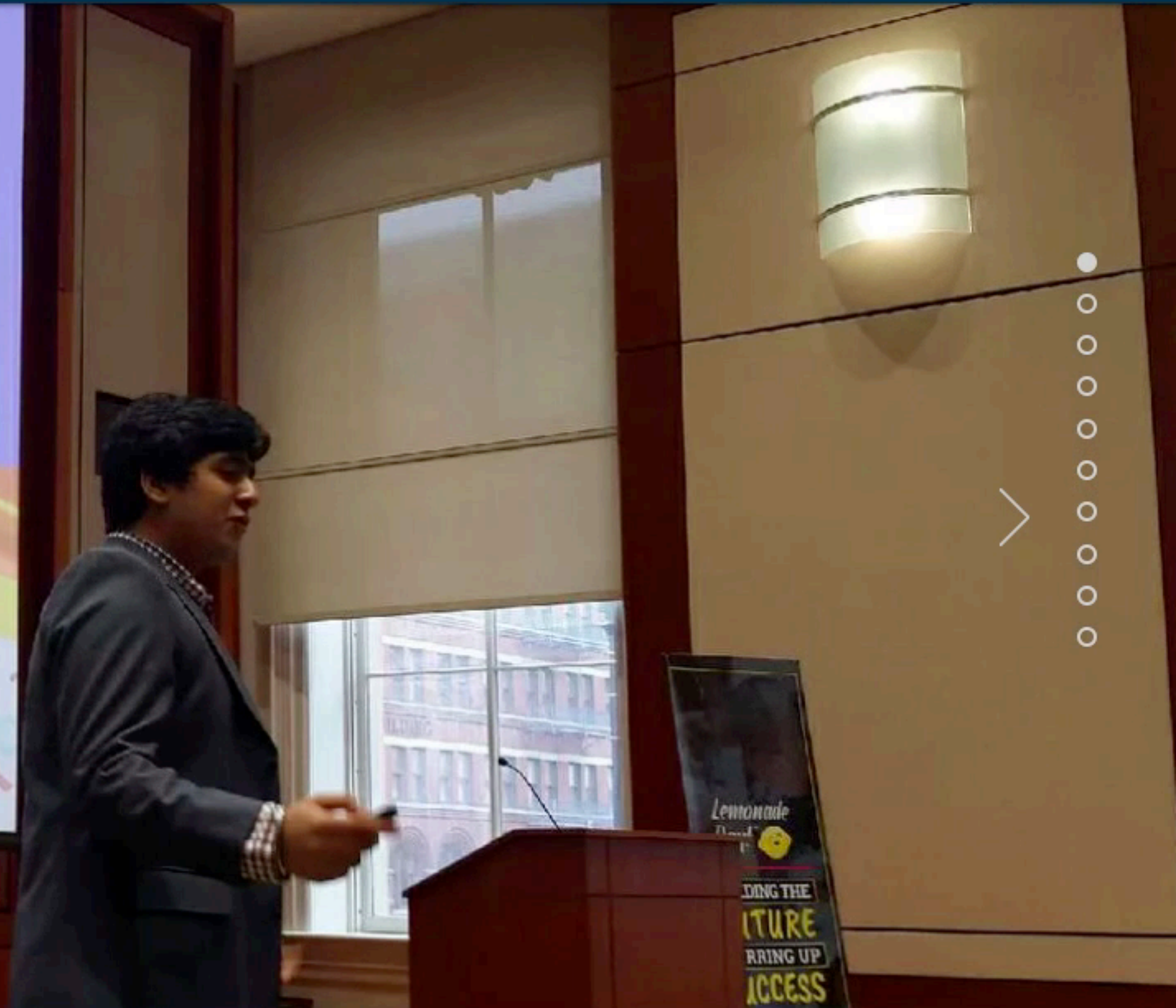


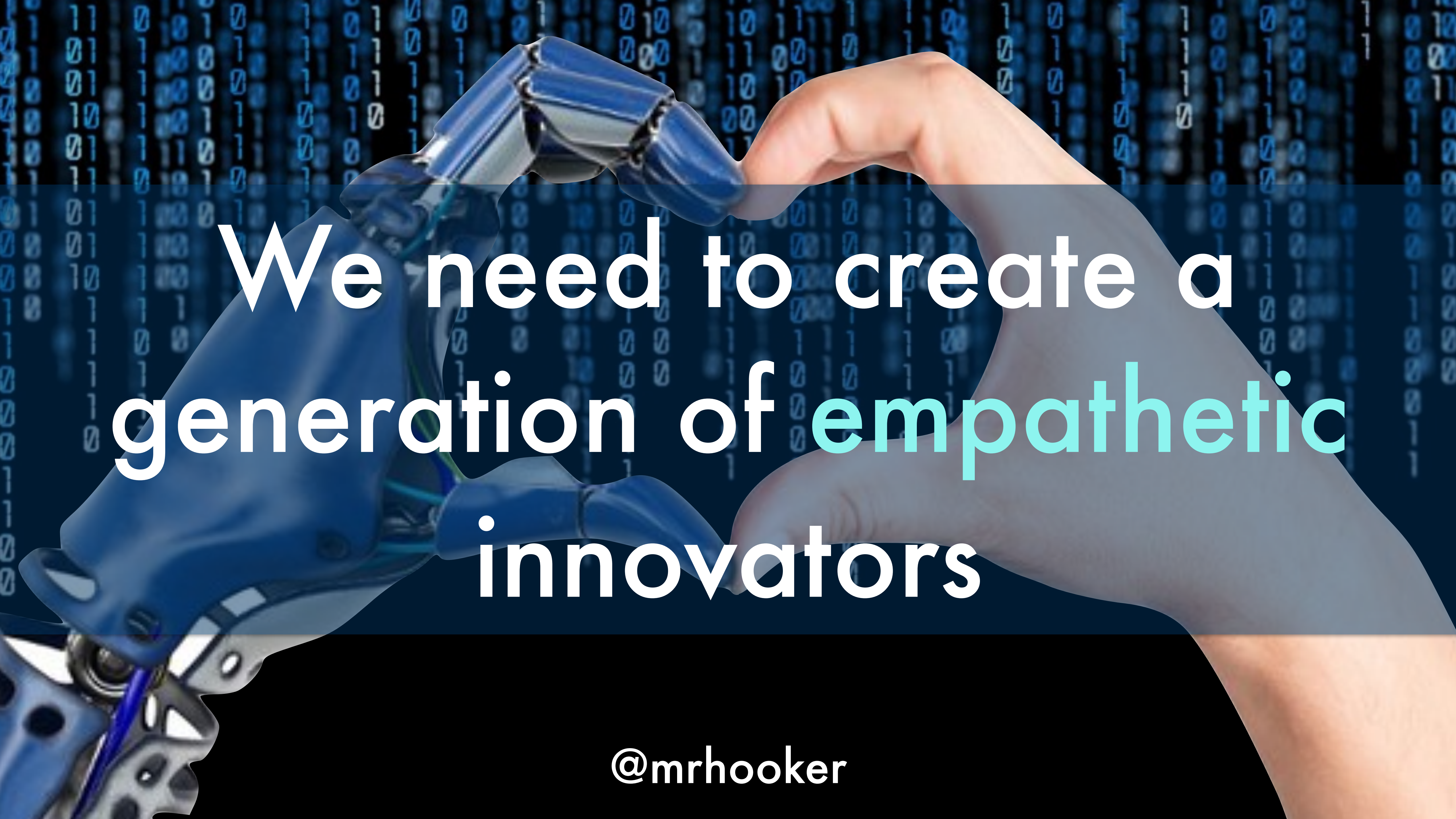


-  **L**eaders
-  **E**emotionally Intelligent
-  **A**cademically Prepared
-  **R**esilient
-  **iN**novators
-  **E**quity Minded
-  **R**eflective









We need to create a  
generation of empathetic  
innovators

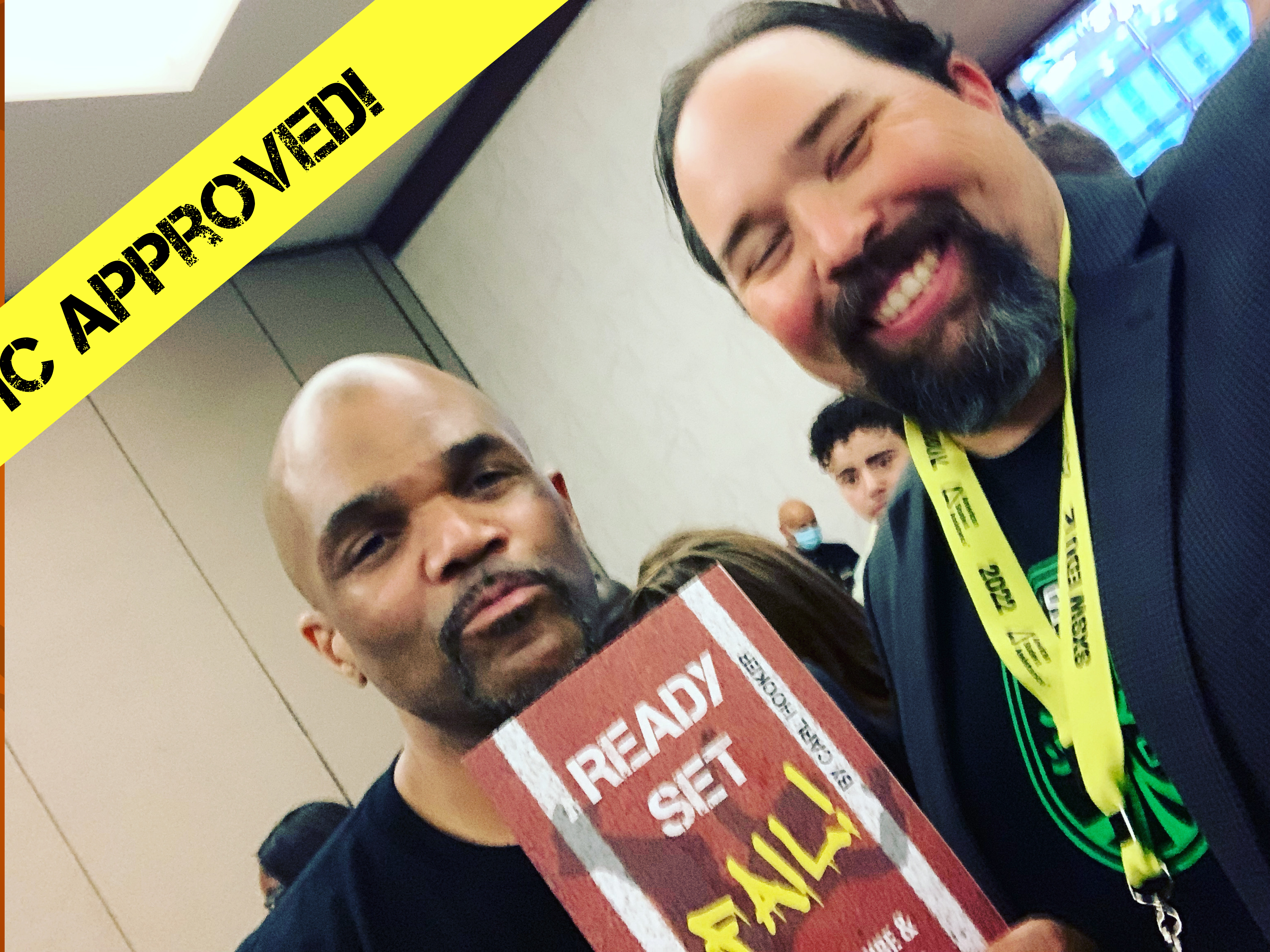
@mrhooker

Students don't  
take risks, if  
teachers don't  
take risks.

Teachers don't  
take risks, if  
leaders don't  
take risks.



**DMC APPROVED!**



**THANK YOU!**

**WHAT DOES IT  
MEAN  
TO BE**

**INNOVATIVE?**

**Resources: [mrhook.it/nn](http://mrhook.it/nn)**

**@MRHOOKER**

**CARL HOOKER**