



**MENDOZA COLLEGE  
OF BUSINESS**

**Nonprofit Executive Programs**

**Foresight & Innovation**

May 26-27, 2016

Hilton San Diego Bayfront  
1 Park Boulevard  
San Diego, CA 92101

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***DESIGN THINKING:  
ENVISIONING FUTURE NEEDS***

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***Empathy...***

- **Seeing** the world through the *Eyes* of others
- **Understanding** the world through their *Experiences*
- **Feeling** the world through their *Emotions*



**Tim Brown**  
President/CEO of IDEO  
Change By Design



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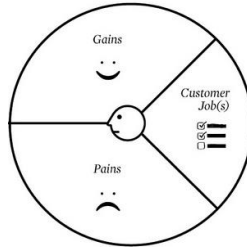
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## Empathy Mapping: Understanding the User

- What jobs are they seeking to accomplish?
- What problems or pains do they experience?
- What are their aspirations?




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## Envisioning Future Needs...

...Requires **Empathy** With The **Future User**

"You've gotta start at the user experience  
and work back to the technology"

Steve Jobs

"... they'd have said a 'faster horse'"

Henry Ford




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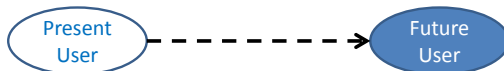
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## Gaining Empathy with the Future User



- |                        |                  |                         |
|------------------------|------------------|-------------------------|
| • Present Preferences  | Will evolve to → | • Future Preferences    |
| • Present Technologies | Will evolve to → | • Enabling Technologies |
| • Present Constraints  | Will evolve to → | • Future Constraints    |

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### Defining the Emerging S-Curve

Expiration

Emergence

Imagining Plausible Paradigm Shifts



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### Future User Point of View (POV)

Present User



Jobs  
Pains  
Gains

Future User



Similarities

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Differences

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### Future User Workshop

Present User



Future User



- Describe your Future User
- Build Empathy
- Compare and Contrast w Present User



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*Let's Take a Break*

*15 Minutes...*

*When we return:*

- *Strategic Framing*



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*Empathy Mapping Exercise*

- Future User Debrief



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*How Might We?*



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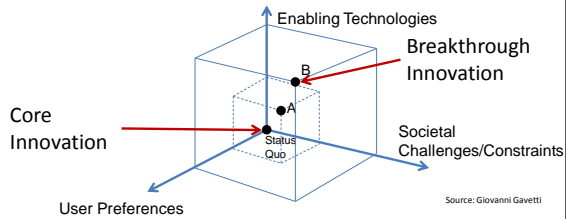
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## Stretch Your Cognitive Proximity



"The act of creation is singular, ...  
...and the result is something fresh and strange."  
Peter Thiel, *Zero to One*



## "Fresh and Strange"...

Understanding the design challenge

- Emerging needs?
- Paradigm Shifts?
- *How Might We?*

## A Bit of Perspective

Risk vs. Opportunity



VS.



## Design Challenge Workshop

Emerging Need

How Might We?



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## After Lunch...

- Future Telling
- Mobilizing



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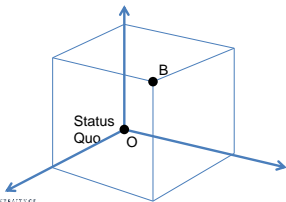
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## FutureTelling: Visualizing Insights

- Storyboarding
- Headlines From the Future
- Artifacts From The Future



Jim Dator, Futurist



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## Future Telling - Storyboarding

- 6-8 Frames
- What is the need / problem?
- Who is the Super Hero?
- What is the outcome?



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## Future Telling - Storyboarding

activist



1. Taylor is a middle-aged woman who works for a company that makes a lot of money.



2. She wants to know what she can do to help the world, but she is not sure if she can.



3. Taylor decides to start a blog and write about the world, and she is very good at it.



4. She has the other activists to help her.



5. They are all very good at what they do, and they are all very smart.



6. Taylor is a very good person, and she is very smart, and she is very good at what she does.



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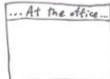
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## Future Telling - Storyboarding

Rectangle



Setting



Stick Figure



Speech



Thought



Tools



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## Future Telling - Headlines



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## Artifacts From The Future



Source:  
Institute for the Future

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## Artifacts From The Future



COURTESY: INSTITUTE FOR THE FUTURE

### Glacier water

**The idea:** A new source for bottled H<sub>2</sub>O.

**The trend:** The world is getting thirsty for fresh drinking water as rivers run dry. At the same time, global warming is melting the ice caps. Why not turn that bug into a feature?

**Technology available?** Yes. Alaska Glacier Refreshments is already marketing water that was stored in the Eklutna Glacier for 23,000 years - but it doesn't come direct.

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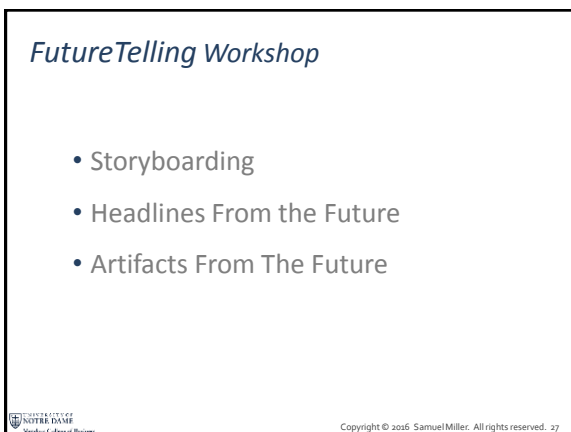
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## Let's Take a Break

# 15 Minutes...

When we return:

- FutureTelling Report Out
- Mobilizing

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## MOBILIZING

*"Long range planning does not deal with future decisions, but with the future of present decisions."*

—Peter Drucker

- Roadmapping
- Becoming a Learning Company
- Wind Tunnel Testing the Wheelhouse

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## Roadmapping

- Where are the interesting destinations?
- Where do we intend to go?

*If you don't know where you're going,  
any road will take you there.*



-- George Harrison

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## Opportunity Spaces

Probably, Approximately  
Correct

**WHAT?!**

Empowers:

- Learning
- Evolution

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## Mobilizing for Cognitive Distance

*"Innovation Intent"*

- *Clearly Articulated*
- *Well-Aligned*
- *Measurable*
- *"Oxygen"*

BERKSHIRE  
HATHAWAY



Google

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## Defining Signposts



Provide clarity on early signals  
of emerging scenarios

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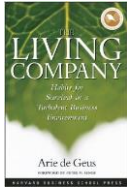
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## Becoming a “Learning Organization”

*“Learning is the only sustainable strategy in an environment of rapid innovation and change”*

Arie de Geus




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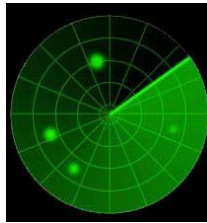
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## Scanning For Signals of Change

*“... be surprised a little at a time,  
rather than all at once.”*

**WEAK SIGNALS** of change

- Small, local disruption
- Have potential to grow in scale or scope
- Seek “Diamonds in the Rough”




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## Market Transitions



John Chambers, CEO, Cisco

**“Market transitions** are the precursors to market disruptions, and in many cases, transitions cause the disruptions.”

**“Disruptions** occur as the market responds to a transition with a game-changing innovation.”

“Cisco Sees the Future, An Interview with John Chambers”, HBR 2008

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## Market Transitions

*"You don't know when the transition period will start. The idea is to understand that it will...and become prepared for it."*



~Peter Bishop  
University of Houston



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## Collective Intelligence

Unleash the scanning and ideation horsepower of the entire enterprise...



Think "Wikipedia" for your foresight process...

[Requires a clear Roadmap]



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## Modes of Environmental Scanning

### Scouting (Radar)



- Ongoing, continuous
- Broad scope

### Deep Dives (Research)

- Project-specific
- Focused scope (i.e. crisply framed)



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## Scenarios and Strategic Leadership



"Give me a one-handed economist..."

Harry Truman

- How can leaders use scenarios without abdicating leadership?



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## Scenarios and Strategic Leadership

*Steer a course between the false certainty of a single forecast and the confused paralysis that often strikes in trouble times.*

*Set forth a goal that is "Robust under different Scenarios"*



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## Wind Tunnel Testing the Wheelhouse



What gaps exist in serving the emerging opportunities?

What vulnerabilities exist?



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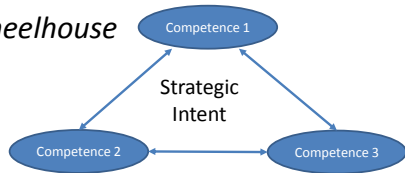
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## Wind Tunnel Testing the Wheelhouse

### Wheelhouse



- Emerging/Fading Competencies?
- Emerging/Fading Markets?
- Business Model Innovations? (*Fit*)

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## Gaining Buy-In & Traction

- A technique: Search Conferences

1. Assess the System's Current Environment
2. Design the Ideal State of the System
3. Identify Obstacles and Opportunities to Reach the Desired State
4. Select and Design Courses of Action




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## One Final Quote...

*Discovery "consists of seeing what everyone else has seen and thinking what no one has thought."*

Albert von Szent-Gyorgyi (1893 – 1986)  
Nobel Prize in Physiology (Medicine)

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## Recommended Readings

- [Blue Ocean Strategy](#) by W. Chan Kim & Renee Mauborgne
- [Art of the Long View](#) by Peter Schwartz
- [Thinking About The Future](#) by Andy Hines and Peter Bishop
- [FutureThink](#) by Edie Weiner and Arnold Brown
- [The Black Swan](#) by Nassim Nicholas Taleb
- [Get There Early](#) by Bob Johansen
- [The Innovator's Dilemma](#) by Clayton Christensen
- [The Living Company](#) by Arie de Geus
- [Zero to One](#) by Peter Thiel
- [Where Good Ideas Come From](#) by Steven Johnson

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## Thank You and Good Luck

- Sam Miller
- [Miller.549@nd.edu](mailto:Miller.549@nd.edu)
- 574-631-6732

**GIGOT**  
CENTER FOR ENTREPRENEURSHIP




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