Innovation & Risk: Vision Before Money

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APSC 450

Overview

Part One...

How I got here

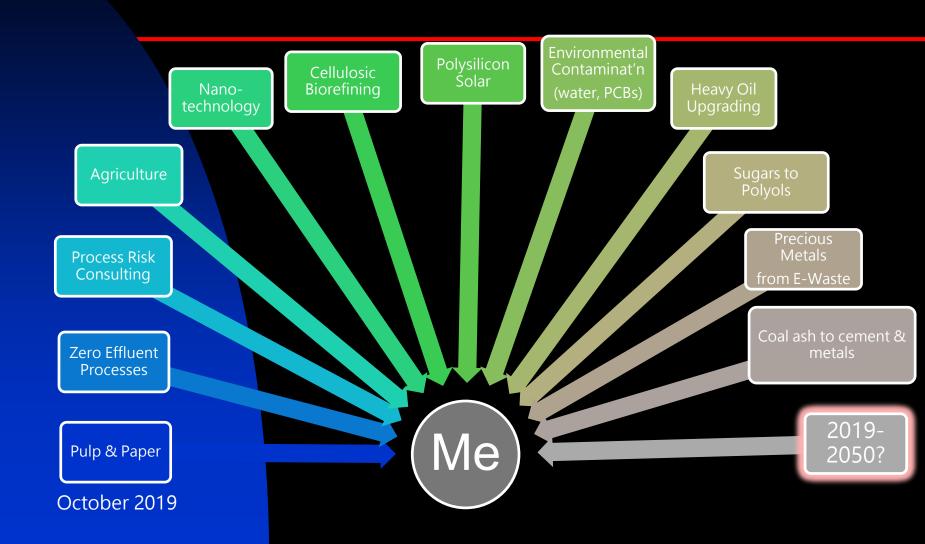
Part Two...

- Practical ethics & innovation
- Embracing difficulty
- Money & creativity
- Metrics

Assumptions

- Forbes (2012):The average job ~ 4.4 yrs
- Deloitte (2018): 28% plan for 5 yrs.
 - ~10 jobs over <u>any</u> working life.
- Industries of 2040 are in the labs of 2019.
- Not innovating implies vulnerability.
- Curiosity is the core of innovation.

Industries



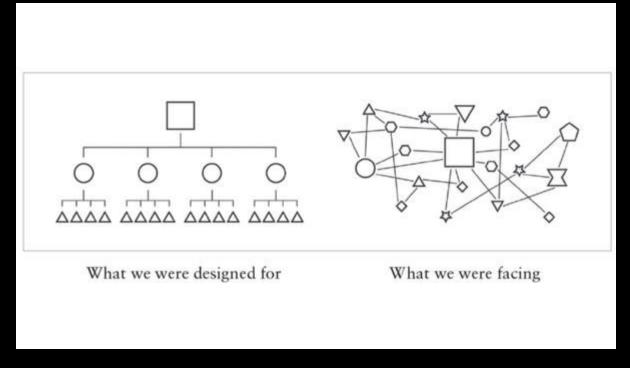
Thoughts

Failure is only the opportunity to begin again, this time more intelligently. Henry Ford

The difference between stupidity and genius is that genius has its limits.

Albert Einstein

Organizations



Gen. Stanley McChrystal, "Team of Teams"

(de)Code of Ethics

- 1. Public interest
- 2. Know your limits
- 3. Don't fake it
- 4. Conflict of interest
- 5. Respect your value
- 6. Lifelong learning
- 7. Do unto others...
- 8. Stand your ground
- 9. Be brave
- 10. Spread the word

Professional = Ethical

- Awareness of your own skill & behaviour.
- f(ethical & technical competency).
- Commitment and renewal.
- Innovation in unpredictable situations.

Innovation...

Where does it come from:

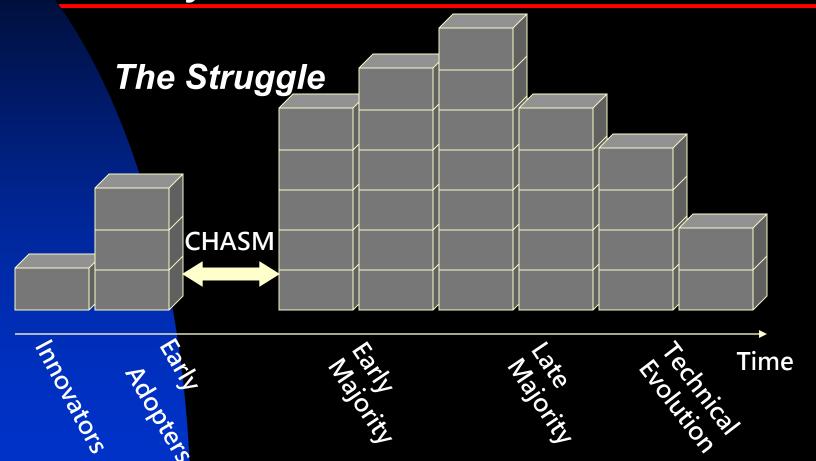
1. Good ideas?

2. Good people?

Concept to Path to ...

- Issues are often driven by nontechnical considerations.
- Our role: to ensure iterations balance business & technology.
- Knowledge + Independence to see opportunities in The Struggle.

Technology Adoption Life Cycle



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Geoffrey Moore, "Crossing the Chasm"

<u>Fundamentals</u>

- The start point defines the end point.
- Requires critical thinking at each stage.
- Where is the social demand and what should it be?
- Communications are not a soft skill.
- Creativity is not a soft skill.

Innovation

"Ideas occur when random thoughts churn until they coalesce. They come from different places for different reasons..."

Tim Berners-Lee

- Technology without creativity is barren.
 Walter Isaacson on Da Vinci
 - This is your role.

Visioneering – Trap vs. Truth

- What is the narrative?
- What can innovation mean?
- Beware of the "disruptive" lure.

 Every global opportunity & challenge has an engineering component.

Momentum

- Execution = f (purpose, team, plan, \$, timing)
- Today's innovations are dominated by tech.
 - Idealab (CA) started 100 cos. in 20yrs.
 - Spent <\$10m</p>
- Execution = f (purpose, team, plan, \$, timing, intensity)
- Timing = f(creativity)

Metrics for Practice

- 1. Why, and what, are you doing? [QUANTIFY]
- Where are the problems that match your capabilities + culture? [STRENGTH]
- 3. Is there a need for innovation or efficiency?
- What is the culture of the business?
- 5. What is the culture of the industry?
- 6. Where do your ideas come from today? [CULTURE]
- 7. How much time is set aside for staff to find new ideas, to connect and get perspective? [LEARN]
- Is objective/excellence hampered by silos vs. team? [CO-OP, CAPSTONE]

Money

- Money does not motivate for long. It is the destination but never the purpose.
- Motivation comes from work with purpose not passion.
- The <u>art</u> of the task elevates everything around it (you), money follows.

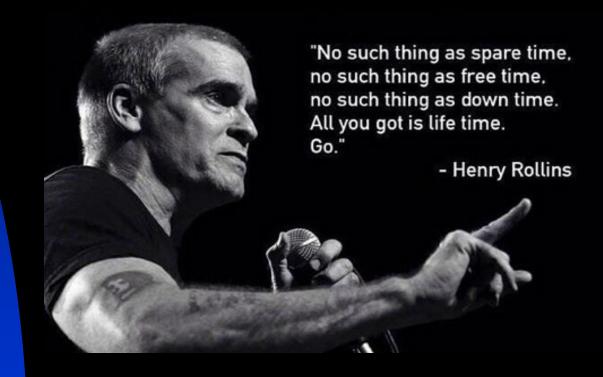
Summary

- 1. Look for emerging trends in industry, culture & social norms. See the arts as a porthole.
- 2. Understand government and its role.
- 3. Understand business drives technology.
- 4. Think/act on global demand now.
- 5. Think/act on global demand 10yrs from now.
- 6. Embrace what is hard. All great ideas are built on the shoulders of giants.
- 7. There is no right company, only opportunity.
- 8. You can't be pragmatic without optimism.

Final Thought

Don't get good at something you don't want to do. - Anonymous

Final, Final Thought



Thank You

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