

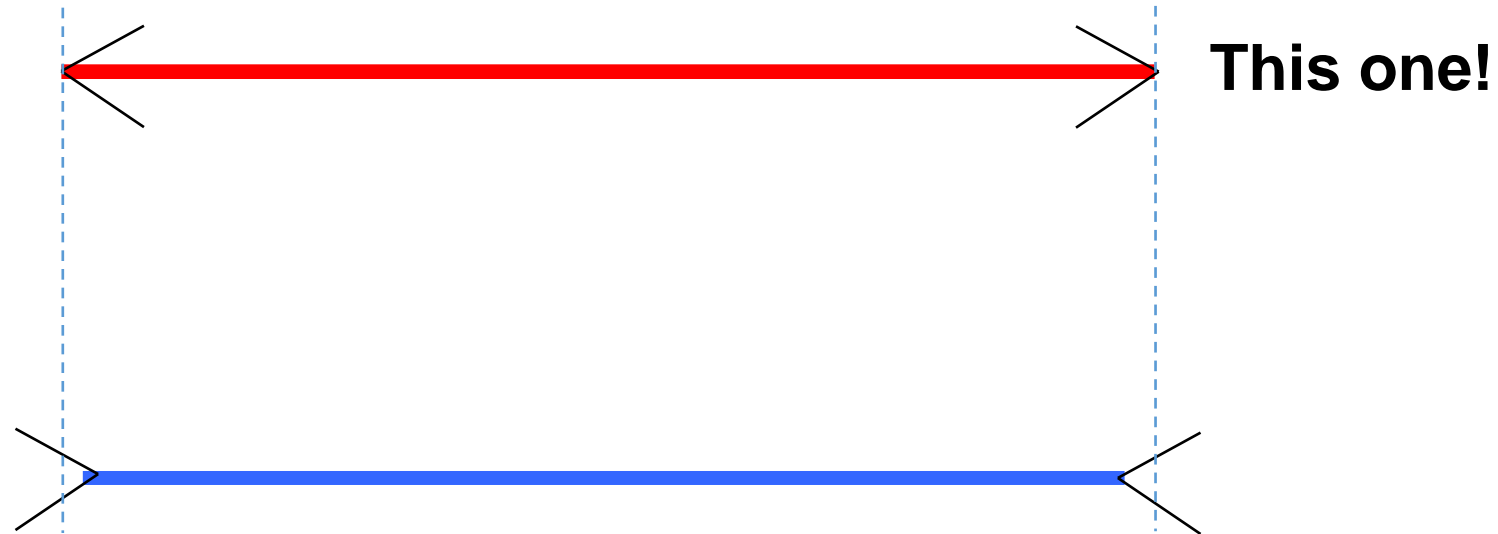


# Managing Change

*Gregory Washington, PhD  
Stacey Nicholas Dean of Engineering  
The Henry Samueli School of Engineering  
Professor, Mechanical and Aerospace Engineering*



# Choose which is larger



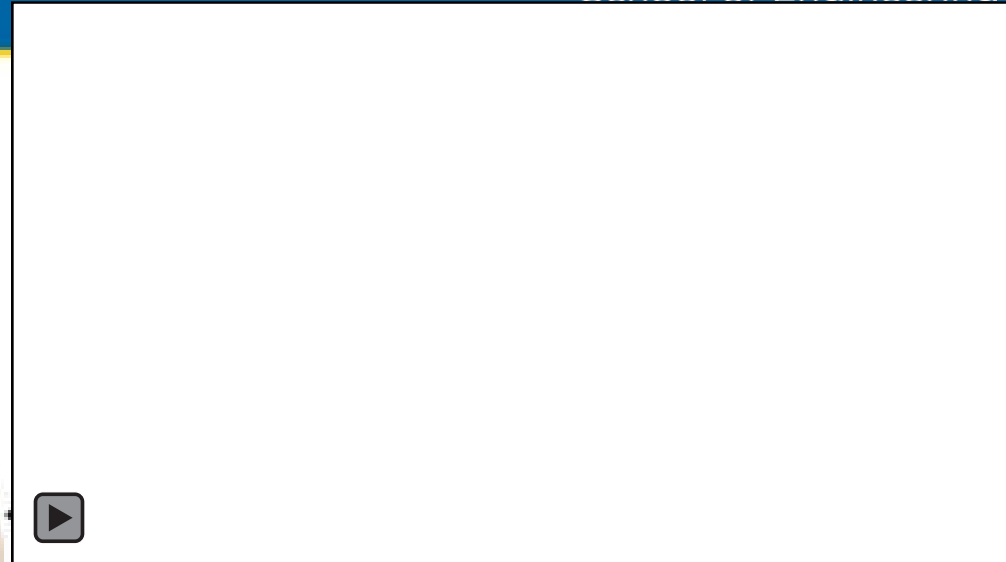
Many of us were raised to believe that these  
two lines were the same size



# Change is all around us

- In the next 5 years you will no longer

- IDs
- Mo
- Cre
- Sto
- Bus
- Pho
- Ma
- Pap
- Bill
- Pap
- Ste
- Org
- Cla



Shutterstock



# COMPETITORS ARE CHANGING

**UCI Samueli**  
School of Engineering







# Our Competitors are Changing

**UCI Samueli**  
School of Engineering



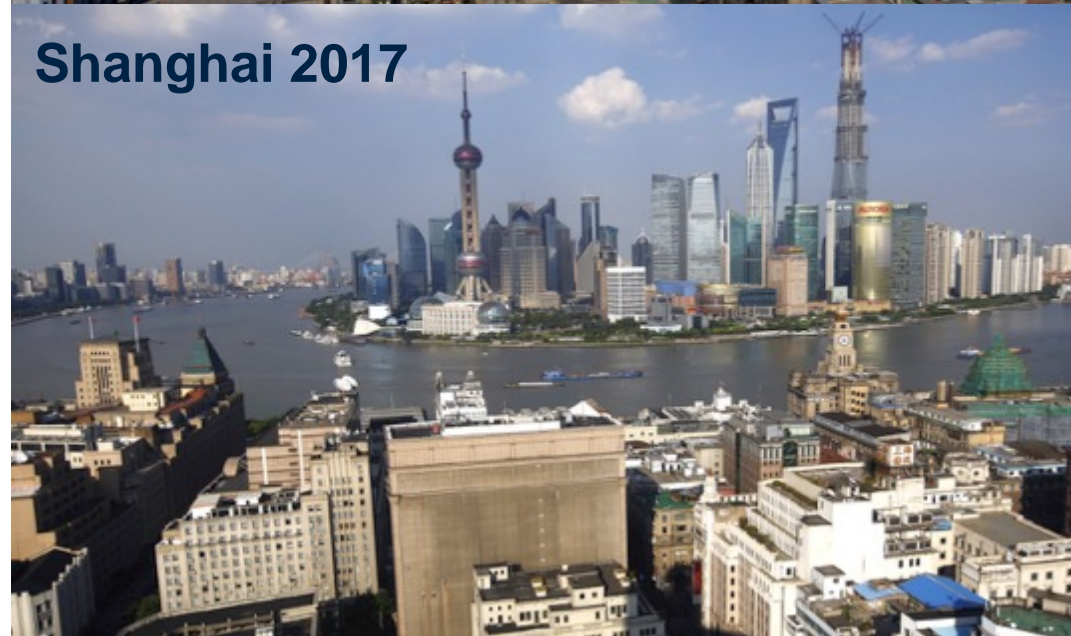
**Singapore 1965**



**Singapore 2017**



**Shanghai - 1987**

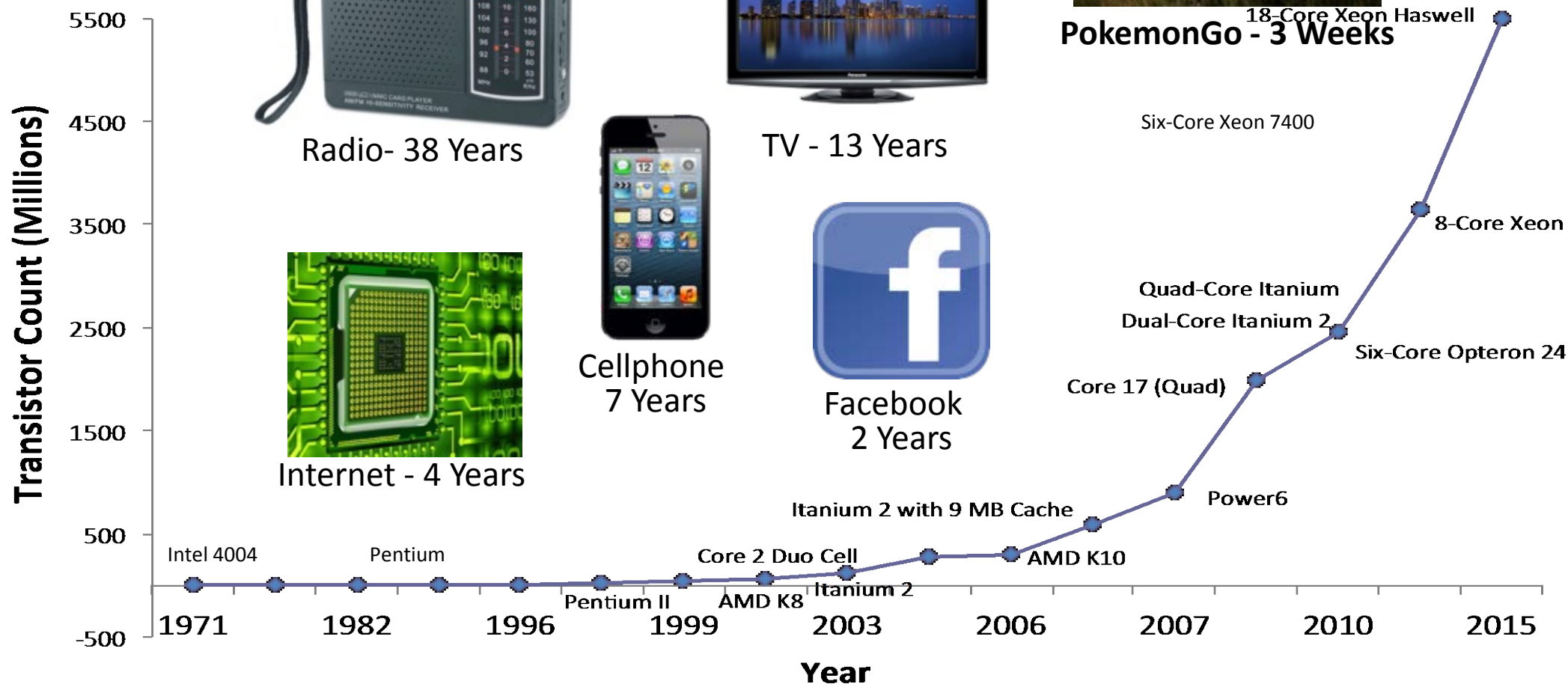


**Shanghai 2017**



# Unprecedented Speed of Change

Years to 50 million users



More than half of the top 10 in demand jobs in 2017 did not exist in 2007





# CHANGE

**UCI** Samueli  
School of Engineering

## ADVANCED ECONOMIES

**38 million to 40 million fewer workers** with tertiary education than will be needed

**13%**  
**too few**

COLLEGE OR  
POSTGRADUATE DEGREES

## DEVELOPING ECONOMIES

**45 million fewer workers** with secondary education than will be needed

**15%**  
**too few**

SECONDARY EDUCATION

## GLOBALLY

**90 million to 95 million more lower skilled workers** than companies have a need for.

**13%**  
**too many**

LIMITED EDUCATION

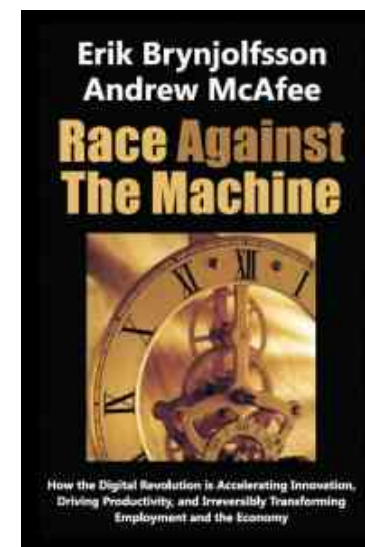




# Technology is a ~~New~~ Real Competitor

- **Probability of Computerization**

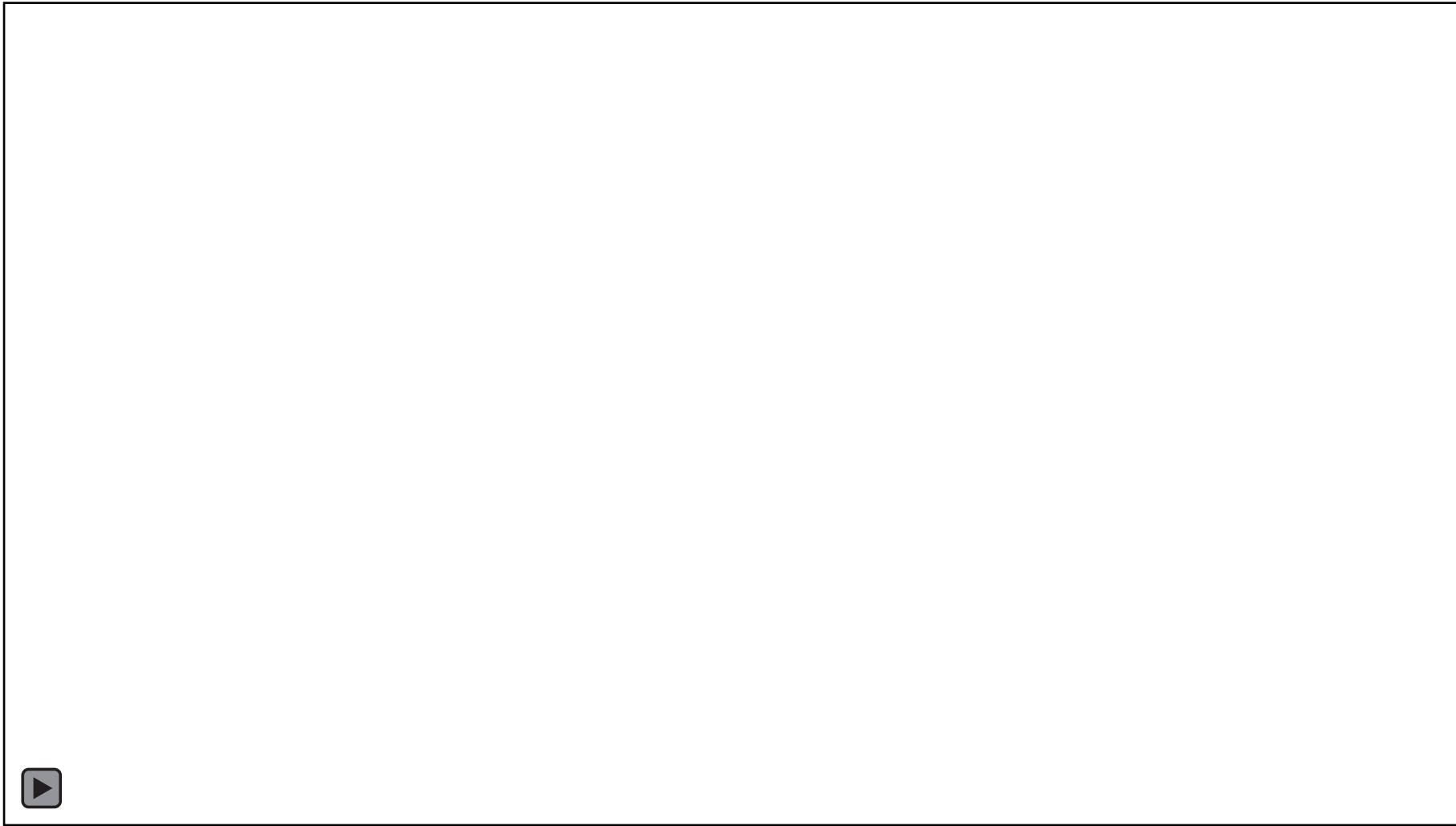
- Telemarketers – 99%
- Secretarial/Adm. Assistant – 96%
- Accountant/Auditors – 94%
- Retail Salespersons – 92%
- Technical Writers – 89%
- Paralegals – 94%
- Postal Service Clerks – 95%
- Machinists – 65%
- ***47% of total US employment is at risk***



*The future of Employment: How Susceptible Jobs are to Computerisation;* C.B. Frey, M.A. Osborne



# Oakley - Radar Pace



**Craig Alexander 3X  
ironman Champ**



## What types of students are we educating in the future?

- **Digital Natives (since birth)**
  - Savvy about online tools, blogs, social networks
- **Always Online-AO students**
- **The Millennials: Confident.** Connected. Open to Change. Socially conscious.
- **Want to make a difference** in the world now with their knowledge/skills
- **Ability to multi-task**
- **Comfortable** with Ubiquitous Mobile Devices and Software Tools







# Changes to our campus

- Many more students! More than 3k students in last five years. Less support
- More Diverse (More brown, More international, More female, older)
- Educational Environment – More digital, More Personal (MOOCs, OC, and flipped classrooms)
- More altruistic, more savvy, conscious.
- An emphasis on novel learning spaces.
- Funding and support (Traditional to RCM). The best way to support entrepreneurial endeavors is by rewarding those units who produce positive outcomes.
- Partnerships between students and universities (entrepreneurship).
- Novel partnerships between universities and industry (Companies on campus)
- Partnerships between K-12, Community Colleges and 4 year research institutions



# What is Change Management?

- Change management is a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state.



# Change Quotes

- “It is not the strongest species that survive, nor the most intelligent, but the ones who are most responsive to change” -Charles Darwin
- “Change your thoughts and you change your world” -Norman Vincent Peale

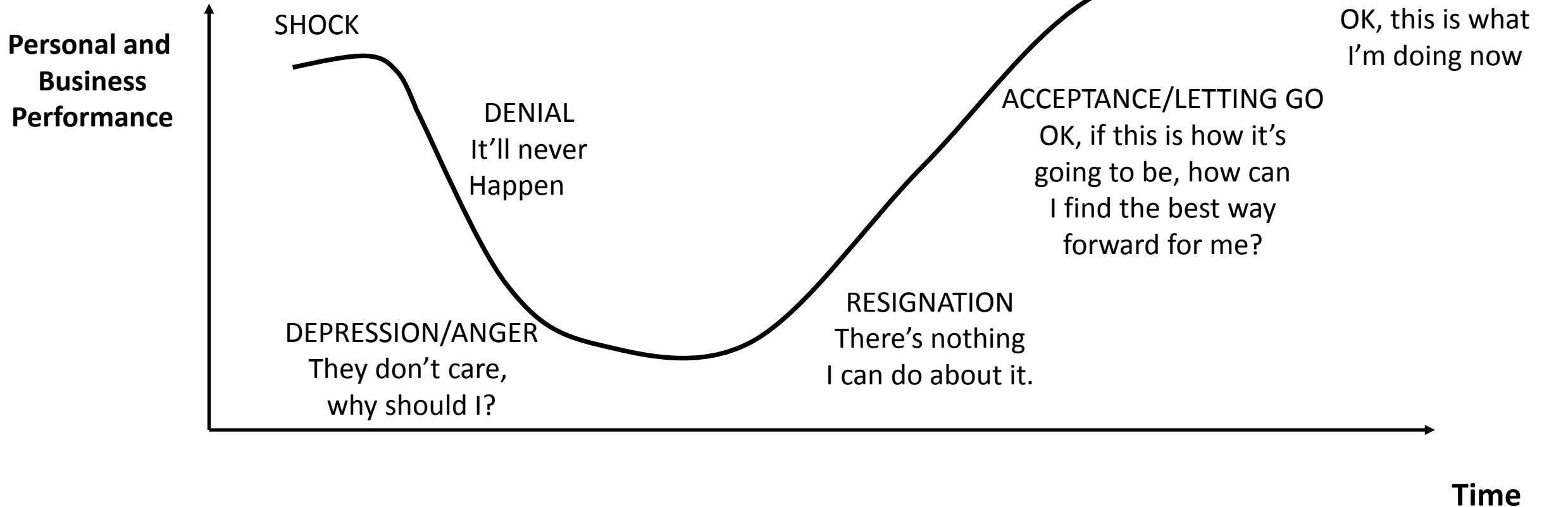


# Change (Loss) curve ...and 3 support stages

Information

Emotional Support

Guidance and direction





# Facts about Change

- **Different people react differently to change.**
- Change often involves a loss, and people go through the "loss curve."
- Most change succeeds or fails on the cooperation of the people who must implement the change.



## Facts about Change (con't)

- The key question asked or unasked on everybody's mind about change is "What's in it for me?" (known by many as WIIFM.)
- **A "few" people and groups are almost always pivotal to a smooth and effective change implementation.**
- Leadership is the key to successful change management





# More Facts about Change

- Everyone has fundamental needs that have to be met .
- A clear plan of action is needed for each group/individual who needs to move up in their support level for the change in order for it to succeed.
- **Communication and support are key ingredients when implementing change.**



# 8 Steps to a Successful Change

*Assemble the puzzle and walk your way through*

1. Establish a sense of urgency
2. Create a guiding coalition
3. Develop a vision and strategy
4. Communicate the change vision
5. Empower broad-based action
6. Generate short-term wins
7. Consolidate gains and produce more change
8. Anchor new approaches in the culture



# Thank You!

**Merci Bien!**

**Vielen Dank!**

**感謝!**

**Obrigado!**

**СПАСИБО!**

**Tak!**

**Grazie!**

**Asante Sana!**

**谢谢!**

**¡Muchas Gracias!**

