# THE HIDDEN LENSES OF SUCCESS

*Engineering in the 21st Century*

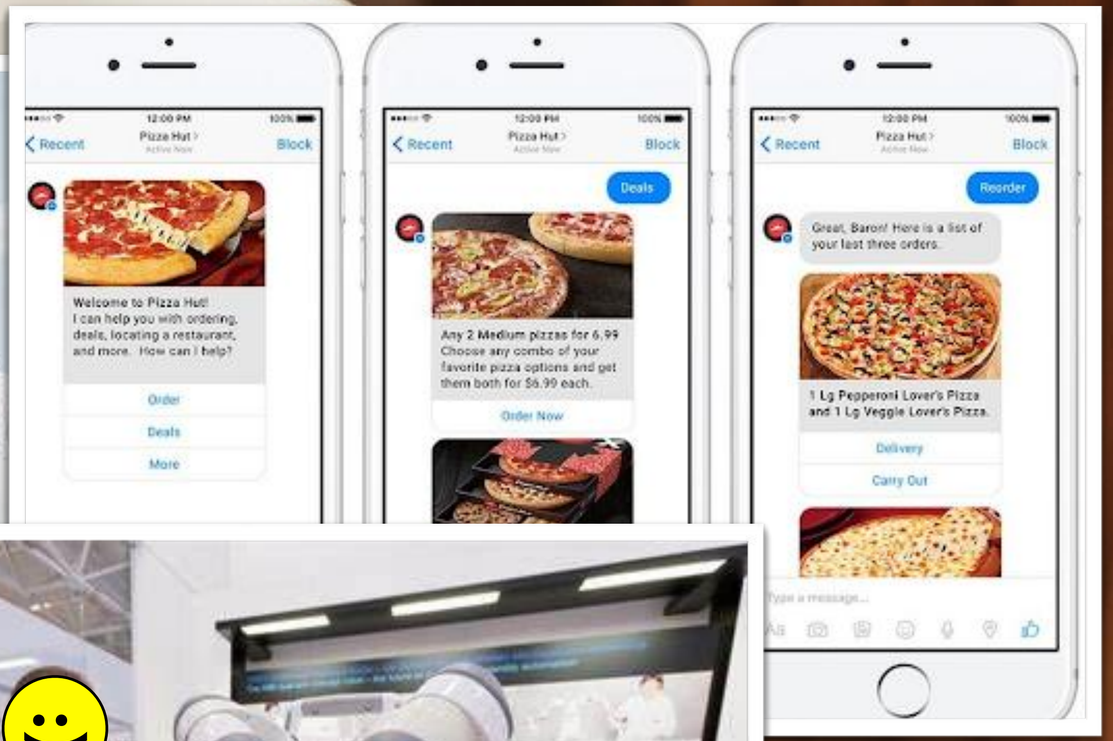


**Jonathan Chew**
**& Leo Szeto**

*January 4, 2020*

# ADVANCES IN TECHNOLOGY



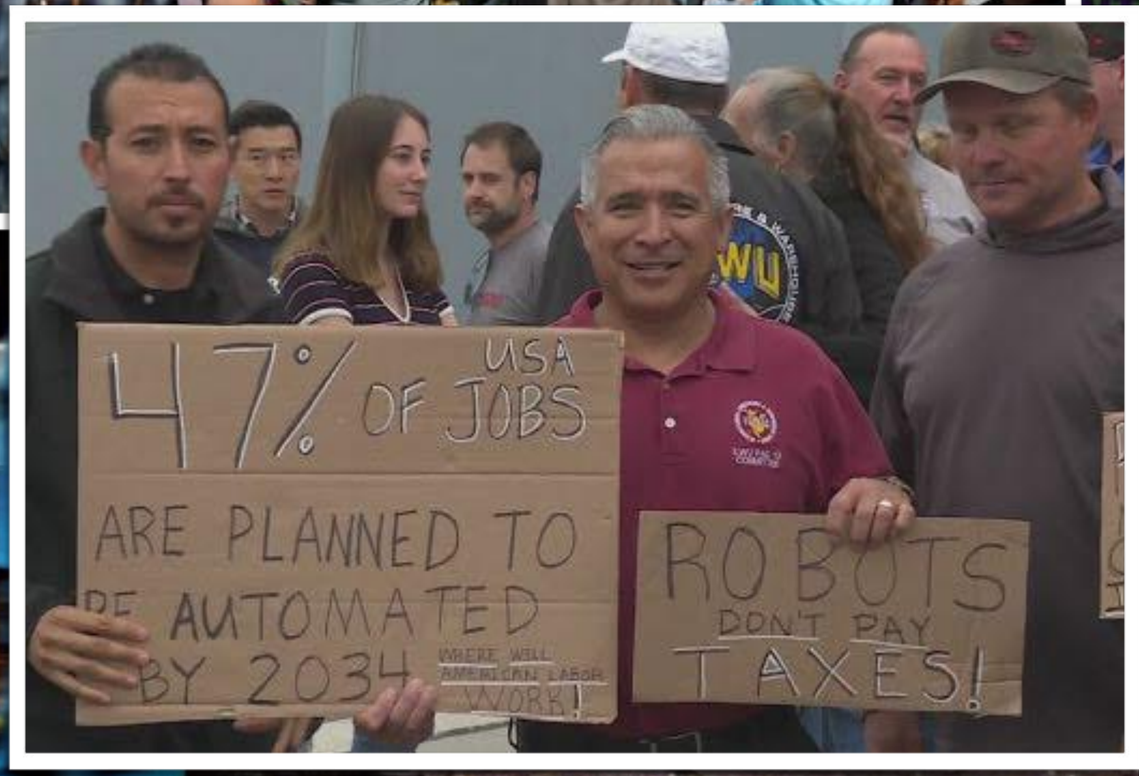











. . . have an impact on our society.

# WHAT IT MEANS TO WORK...

...HAS ALWAYS BEEN CHANGING!

# HOW WILL ENGINEERING WORK CHANGE IN THE 21ST CENTURY?

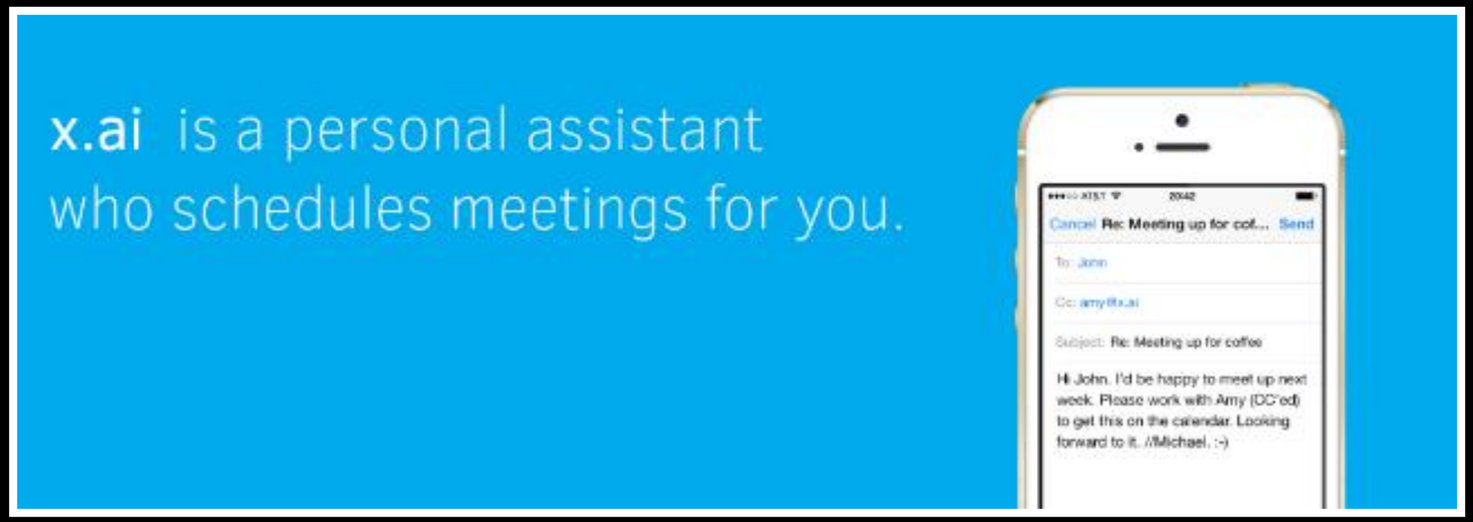
THE NEW AGE OF AI AND AUTOMATION WILL UNBURDEN HUMANITY FROM ROUTINE COGNITIVE WORK.

# ADMIN/COORDINATION

2011




2019






© Disney

# AUTOMATRONICS

# EMPLOYEES OF 1950 NEEDED

1. The ability to work rapidly and for long periods of time.

2. Memory for details and directions.

3. Skills in arithmetic computation.

# EMPLOYEES OF 2020 NEED

- *According to Forbes:*
  1. Complex problem solving
  2. Critical Thinking
  3. Creativity
  4. People Management
  5. Coordinating with Others
  6. Emotional Intelligence

- Today, *employers* want:
  - Innovative Thinking
  - Independence
  - Initiative

Done blog.linkedin.com AA



- **Demand for soft skills is likely to increase as automation becomes more widespread.** Skills like communication, creativity, and collaboration are all virtually impossible to automate, which means if you have these skills you'll be even more valuable to organizations in the future. If you have these skills, make sure they're on your LinkedIn profile so hiring professionals can find you for relevant opportunities.

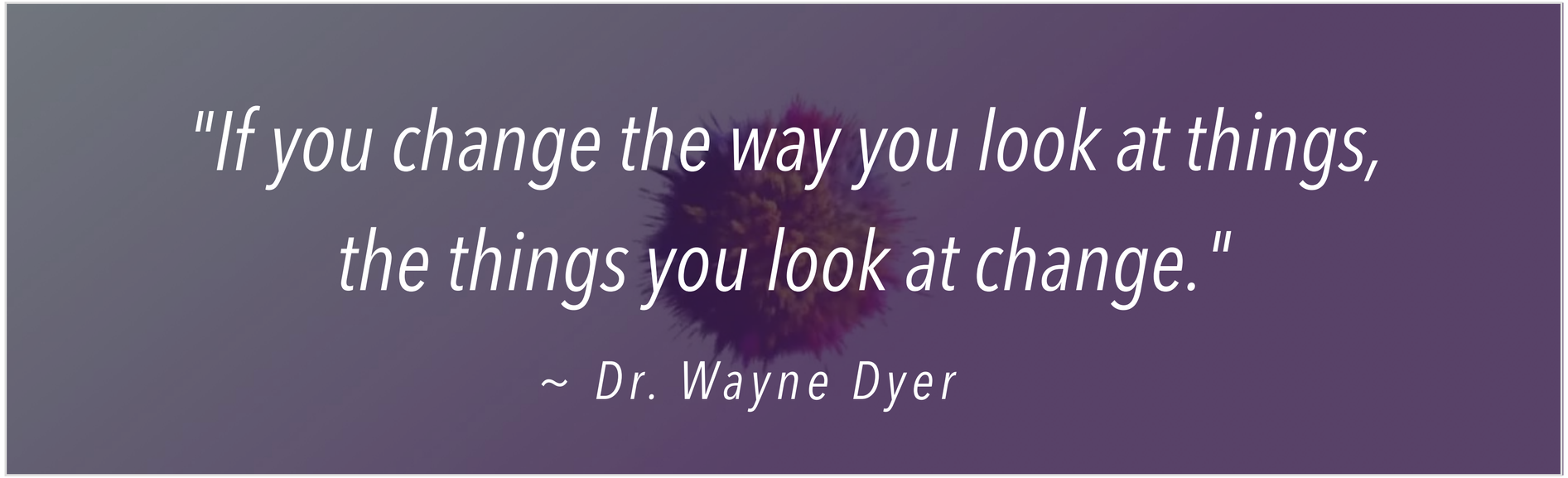
# THE PEOPLE PERSON



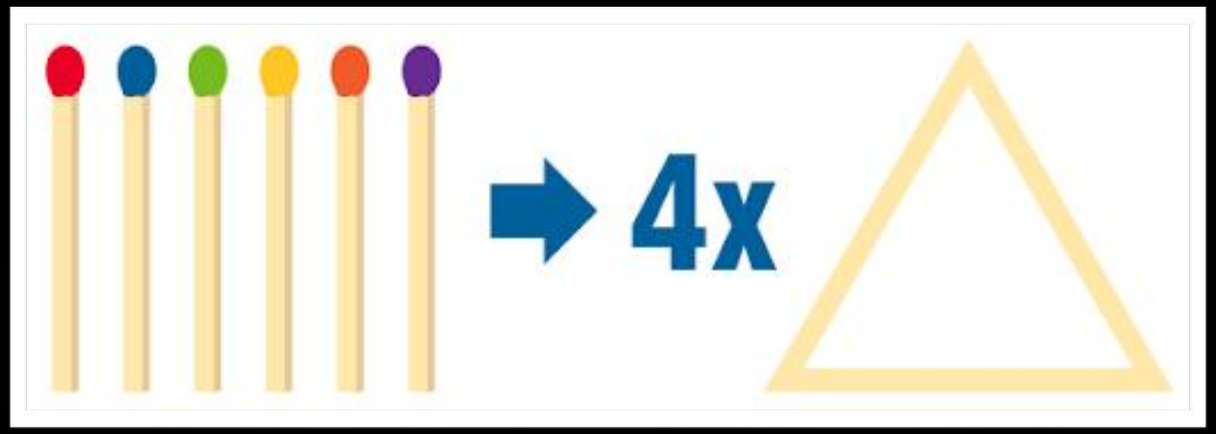



Tom Smykowski



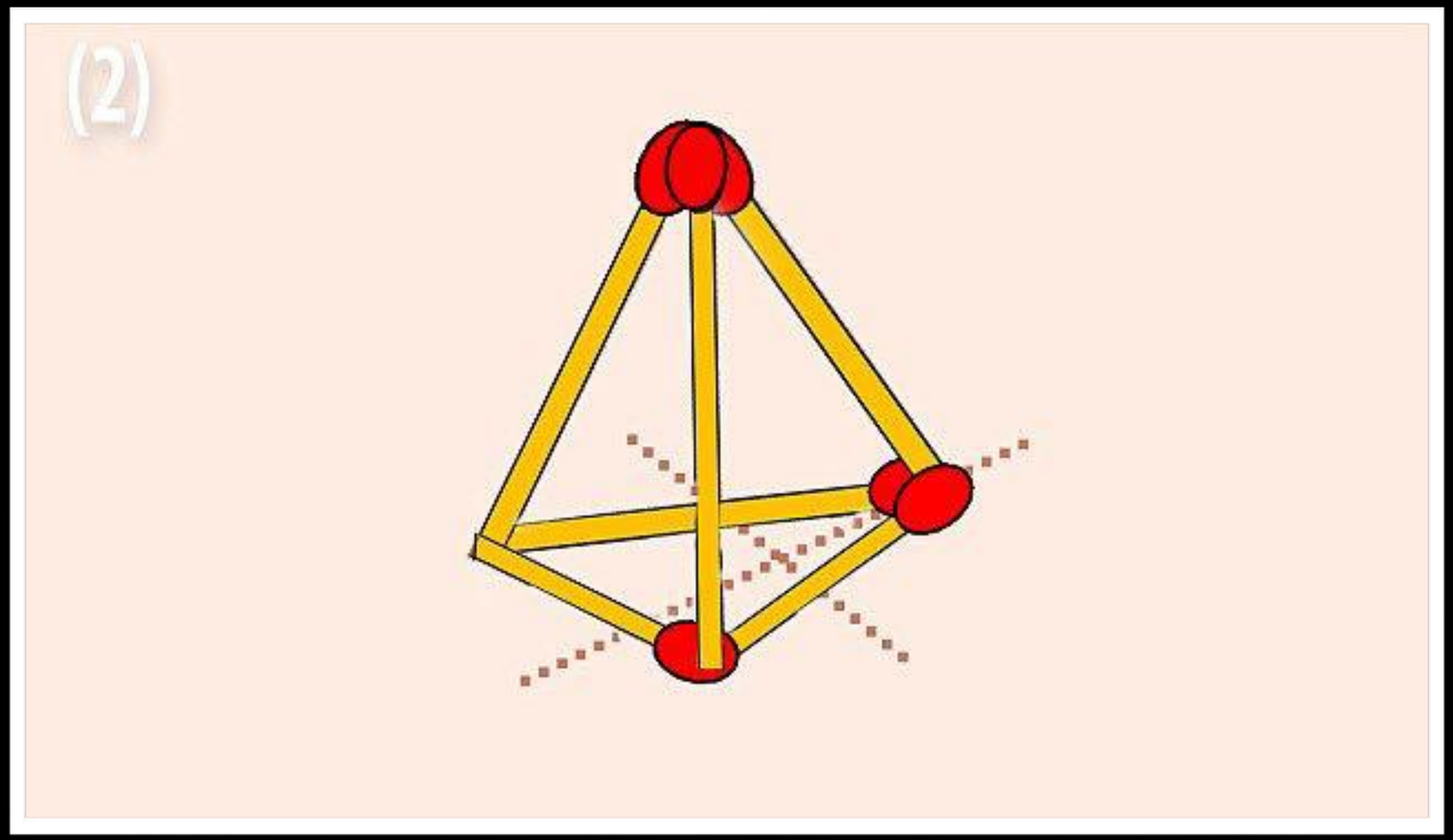

"If you change the way you look at things,
the things you look at change."
~ Dr. Wayne Dyer

# THE VALUE OF PERSPECTIVE




Given six matchsticks, create a configuration where the matchsticks form exactly four equilateral triangles, without breaking the matchsticks into smaller pieces.

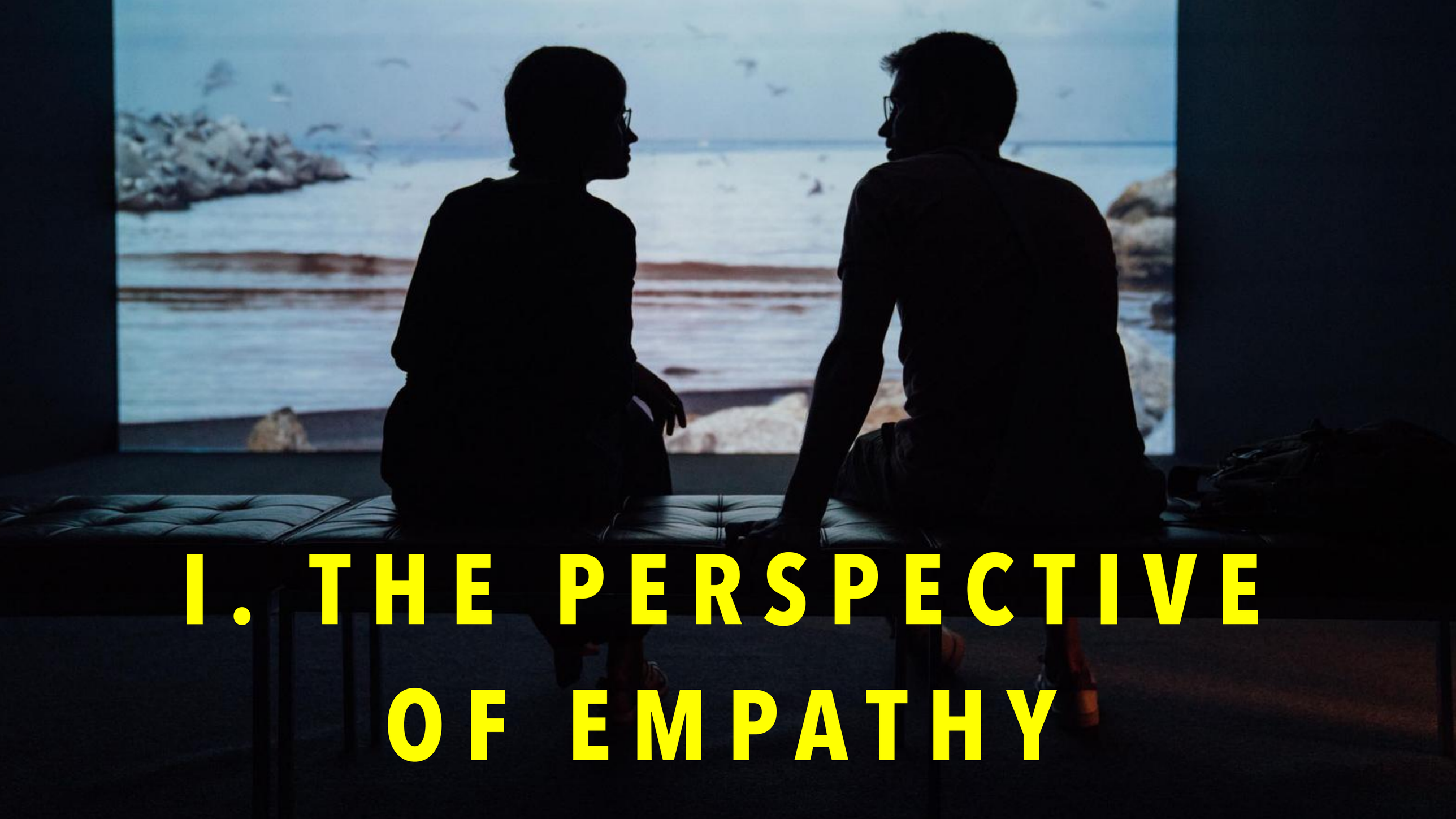
# THE VALUE OF PERSPECTIVE



*By shifting perspectives, we create new ways to move forward.*

Engineers of the *21st Century* should maintain perspectives of **Empathy**, **Impact**, and **Flexibility**.





# I. THE PERSPECTIVE OF EMPATHY

# COMMUNICATION

*"Become genuinely interested in others –*
*you're not interesting until you're interested."*

## LISTEN!!!
## (Data Gathering Exercise)

# CONVERSATION STACK

*"The sweetest sound to anyone's ear is the sound of one's own name." ~Dale Carnegie*

| | |
|---|---|
| 1. License Plate | - Name (introduce yourself 1st) |
| 2. House | - Where are you based? |
| 3. World Map | - Where are you originally from? Where did you grow up? |
| 4. Work Glove | - Where do you work? What do you do? What industry are you in? |
| 5. Jumbo Jet | - Do you like to travel? What was your last trip? |
| 6. Family | - Do you have any kids? Do you see your parents often? |
| 7. Tennis Rackets | - What are your favorite hobbies? Sports? Movies? Reading? Interests? |
| 8. Goalie Stick | - What are your goals / dreams? What do you want to do? |
| 9. Light Bulb | - What are your ideas on… ? |
| 10. Mickey | - Listen and shut your mouth! |

# JONATHAN CHEW

*Glendale, CA*

*Los Angeles*

*Assistant Producer*

(Walt Disney Imagineering)

*New Orleans for Christmas*

# LEO SZETO

*Burbank, CA*

*San Francisco*

*Engineer*

(Nusano)

*New Orleans for Christmas*

# PRACTICE ROUND

Turn to the person next to you.
Find one thing in common!

# CONVERSATION STACK

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All communication is either a
loving response or a cry for help.

# CALL TO ACTION



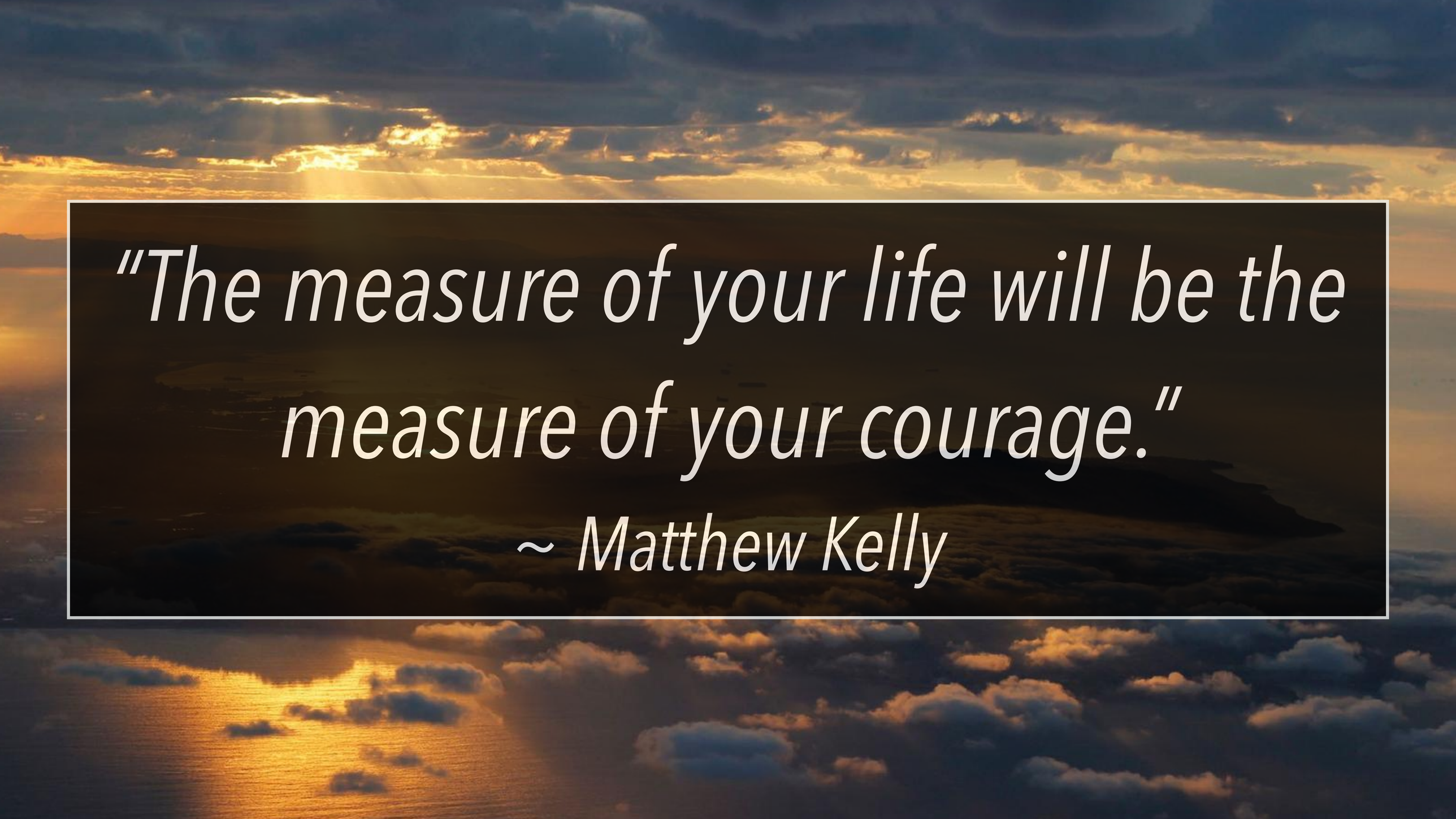
*Use the* ***Conversation Stack****!*

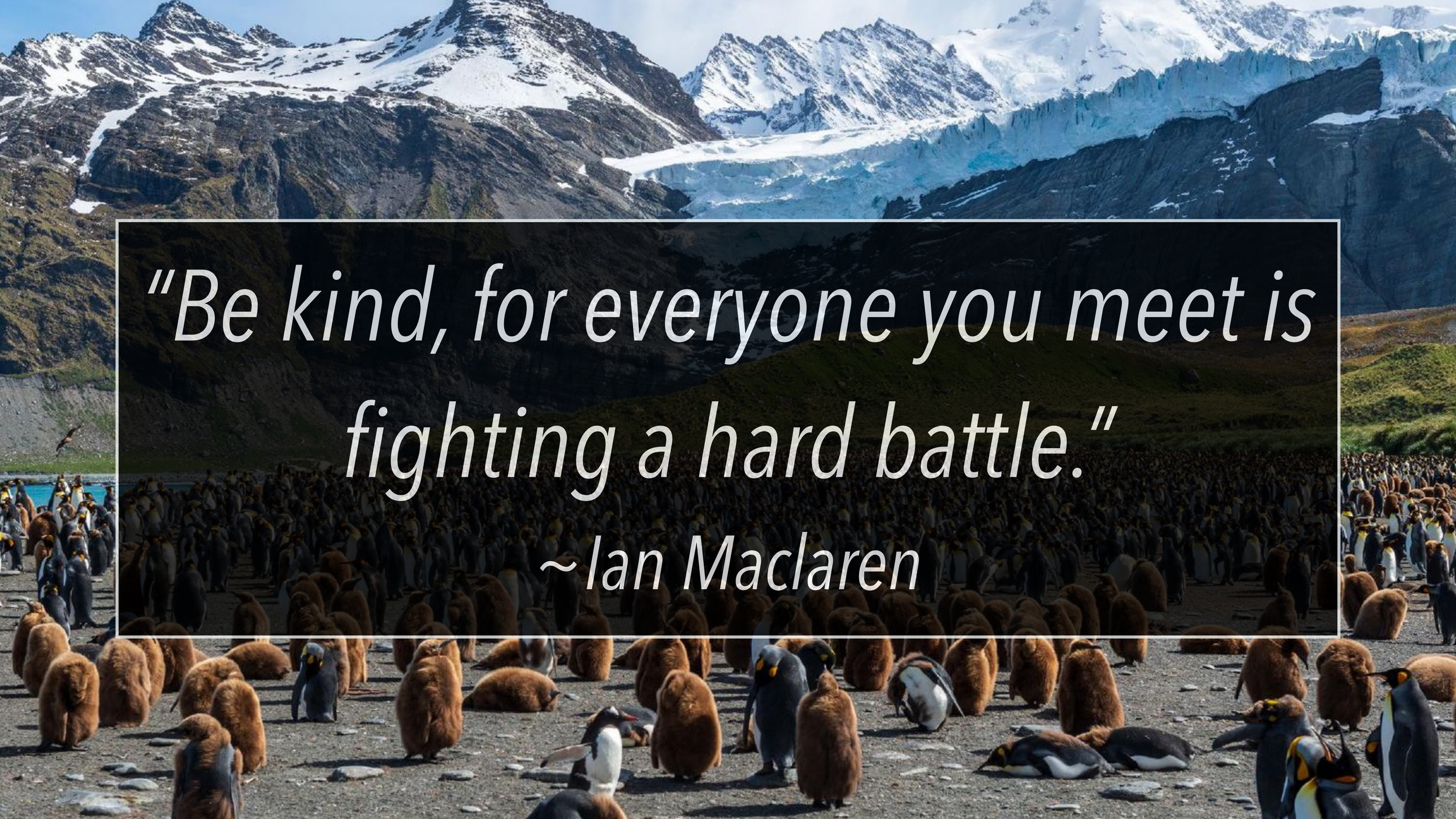


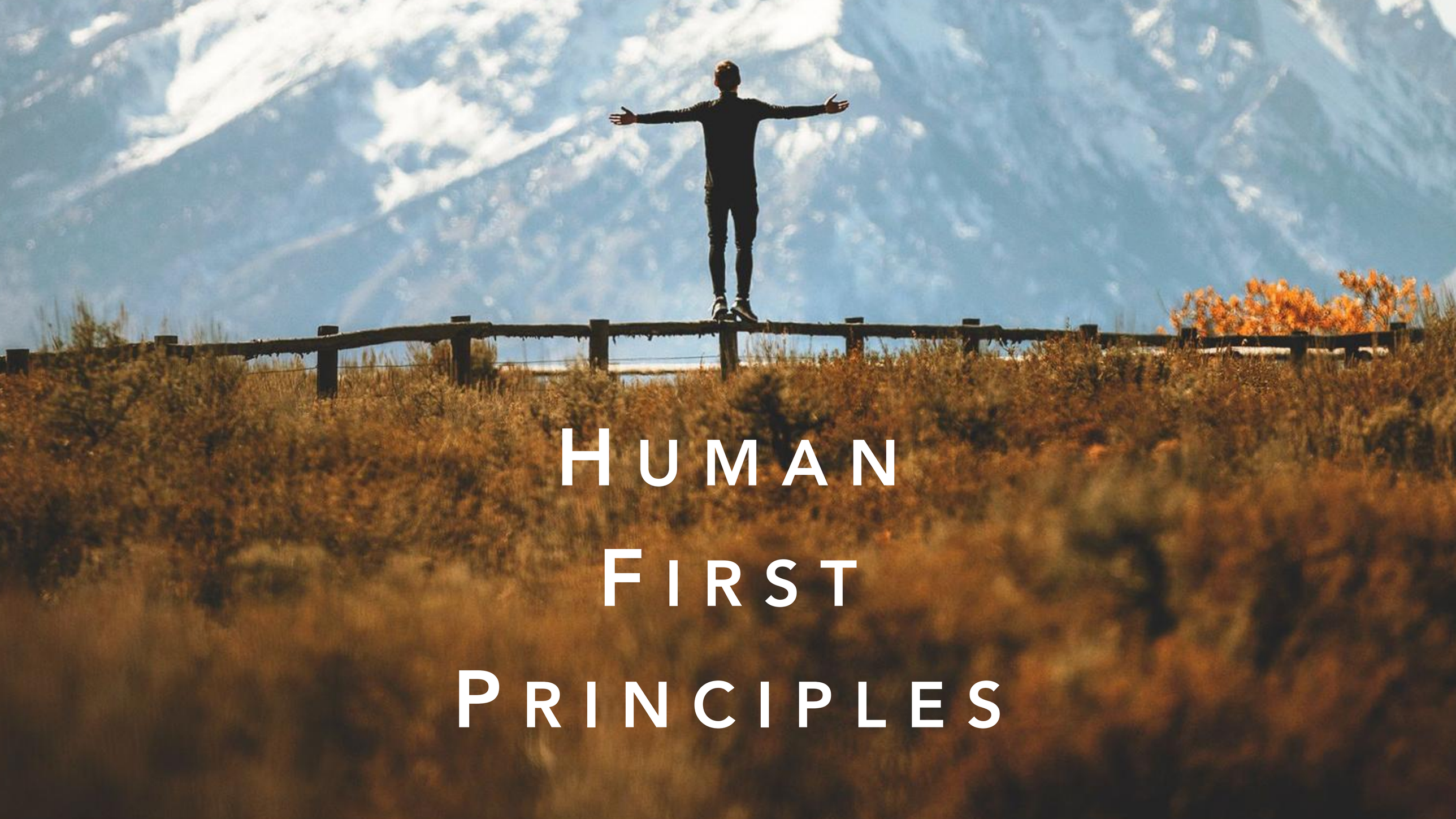
# II. THE PERSPECTIVE OF IMPACT

# COLLABORATION

*"You can get everything you want in life if you just help enough other people get what they want." ~Zig Ziglar*


"The measure of your life will be the measure of your courage."
~ Matthew Kelly


“Be kind, for everyone you meet is fighting a hard battle.”
~Ian Maclaren


HUMAN
FIRST
PRINCIPLES


GETTING INTO THE
MINDSET OF
CONTRIBUTION

# CALL TO ACTION



*When you talk to people,*
*ask them **WHY** they came to this conference!*
*Find out if there's a way to **help** them with their goal.*



# III. THE PERSPECTIVE OF FLEXIBILITY

# CREATIVITY




Combine
Adapt
Magnify
Modify
Put to other uses
Eliminate
Rearrange
Substitute


THINK
WIN-WIN-WIN

# OPTIMISM

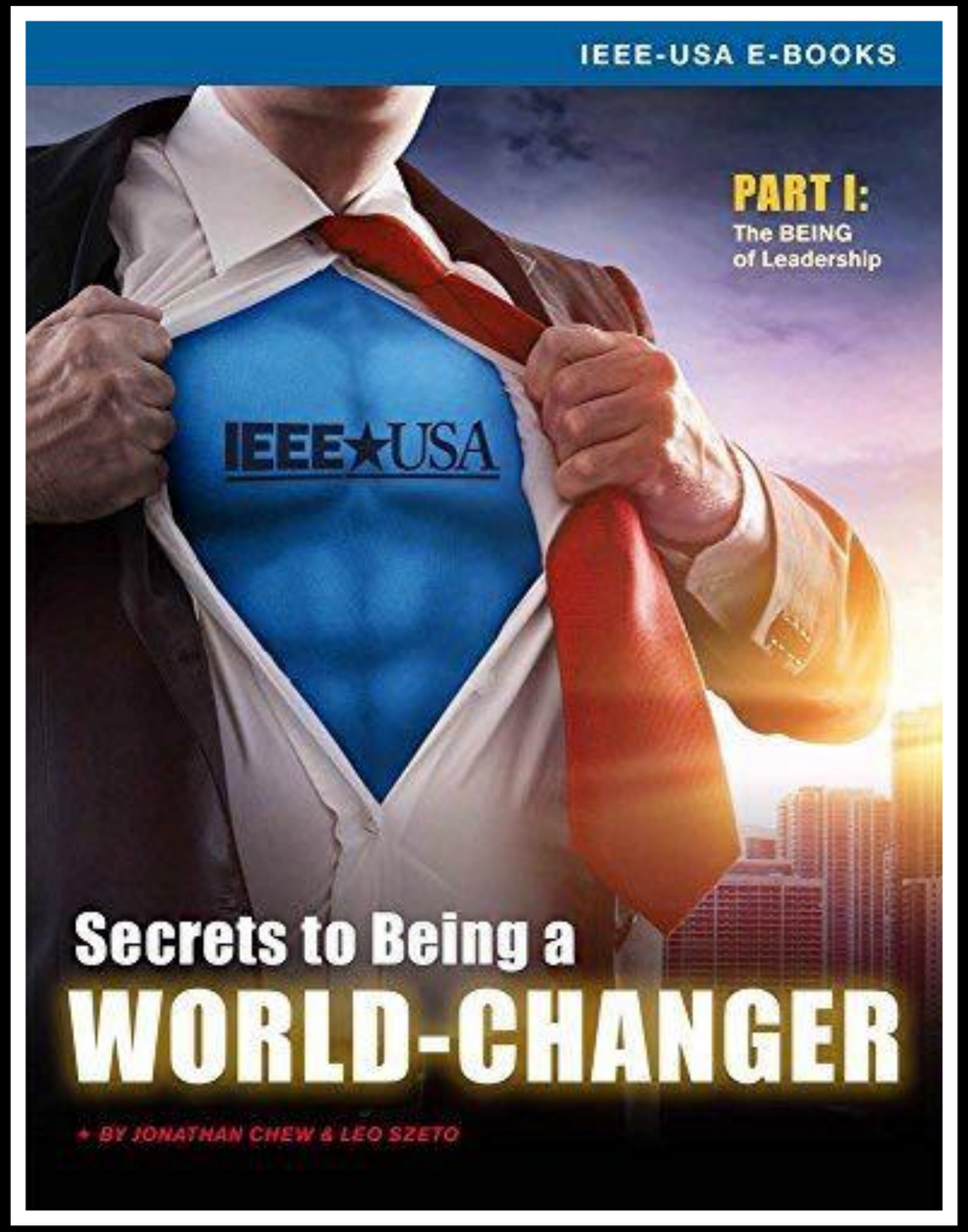



Use these perspectives
to thrive in a Post-AI World!

# CALL TO ACTION



*Use **CAMPERS** to change your perspective on any problem!*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The BEING
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Secrets to Being a
WORLD-CHANGER
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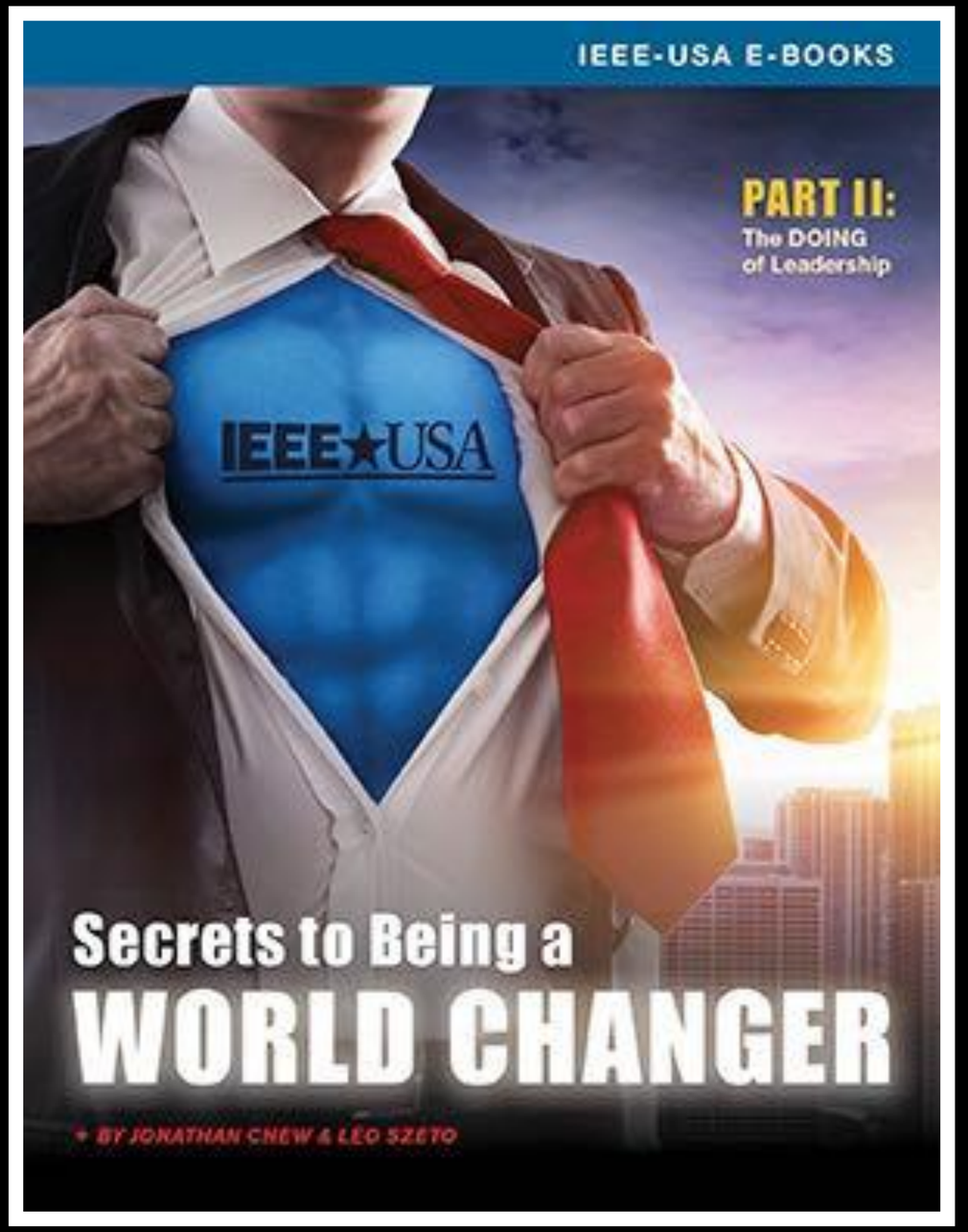
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# BOOKS THAT WE'VE MENTIONED

## INSPIRATIONS & INFLUENCES

1. How to Win Friends & Influence People by Dale Carnegie
2. Strengths Finder 2.0 by Tom Rath
3. Start with Why by Simon Sinek
4. The 7 Habits of Highly Effective People by Stephen R. Covey
5. Prepared: What Kids Need for a Fulfilled Life by Diane Tavenner
6. The Shift by Wayne Dyer