

Hypotheses and Processes

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The Real Challenges of the Knowledge Era

- ~~• All facets of business are changing at an accelerating rate~~
- ~~• Competition is increasing~~
- Business is becoming more global
- Composition of the workforce is changing, as are its values/expectations
- ~~• Increasing shortages of resources (raw and talent)~~

The Real Challenges of the Knowledge Era

- Industrial economy → knowledge economy
- ~~Market/economic conditions are very unstable~~
- Stakeholders are making greater demands
 - More like, short-term vs. long-term!
- Business environment is becoming more complex

The Role of Time

- Time is for using, doing, creating
- Time is about *results*
 - *So just get it done*
- The hardest part is engaging time (i.e., getting started)

- Rethink:
 - Time spent in class
 - Time spent at work
 - Time spent playing

- Productivity
 - Getting the output you want with the least possible input!

- Be goal-oriented



Innovation: Applied Creativity


The Four P's of Innovation

- PRODUCT – needs the three P's below
- POSSIBILITIES – culture, opportunities
- PROCESSES – techniques, technology
- PERSONAL/GROUP



4 Types of Innovation

- Product
- Process
- Marketing
- Management




The Creative Problem-Solving (CPS) Process

CPS Steps

- Environmental analysis
 - What is the state of the world/domain?
- Problem recognition
 - Is everything working properly? Why not?
- Problem identification
 - What is the real problem? (As opposed to symptoms)
- Making assumptions
 - Hypothesize!

CPS Steps

- Generating alternatives
 - Laying out possible mechanisms for testing hypotheses
 - Considering all possible ways of getting to a solution
 - Creativity techniques here!
- Evaluation and choice
 - Which alternatives fit our parameters?
- Implementation
 - Get it done and overcome obstacles
- Control
 - Edit solutions as needed
- (Rinse and repeat)



Hypothesizing Disruption

Disruptive Hypotheses

- Ask wild questions
- Figure out what you want to disrupt
 - Keep it at high level (e.g., want fast ways to get from Point A to Point B – not fast trains)
- Consider the clichés of the domain
 - E.g., video games are sedentary → Wii

Dealing with Clichés

Find clichés by analyzing field leaders and competition – what are the patterns among these products/services, pricing/business model, and company-client relations?

- Invert – turn the cliché on its head
- Deny – doesn't have to be this way
- Scale – alter the numbers

Getting Disruptive

- Most companies innovate by adding new features that are better than the old one
 - E.g., computer operating systems, web browsers
 - Is it better to have more features?
- Innovate or die
 - Great, but then why don't companies innovate?
- “Think what no one else is thinking. Do what no one else is doing.”
 - In that case, how are they going to understand what you are thinking?
 - *Create the market* => DISRUPT!


Five Stages of Disruptive Thinking

- Craft a disruptive hypothesis
- Define a disruptive market opportunity
 - Note that it doesn't say "find"
- Generate ideas
- Shape ideas into a solution
- Make a pitch that brings in stakeholders

- WHAT IF?

Ideas, inventions, and foundations

- Ideas are free, and valuable!
- Don't predict the future, invent the future
 - Creating your own job
 - Doing things your own way
 - Setting precedents
- Go back to the foundation of the construct
 - What is it?
 - Why do we do/have/use this?
 - Who does/has/uses this?
 - Where do people do/have/use this?
 - When do people do/have/use this?
 - How do people do/have/use this?



Pain Points and the Stress of the World

What do you solve?