Attitude Determines Altitude: Engineering Yourself

Randy Shoup
@randyshoup
linkedin.com/in/randymshoup
“Improve a mechanical device and you may double productivity, but improve man and you gain a thousandfold.”

– Khan Noonien Singh, Star Trek
Growth Spectrum

I cannot get better

I know I can improve

I am never good enough
The Growth Mindset

• Dr. Carol Dweck of Stanford

• Your **self-theory about intelligence and talent** determines your learning achievement, skill acquisition, professional success

• Most effective way to improve is to know that you can
## Fixed vs. Growth Mindset

<table>
<thead>
<tr>
<th>Fixed Mindset</th>
<th>Growth Mindset</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Talent is static</strong></td>
<td><strong>Talent can be developed</strong></td>
</tr>
<tr>
<td>Leads to a desire to look smart and therefore a tendency to …</td>
<td>Leads to a desire to learn and therefore a tendency to …</td>
</tr>
<tr>
<td>Avoid challenges</td>
<td>Embrace challenges</td>
</tr>
<tr>
<td>Give up easily due to obstacles</td>
<td>Persist despite obstacles</td>
</tr>
<tr>
<td>See effort as fruitless</td>
<td>See effort as path to mastery</td>
</tr>
<tr>
<td>Ignore useful feedback</td>
<td>Learn from criticism</td>
</tr>
<tr>
<td>Be threatened by others’ success</td>
<td>Be inspired by others’ success</td>
</tr>
</tbody>
</table>
“Effort is one of the things that gives meaning to life. Effort means you care about something, that something is important to you, and you are willing to work for it.”

– Dr. Carol Dweck
• “The preponderance of psychological evidence indicates that experts are made, not born.”

• “Effortful study is the key to achieving success in chess, classical music, soccer and many other fields.”

Philip E. Ross, Scientific American, August 2006
The 10,000 Hour Rule

- “Ten thousand hours is the magic number of greatness.”

- Deliberate practice with constant challenge
“Practice isn’t the thing you do once you’re good. It’s the thing you do that makes you good.”

– Malcolm Gladwell, Outliers
The Progress Principle

• Dr. Teresa Amabile at Harvard Business School, 2011

• “Inner Work Life” drives performance – constant stream of emotions, perceptions, and motivations
The Progress Principle

• Making progress on meaningful work most strongly improves motivation and performance

• Steady progress and small wins lead to big gains
Focus and Attention

- Psychologist Daniel Goleman, 2013

- Ability to focus ("cognitive control") is the best predictor of success and high achievement
Focus and Attention

Focus is the ability to moderate between two parts of the brain:

- **Top-down higher brain**
  - Neocortex
  - Executive function
  - Deliberative, reflective, self-aware

- **Bottom-up lower brain**
  - Amygdala
  - Emotion and motivation
  - Impulsive, uncontrolled
Focus and Attention

Complex interplay between Creativity and Execution:

• Creativity from “open awareness”
  o Daydreaming
  o Finding unexpected connections

• Execution from focus
  o Goal focus
  o Resistance to distraction
Attention is a “Mental Muscle”

“From the perspective of cognitive science, all meditation methods are methods to train attention.”

– Daniel Goleman
“It’s not that I’m so smart; it’s just that I stay with problems longer.”
Trust Spectrum

Distrust  Trust  Naïveté
Theory X vs. Theory Y

- Dr. Douglas McGregor, 1960
- Leadership’s beliefs about what motivates employees
Theory X vs. Theory Y

- **Theory X**: people are inherently lazy and avoid responsibility, require extrinsic motivation
- **Theory Y**: people are intrinsically motivated, seek ownership, want to perform well
‘Theory X’

- Authoritarian, repressive style. Tight control, no development. Produces limited, depressed culture.

‘Theory Y’

- Liberating and developmental. Control, achievement and continuous improvement achieved by enabling, empowering and giving responsibility.
Westrum Organizational Model

- Generative Organization
  - Trust and Sharing

- Bureaucratic Organization
  - Rules and Processes

- Pathological Organization
  - Fear and Threat
Psychological Safety

• Team is safe for interpersonal risk-taking

“Being able to show and employ one’s self without fear of negative consequences”

• More important than any other factor in team success
“If you can’t change your organization, change your organization.”

– Martin Fowler
Confidence Spectrum

Fear

Confidence

Arrogance
“Whether you think that you can or you can’t, you are usually right.”

– Henry Ford
“Despite outstanding academic and professional achievements, women who experience the **Impostor Phenomenon** persist in believing that they are really not bright and have fooled anyone who thinks otherwise.”

– Clance and Imes, 1978

“We find that professional role confidence predicts behavioral and intentional persistence, and that women’s relative lack of this confidence contributes to their attrition.”

– Cech, et al., 2011

“Impostorism affects a wide range of people ... 70% of people will experience at least one episode of this Impostor Phenomenon in their lives.”

– Jaruwan and Alexander, 2011

[link to the source: Jaruwan and Alexander, "The Impostor Phenomenon", 2011]
Confidence and Honesty

• Ed Catmull was interviewing at Lucasfilm in 1979 to start a computer graphics group

• George Lucas asked "Who else should we be talking to?"

• Catmull suggested <all the big names in computer graphics>

• No other candidate had shared any of those names (!)
Overconfidence and Dunning-Kruger
Confidence and Attractiveness

“Attraction is about a certain primal magnetism. Of course, we can be physically attracted to someone, but we are more often drawn to their confidence, passion, and personality.”
Cycles of Confidence
Building Confidence

- Amy Cuddy of Harvard Business School
- TED Talk, 2012: “Your body language may shape who you are”
- Nonverbal expressions of power and confidence

https://www.ted.com/talks/amy_cuddy_your_body_language_shapes_who_you_are
“Postural Feedback Effect”

Adopting a “Power Pose”
- Increases feelings of power and confidence
- Activates approach system instead of avoidance

Improves
- Performance under stress
- Mood and motivation
- Assertiveness
- Physical strength

https://ideas.ted.com/inside-the-debate-about-power-posing-a-q-a-with-amy-cuddy/
Fake It Till You Make It
Game Changers
Amy Cuddy

Do It Till You Become It
Find Your Core

Connect to your core and you’ll find strength. Act from your core and you’ll move mountains.

- Use your core strength to build your foundation
  - Profession
  - Family
  - Friends
  - Relationship
  - Volunteerism
  - Etc.

- Strength in one area helps you be strong in others
MAKE YOURSELF OBSOLETE
Mentoring myself out of a job is not an easy thing to do (loss of control) but it's the right thing to do. It's better for @EnvoyProxy, @lyft, and myself.
If you are a senior engineer, a leader of a team, and are not actively working to make your team productive without you, you are literally not doing your job.

7:19 PM - 4 Mar 2018

7 Retweets 14 Likes

You can accomplish this through automation, documentation, hiring, training, etc.

But you do no one any favors — least of all yourself — by perpetuating a bottleneck.
Hire the people who will automate themselves out of a job, then just keep giving them jobs.
Growth Mindset
Trust
Confidence
“A ship in port is safe; but that is not what ships are built for. Sail out to sea and do new things.”