The Future of Campus Experiences

The Art & Science of Looking at the Future

Garry Golden
Forward Elements

April 4, 2019

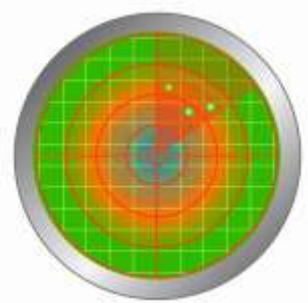
Start → *End*

Foresight 101
Era-based Change

IMAGINE
BEACH 2030

Eat

Generating Ideas



Scanning for Signals

Wrap up
Next Steps

1) Why you selected this quote!

2) Describe the first (or memorable) time you were asked to *think about the future*

What? Why? How?

More or Less Change Ahead?

Last ten years

2009 – 2019

Next ten years

2020-2030

Let’s talk about our ability to have …

- ❑ Hindsight
- ❑ Insight
- ❑ **Foresight**

Defining Foresight

How would you describe foresight to a colleague or student?

What do you do? Outputs? Outcomes?

… the ability to anticipate and lead change

… an organized and systematic process to reduce the uncertainty of the future

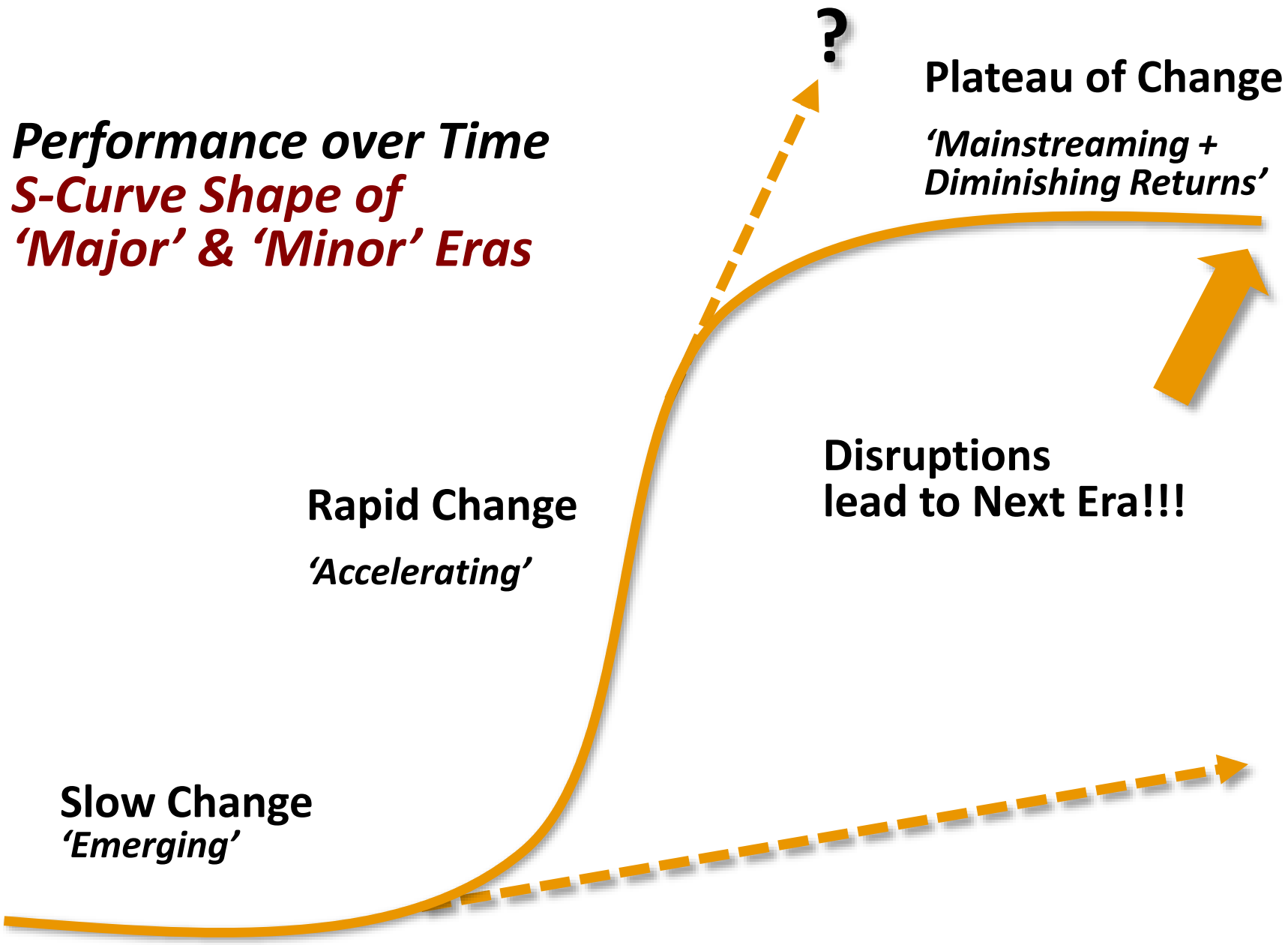
… the ability to create and sustain a variety of high-quality forward views and to apply the emerging insights in organizationally useful ways (APF)

… the ability to create and maintain high quality, coherent and functional forward views

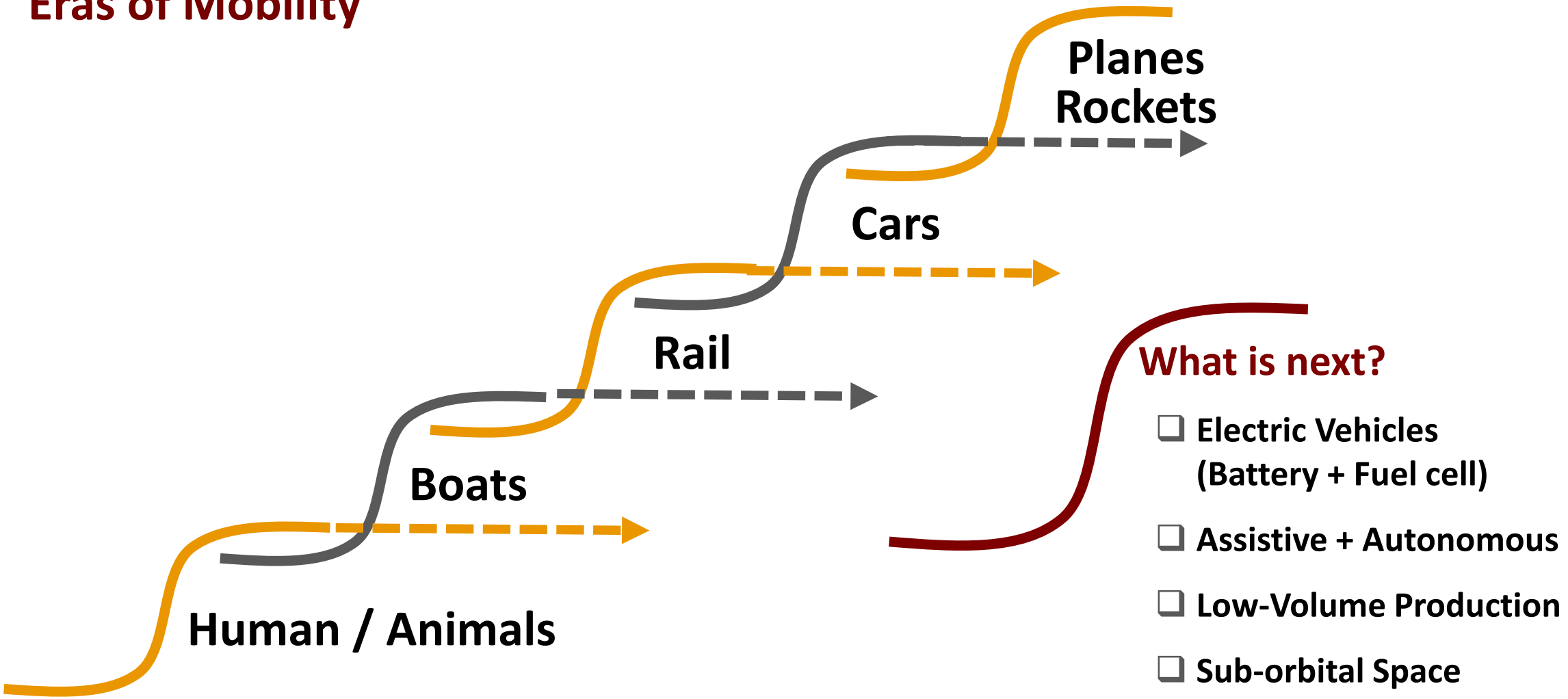
… a universal human capacity which allows people to think ahead and consider, model, create, respond to future eventualities (Slaughter)

Foresight = Front end of Innovation

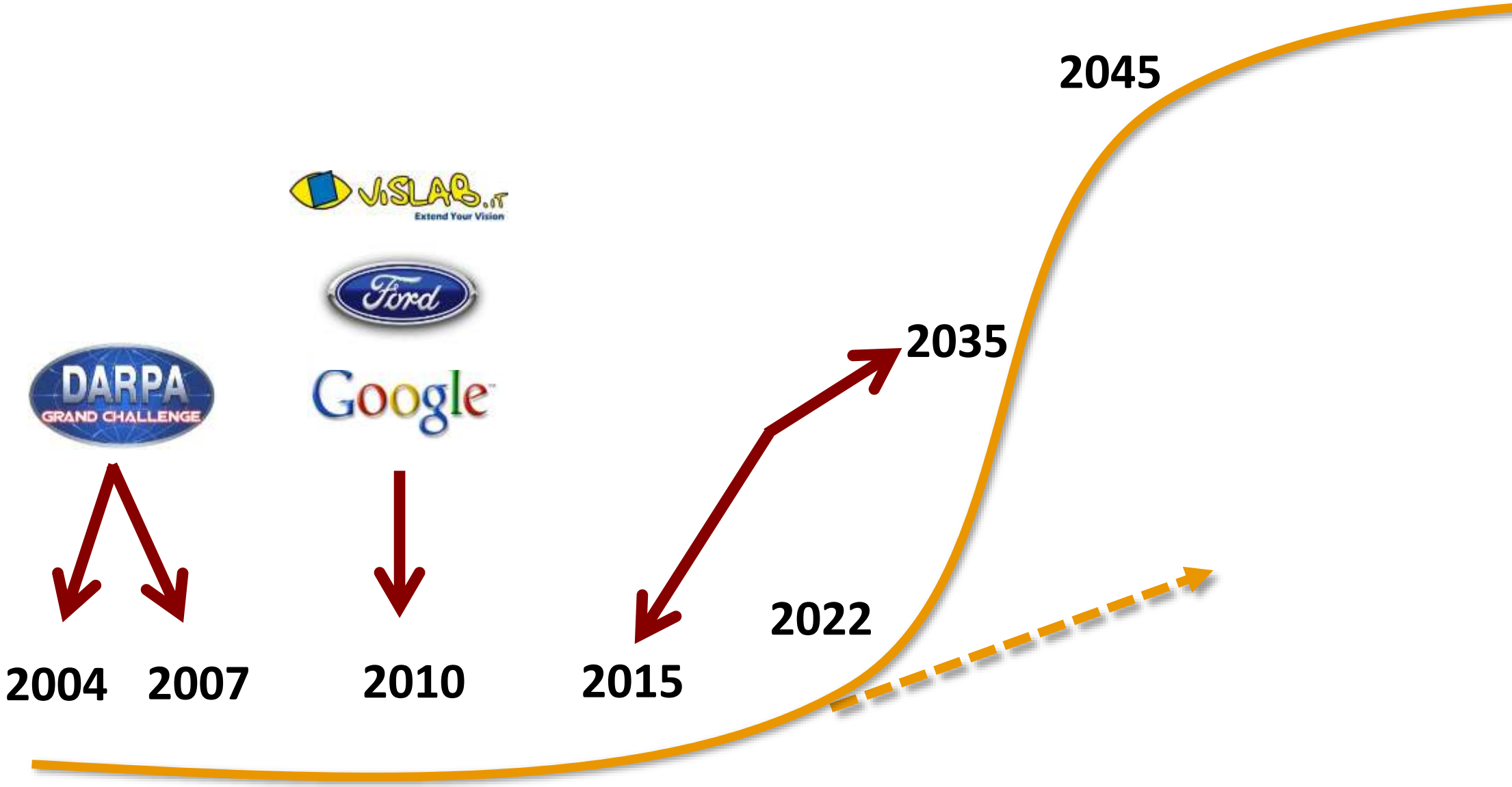
Era-based Dynamics of Change


Performance over Time
S-Curve Shape of
'Major' & 'Minor' Eras
?
Plateau of Change
'Mainstreaming +
Diminishing Returns'
Disruptions
lead to Next Era!!!
Rapid Change
'Accelerating'
Slow Change
'Emerging'

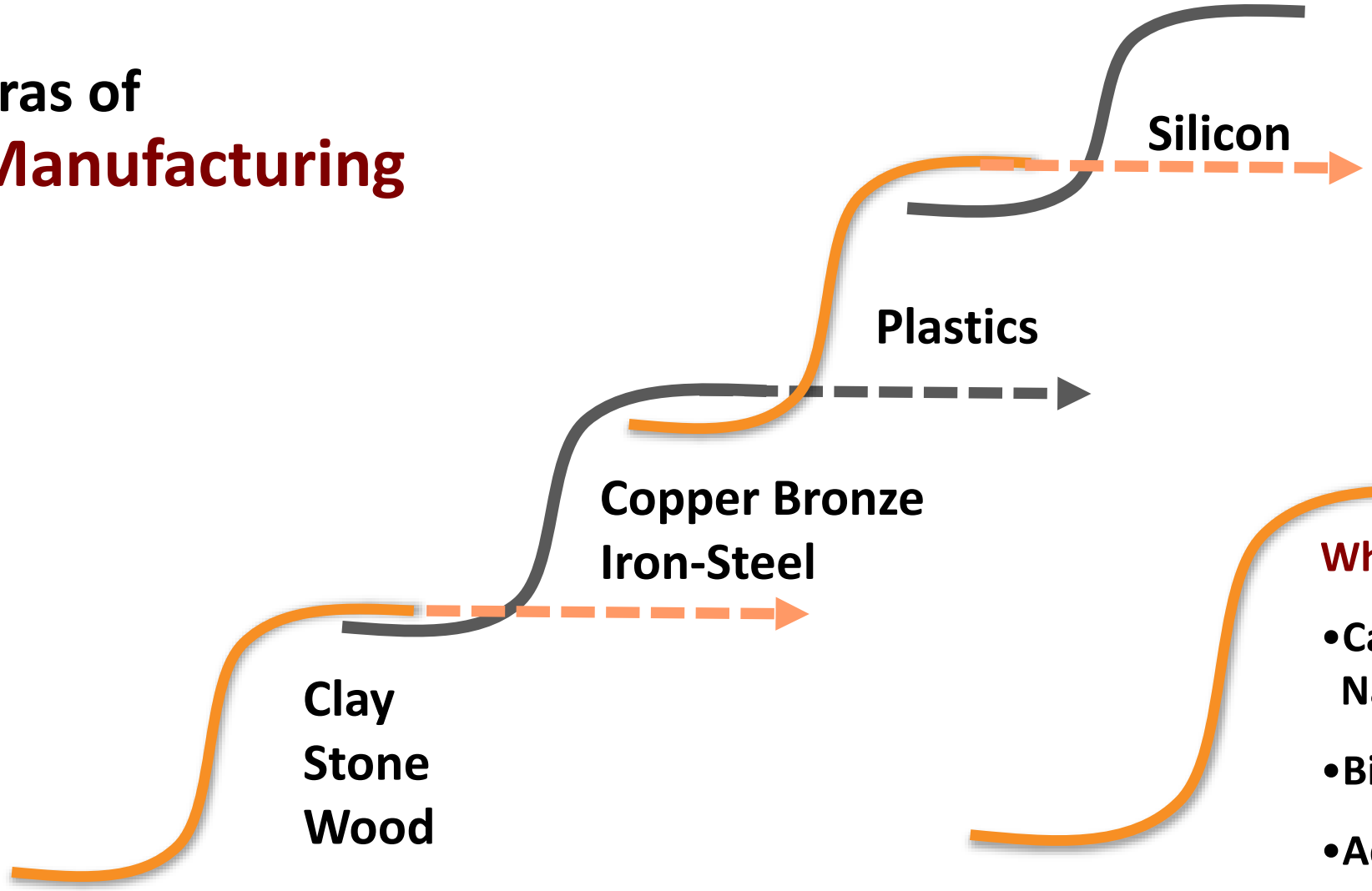
Eras of Mobility



Tapping Your Inner Futurist: Monitoring Signals of Change



Eras of Manufacturing

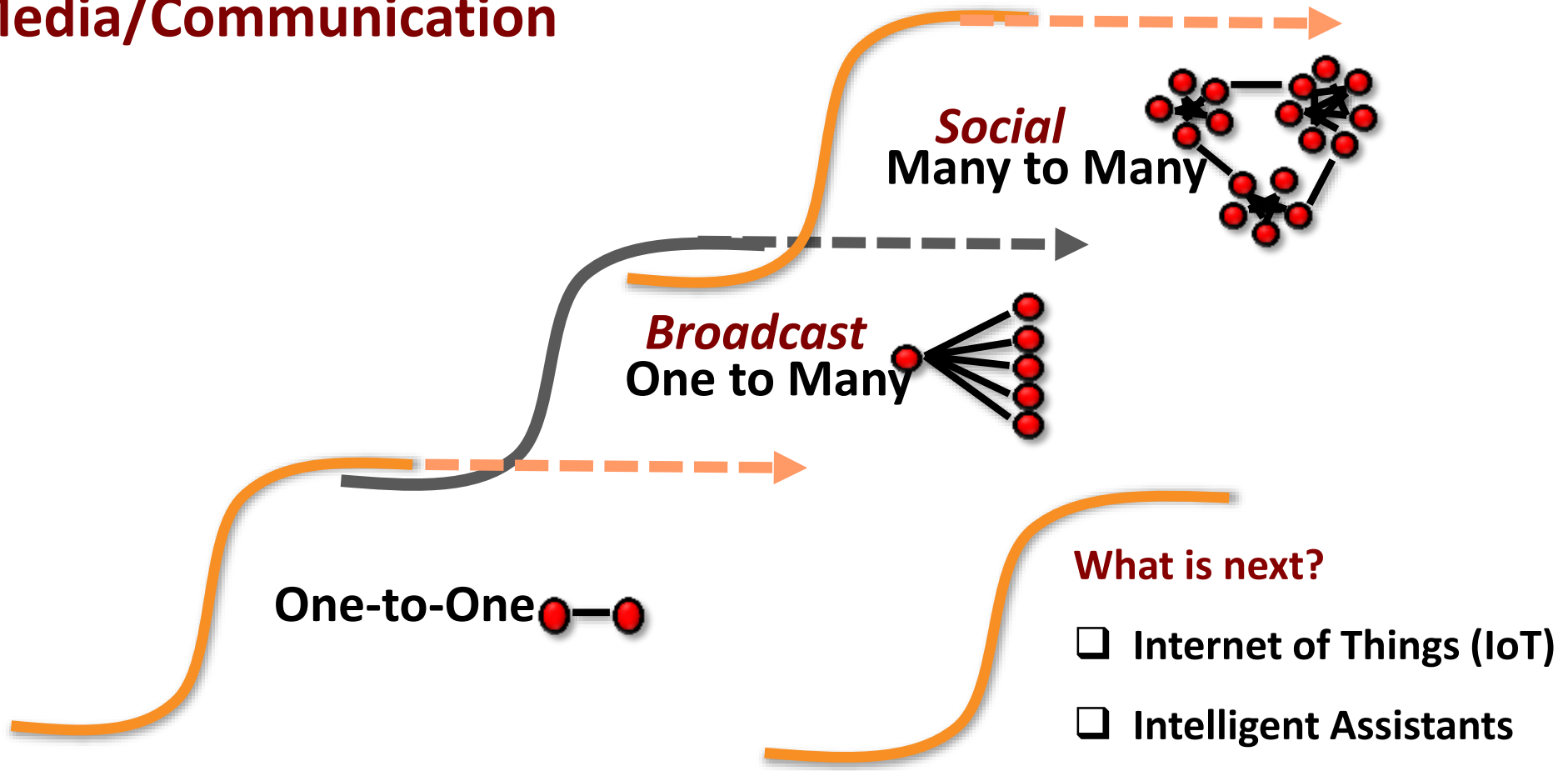


What is next?

- Carbon-based Nanoscale Materials
- Biomaterials
- Additive (3D) Printing

Eras of

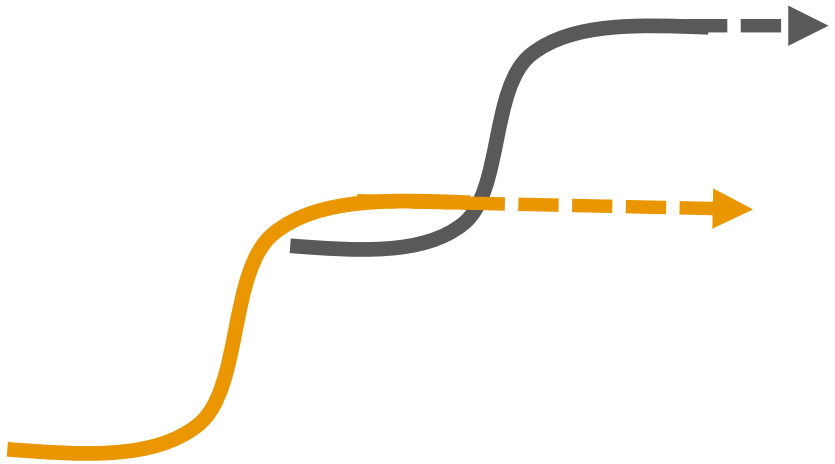
Media/Communication



What is next?

- ❑ Internet of Things (IoT)
- ❑ Intelligent Assistants

How will societies navigate S-curve transitions for…?



Education / Learning

Life stage to Lifelong; Online to AI-mediated

Healthcare / Wellness

Population Health; Outcomes-based Care; Genomics

Agriculture / Farming / Food

Precision Ag; Automation; Urban; Bio-; Small scale farmer

Transportation/Mobility

EVs, AVs, TNCs; Micro-mobility; Empowered Cities

Retail

Online; Hybrid Brick+Mortar; Localization

Media / Communication

Authentication/Verification; AI; IoT; Agents/Assistants

Entertainment

AI; Mixed Reality; Wellness Impact

2007

2017

2027

?

?

?

?

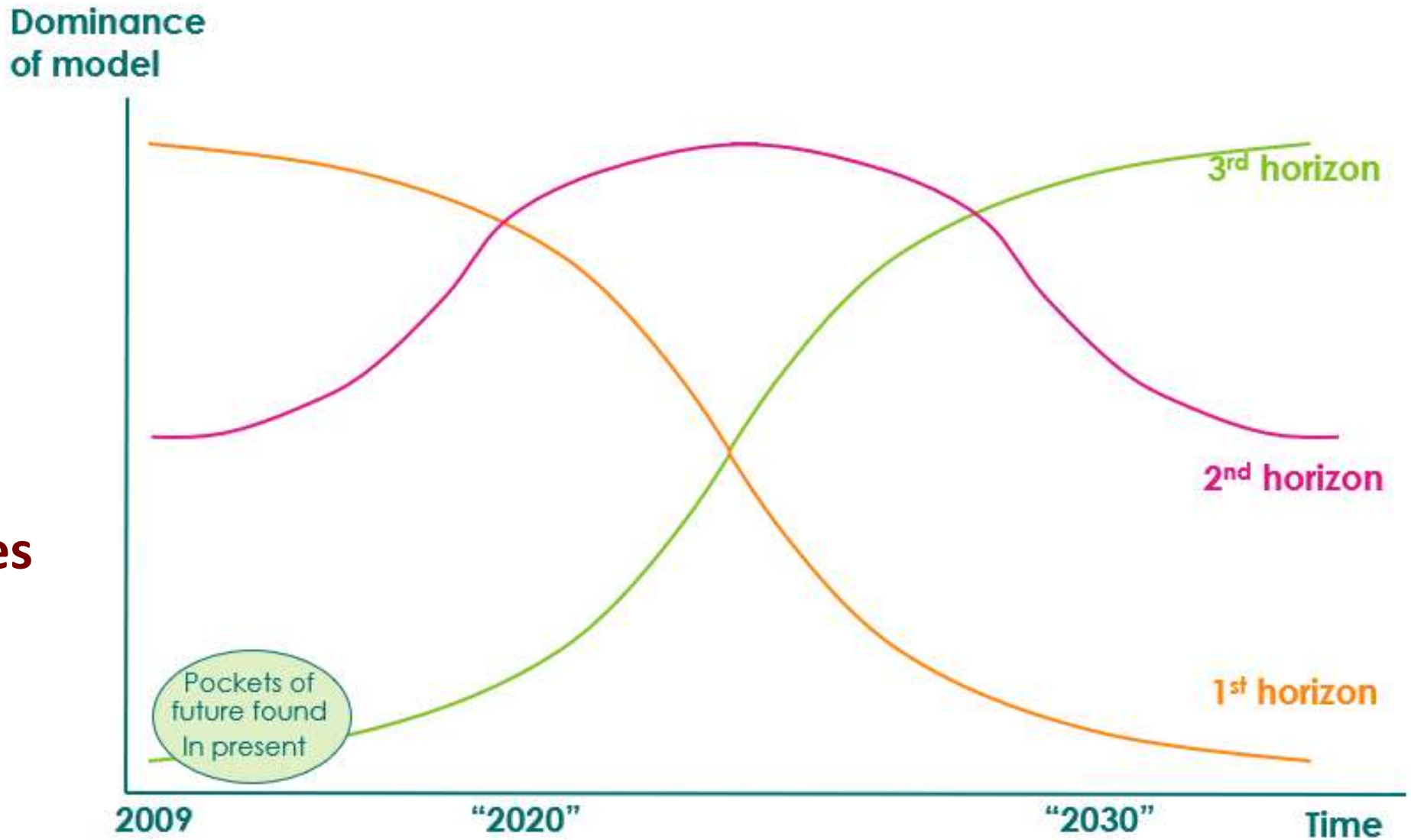
?

?

?

"Three Horizons" Model of Change (Bill Sharpe)

The Three Horizons of Library Experiences



Graphic courtesy of Andrew Curry, The Futures Company

Worksheet

Era-based Analysis

Worksheet: Era-bases Analysis of Change	Current Era:_____	Emerging Era:_____
Vision & Mission - Who you are; Who you serve & how. **Problems (JTBD) & Solutions** - Customer *jobs to be done*.		
Operational Market Dynamics - Describe types of conditions. - Describe types of partners. - Describe types of acquisitions. - Regulatory landscape: Constraints or protective policies? **Service Cycle** - What do you provide? - How do you (*go to market)*? - How fast or slow do clients demands change? - What is considered innovative?		
Minor Eras - Were there small but significant platform transitions within the company or industry? **Disruptive Elements** - What elements challenge this era, and lead to changes in the company? - Are there constraints or 'limits to growth' within this era?		

Enterprise Version

Worksheet: Era-based Analysis of Change

	Current Era:_____	Emerging Era:_____
Vision & Mission - Who you are; Who you serve & how.		
Dynamics & Conditions **- Dynamics of student (learner) experience** **- Dynamics of an instructor experience** - Dynamics of staff experience - Dynamics of campus life - Dynamics of alumni connections - Describe partnerships - Regulatory **/ Policy** landscape: Constraints or protective policies? **Programs, Products & Service** - What do you provide? - How do you *launch new offerings*? - How fast or slow do internal/external demands (expectations) change? - What is considered innovative?		
Minor Eras - Were there small but significant transitions within the library, university or campus experience? **Disruptive Elements** - What elements challenge this era, and lead to changes in the company? - Are there constraints or 'limits to growth' within this era?		

Applying Foresight

- ❑ Work with colleagues in generating PoV on era-based transitions for the next decade of campus experiences
- ❑ **Surface three (3) assumptions** that might be discarded across the *S-curve* era transition
- ❑ **Identify three (3) *hunting ground*** opportunities for future success or organizational impact

Worksheet: Era-based Analysis of Change		
	Current Era:_____	Emerging Era:_____
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Worksheet: Era-based Analysis of Change

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Minor Eras - Were there small but significant transitions within the library, university or campus experience? **Disruptive Elements** - What elements challenge this era, and lead to changes in the company? - Are there constraints or 'limits to growth' within this era?	Stacks to Social Study Spaces Shift to One Search Database	

Write three (3) assumptions about the emerging era of campus and/or library experiences

The Future is Accepting Trade-offs

Dr. Tanya Harrison and 9 others follow

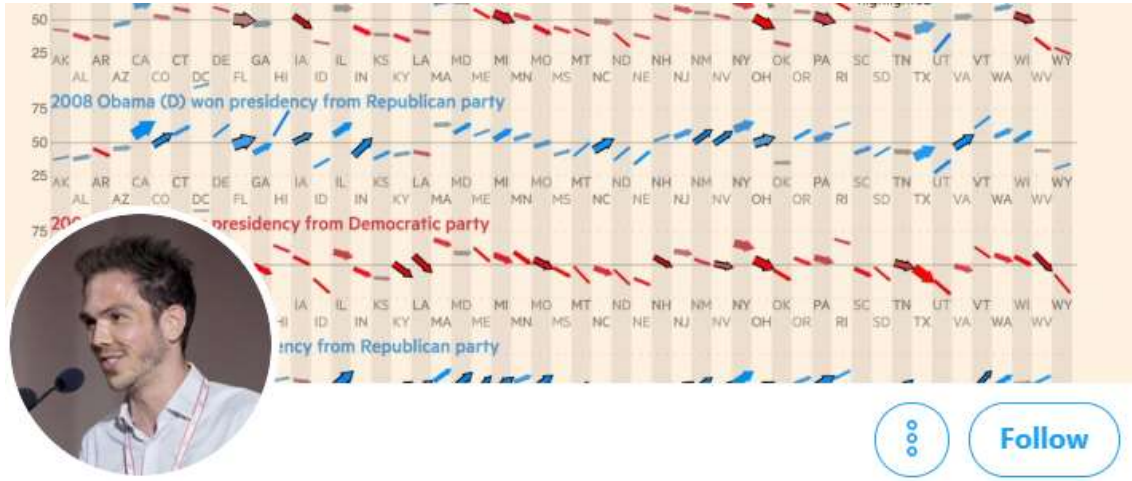
John Burn-Murdoch @jburnmurdoch · 10h

Google sent the @FT a cake to congratulate us on reaching 1m paying subscribers.

It's quite plain and the wrong shade of pink. Also doesn't really make up for the destruction of the news industry's revenue streams.

But thanks!

38 145 782



Follow

John Burn-Murdoch

@jburnmurdoch

Stories, stats & scatterplots for @FinancialTimes | Currently working on bias in AI | john.burn-murdoch@ft.com | #dataviz

Doncaster London ft.com/ibm Joined June 2009

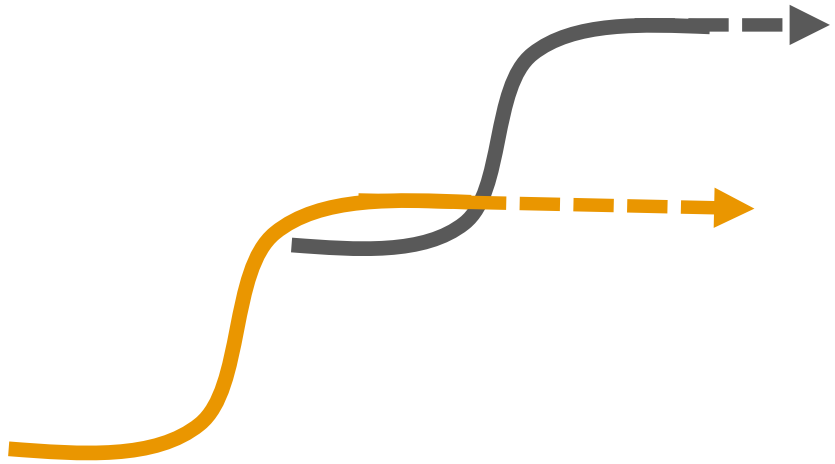
3,469 Following **28K** Followers

Followed by Civil, Blazegraph, and 70 others you follow

Tweets Tweets & replies Media Likes

What excites you about this new era?

What does not excited you?



Fundamental Stages + Activities of Foresight

Investigate
Identifying
& Monitoring Change

- ❑ Horizon Scanning
- ❑ Emerging Issues Analysis
- ❑ Indicator Analysis
  (Leading vs Lagging)

Imagine
Exploring Implications

- ❑ Forecasts
  (Trend Extrapolation)
- ❑ Scenarios
  (Alternative Assumptions)

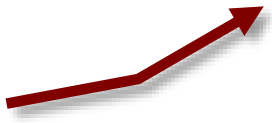
Inspire
Communicating the
Need for Change

- ❑ Visioning & Backcasting
- ❑ Planning, Goal Setting & Roadmapping
- ❑ Transformation Management

Wendy Schultz/Garry Golden

Foresight 101: Mechanisms of Change

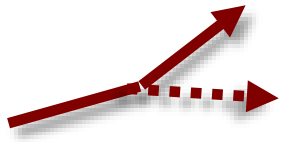
Trends
(Continuities)



Plausible Future

Forecasts

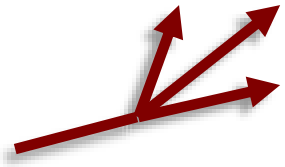
Events
(Discontinuities)



Possible Futures

Scenarios

Choices
(Discontinuities)

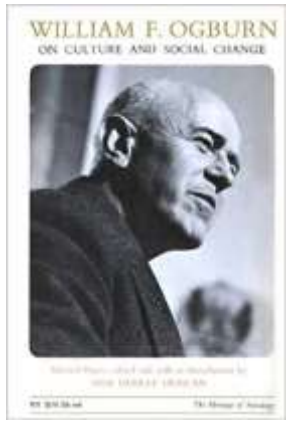


Preferred Future

Visions

Popularized by Peter Bishop

History and Evolution of Foresight



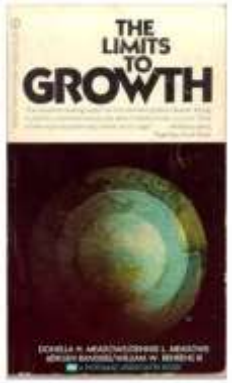
William Ogburn (1930s)

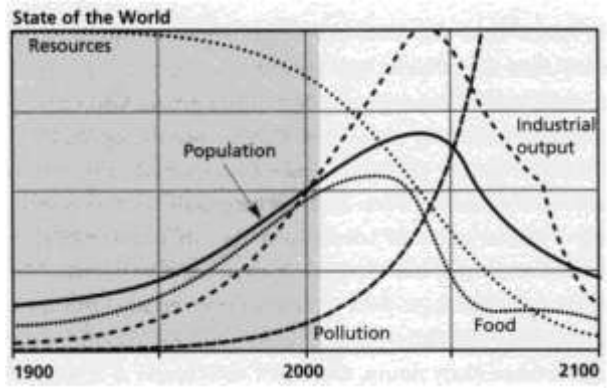
Social Change
(Society + Technology)

RAND CORPORATION
HUDSON INSTITUTE
The CENTER for GLOBAL PROSPERITY

Herman Kahn ('50/60s)
RAND / Hudson Institute

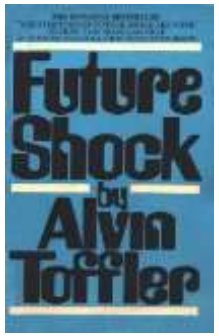
Scenario-based Decisions

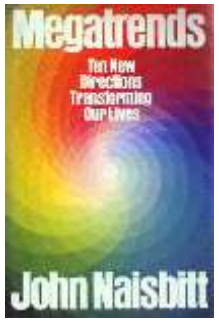




Club of Rome / *Limits to Growth (70s)*

Systems-based Simulations

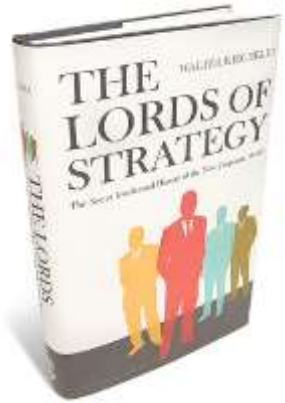




BCG
The Boston Consulting Group

MONITOR

McKinsey&Company



('80-Present)

Rise of Strategy Industry

2010s + Beyond

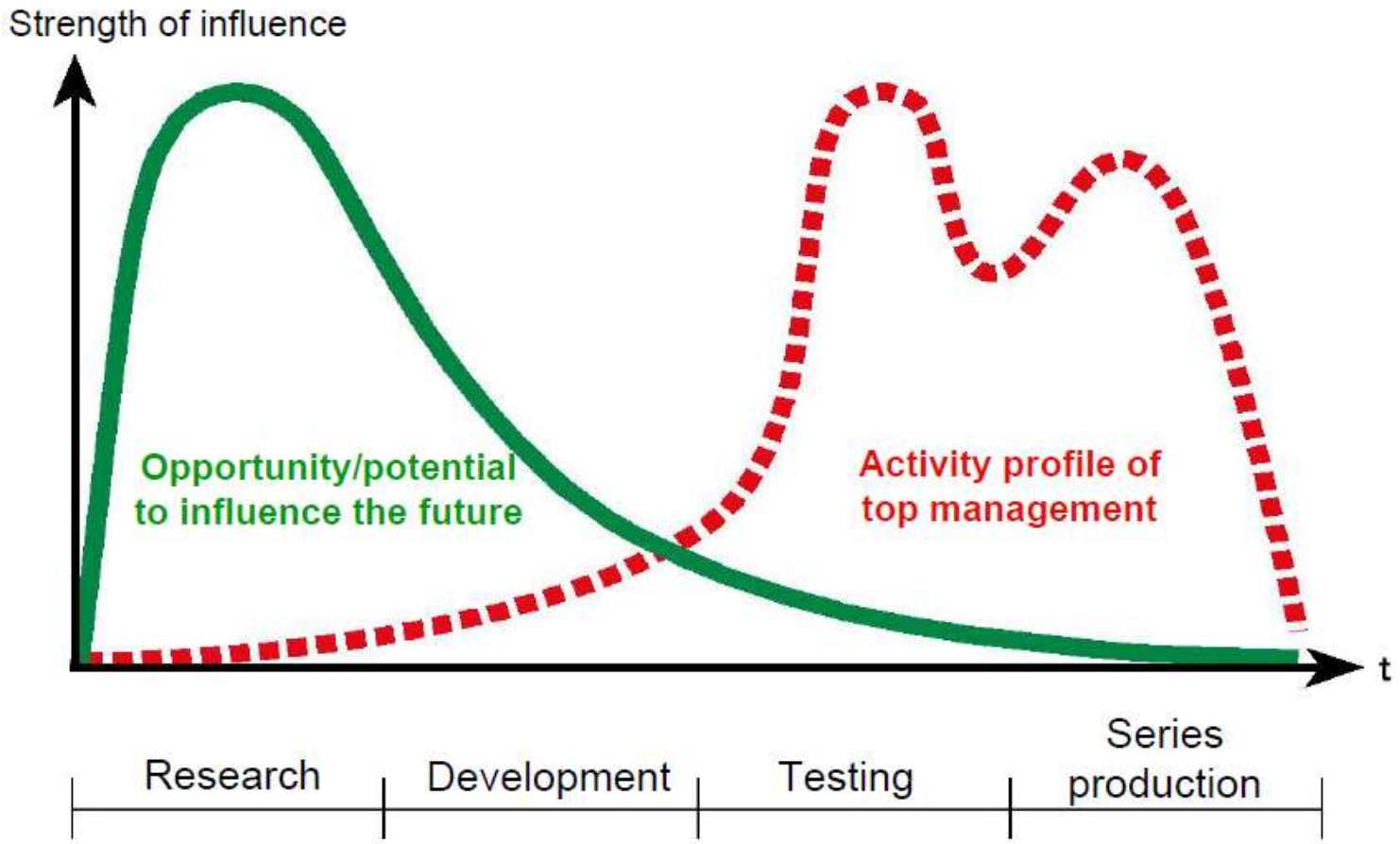
Era of Integration, Inclusivity & Intervention?

Expanding Leadership Capabilities

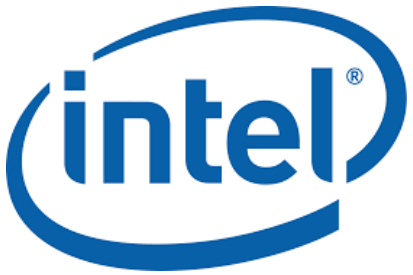
DAIMLER

Why Corporate Foresight?

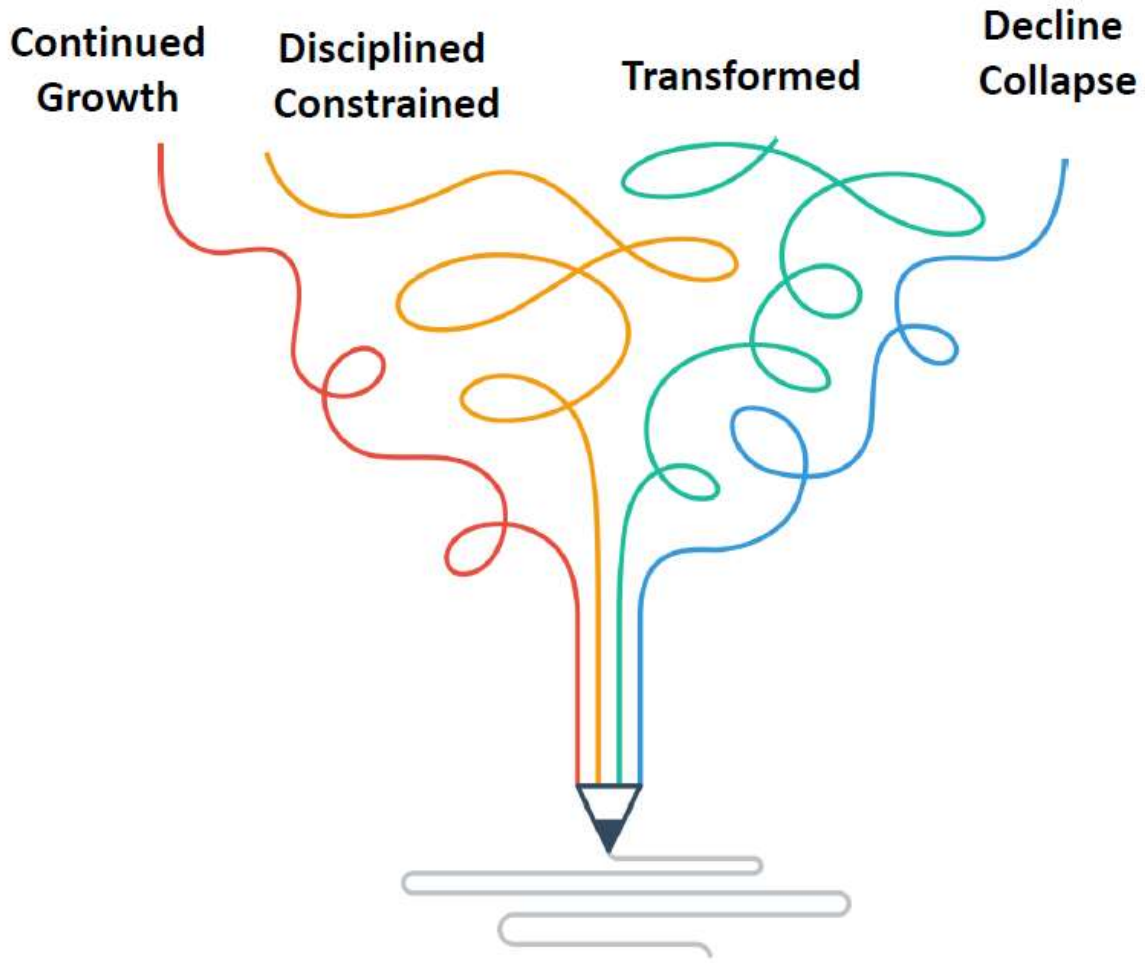
Knowledge about the future and the reach of decisions



Organizations with Futurists or Foresight Practices



Four Futures



Four Futures Thinking

?

Continued Growth

Peabody ENERGY

Microsoft

Disciplined Constrained

IBM

Transformed

BlackBerry

NOKIA

Decline Collapse

Popularized by Jim Dator

Leadership Challenge: Write Your Four Futures

Continued Growth

Disciplined Constrained

Transformed

Decline Collapse

Defining Innovation

What do you do? Outputs? Outcomes?

Defining Innovation

The ability to generate **new and useful ideas**
that bring **value** to your *customers* and/or organization

Creative Mindset

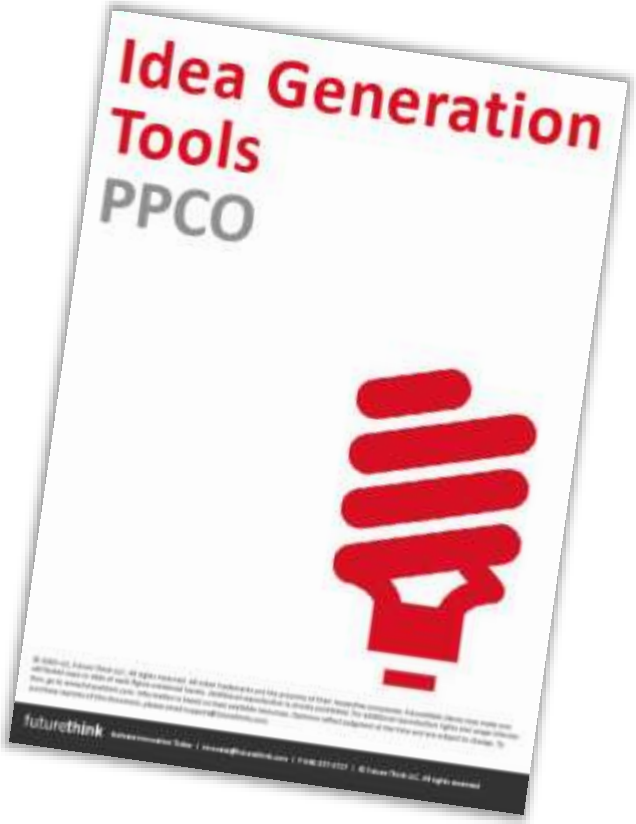
PPCO

Pluses:
What is good about the idea as presented (no changes)?

Potentials:
What future benefits might result from this idea?
What else could this idea do? *"We could…"*

Concerns:
Phrase as open-ended questions.
"How might we…?" "What are all the ways to…?"
"How to…?"

Overcome:
Brainstorm ideas to overcome your concerns.



The PPCO technique was developed in the early 1980's by Diane Foucar-Szocki, Bill Shepard and Roger Firestien.

Slides Removed

Benefits of a PPCO Mindset

1. Keeps the good alive.

2. Steers to practical thinking.

3. Creates a safe environment.

4. Builds teamwork.

5. Saves time.

IMAGINE BEACH 2030

Draft: University Strategic Priorities for 2030

Beach 2030 – Library Themes

	Embrace Diversity as an Asset	Connect Learning to Impact	Expand Access to Learning	Amplify Research & Creative Activities	Be a Leader for Learning, Working and Playing	Design Culture of Campus Collaboration	Become Financially Resilient
I-Space / Services for 3D Printing							
Library Instruction / Smart Classrooms							
Digitized & Electronic Materials							
Universal Design; Disability Access; Alumni Access (Physical/Virtual)							
Increase Study Space							
Increase Parking Space (Mobility Solutions)							
Physical Library Operational Hours							

Our Job: Generate Ideas at Intersection of…

IMAGINE
BEACH 2030

Beach 2030 – Library Themes

1. I-Space / 3D Services
2. Library Instruction / Smart Classroom
3. Digitized & Electronic Materials
4. Universal Design / Access
5. Increased Study Space
6. Increased Parking Space (Mobility Solutions)
7. Physical Library Hours

Draft: University Strategic Priorities for 2030

1. Embrace Diversity as an Asset
2. Connect Learning to Impact
3. Expand Access to Learning
4. Amplify Research & Creative Activities
5. Be a Leader for Learning, Working and Playing
6. Design Culture of Campus Collaboration
7. Become Financially Resilient

Seeing Bigger Picture…

Future Role of Place (Space)

Future of Learning

Changing Role of Place (Space)

Innovation Spaces

Campus Spaces (including Parking!)

Study (Social) Spaces

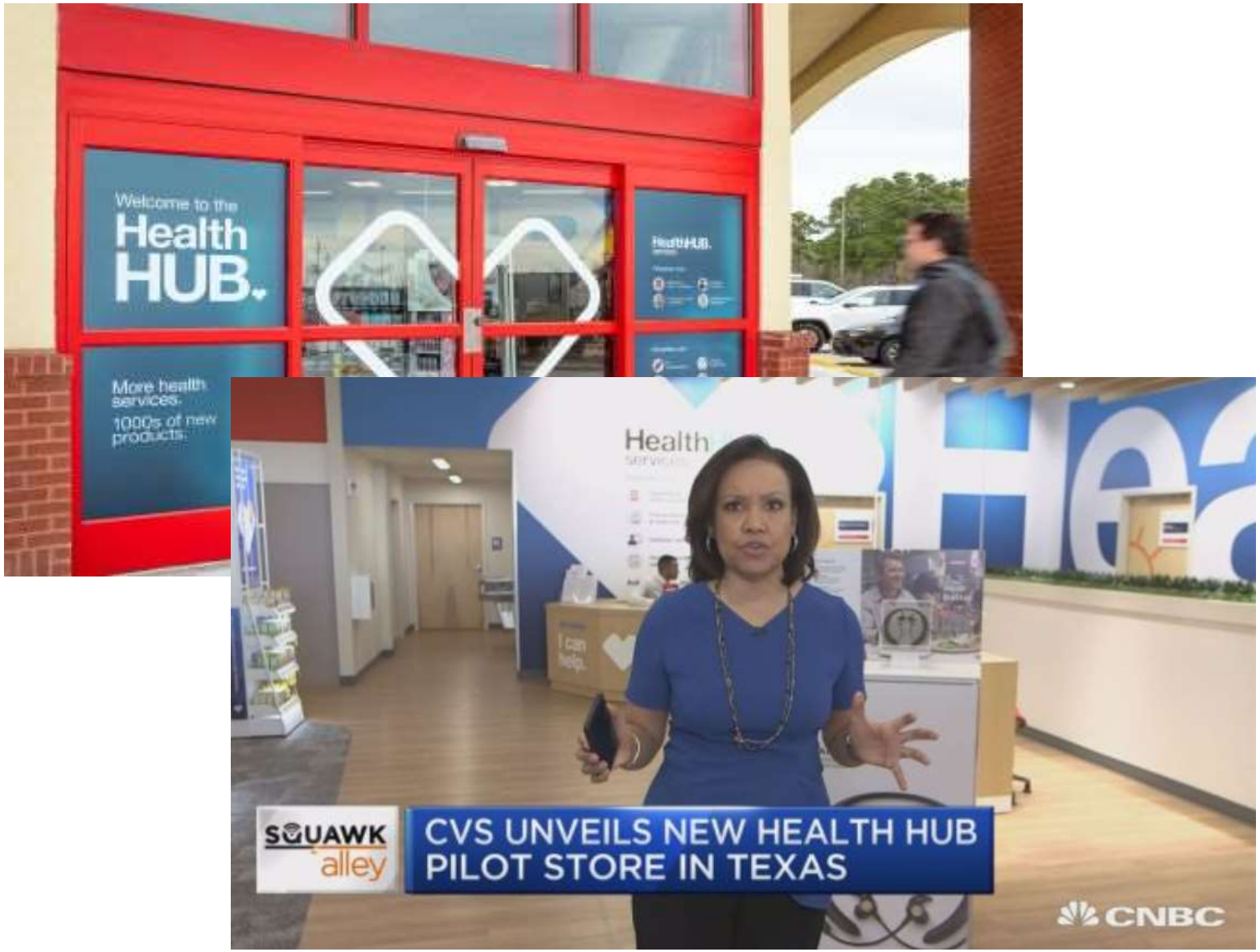
Third Place
is a Real Thing

Pedestrian Friendly Zones

“Pop Up” Culture

Places for Connections:
Live Experiences, Together

Retail Healthcare



Places to Pause…
Mindfulness
Meditation
Sensory Enhancements
Sensory Deprivation
Play with Dogs

american libraries

A Space Apart

College libraries contemplate meditation rooms

By Ronnie Wachter | January 2, 2018

Librarians Megan Donald (left) and Emily Tichenor of Tulsa (Okla.) Community College sit in the meditation room at the West Campus Library.

Photo: Tulsa (Okla.) Community College

Brain Booth

HUMBOLDT STATE UNIVERSITY

~ Stop by and relax ~
Try out biofeedback, sound and light therapy, VR goggles, coloring, meditation, and other activities that promote intentional brain breaks and support emotional self-regulation and singular thoughtful focus.

Hacking Places

The Experience is the Destination

Hacking The Audio Experience: Museum Hack Is Part Of SFMOMA's New Tours!

A Fun, New Experience in NYC, DC, San Francisco & Chicago

We Lead Renegade Museum Tours for Individuals, Private Groups & Company Team Building

Library Teaches Place-based Programming

THE Library AS incubator PROJECT

Escape Rooms

Definitely ‘Fad’ Elements

(but you can integrate research skills)

The Rise of Educational Escape Rooms

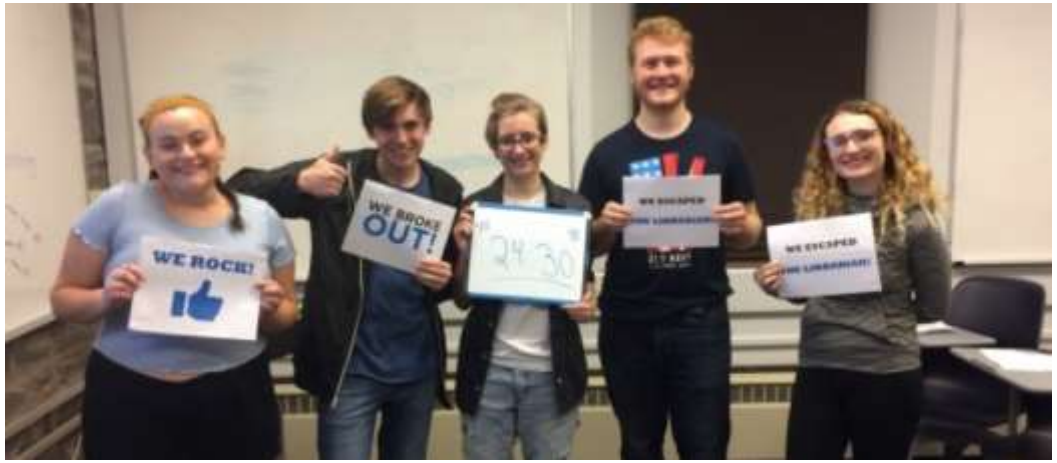
Why UV lights and padlocks are finding their way into classrooms

THE UNIVERSITY OF IOWA LIBRARIES

Engineering Library Escape Room

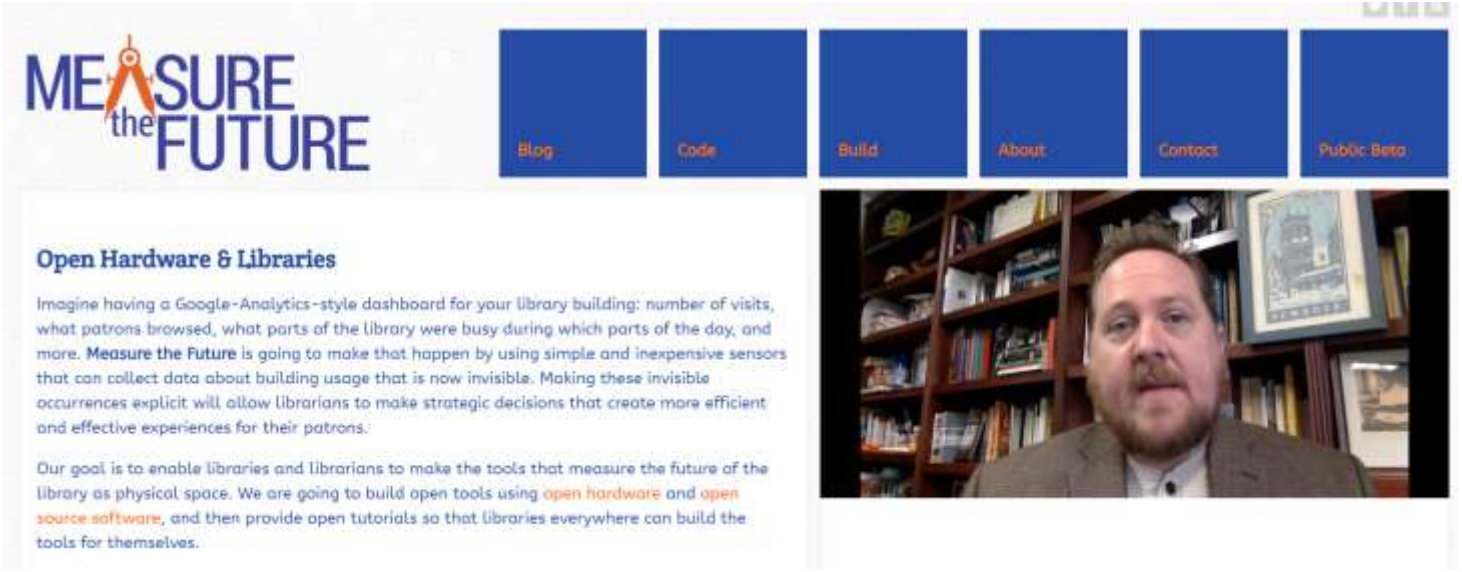
Looking for inventors, puzzle-lovers, adventure-seekers, escape room aficionados!

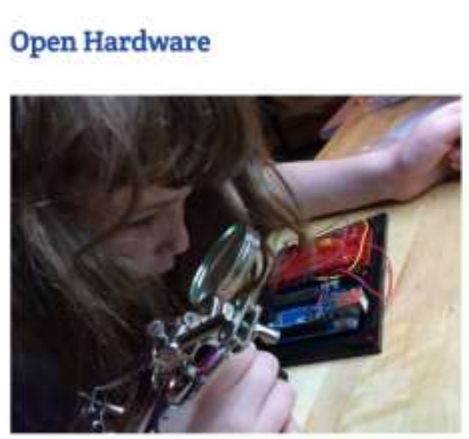
Ursinus College *Escape the Librarian* escape room



Place Use-Data

…Google Analytics for the libraries and campus buildings





Jason Griffey

The Librarybox Project

Universal Design

Empathy Principles

MIT AGELAB

How Barclays' age-simulation suit is helping its staff empathise with elderly customers

James Day for Metro.co.uk Wednesday 20 Nov 2013 6:00 am

37

James Day tests out the age-simulation suit (Picture: Daniel Lynch)

The 7 Principles of Universal Design:

PRINCIPLE ONE: Equitable Use
The design is useful and marketable to people with diverse abilities.

PRINCIPLE TWO: Flexibility in Use
The design accommodates a wide range of individual preferences and abilities.

PRINCIPLE THREE: Simple and Intuitive Use
Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

PRINCIPLE FOUR: Perceptible Information
The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

PRINCIPLE FIVE: Tolerance for Error
The design minimizes hazards and the adverse consequences of accidental or unintended actions.

PRINCIPLE SIX: Low Physical Effort
The design can be used efficiently and comfortably and with a minimum of fatigue.

PRINCIPLE SEVEN: Size and Space for Approach and Use
Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Center for Universal Design at North Carolina State University

Ronald L. Mace

Places that Do Check-ins, Audits & Self Work

NPQ

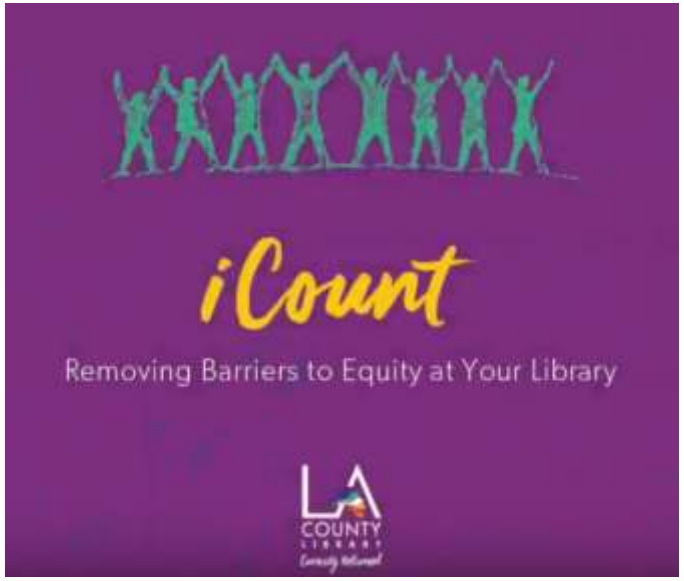
The Organic Role of Libraries as Centers of Inclusiveness and Support

By STEVE DUBB | January 24, 2019

american

LA COUNTY LIBRARY

The iCount Initiative:
Removing Barriers to Equity

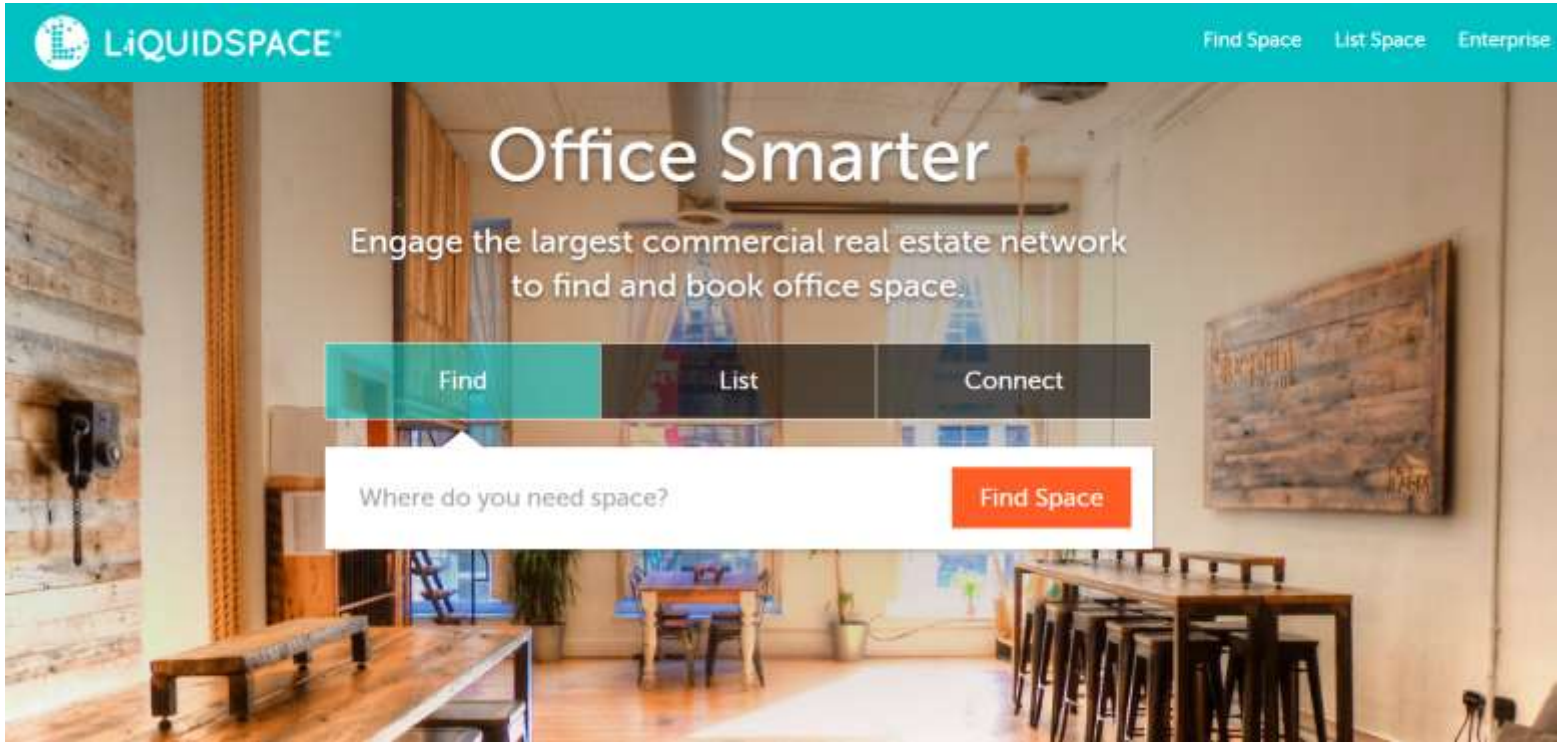


Library Equity Action Plans (LEAPs)

Skye Patrick

On-Demand(ness)

Scheduling Here or Anywhere



Place-based Innovations via Computer Vision

HACKERS CAN SPY ON AND HIJACK AMAZON DOORBELL'S VIDEO FEED

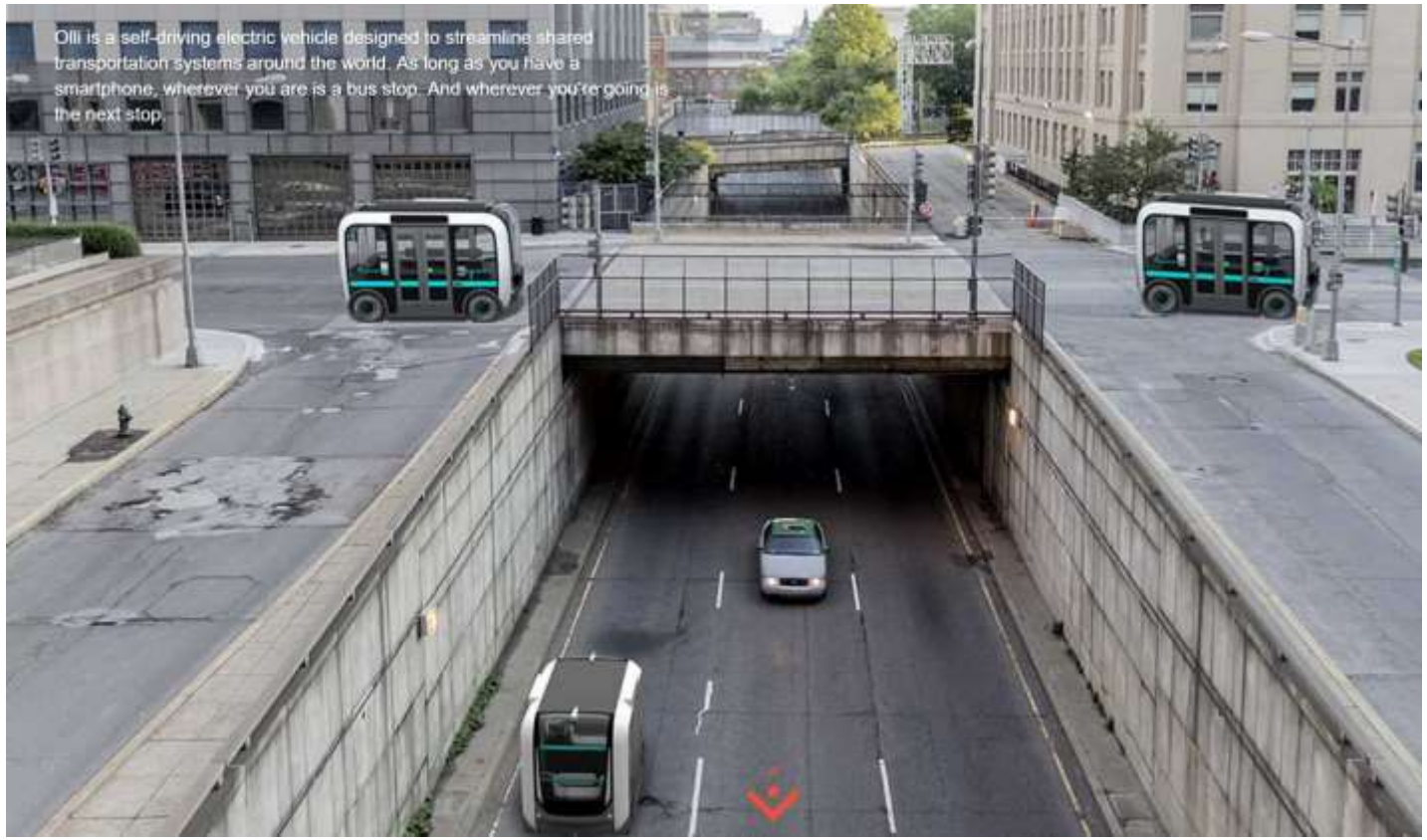
Mall operator suspends use of facial recognition as Canadian privacy commissioners investigate legality

Aug 6, 2018 | Chris Burt

Micro Mobility

Mobility + Accessibility

Safety, Equity + Access



Autonomous People Movers Coming Soon!

LOCAL MOTORS

IBM Watson

Deliver to My Place

SELF-DRIVING PRODUCE —

Forget deliveries—this firm wants to bring a grocery store to your driveway

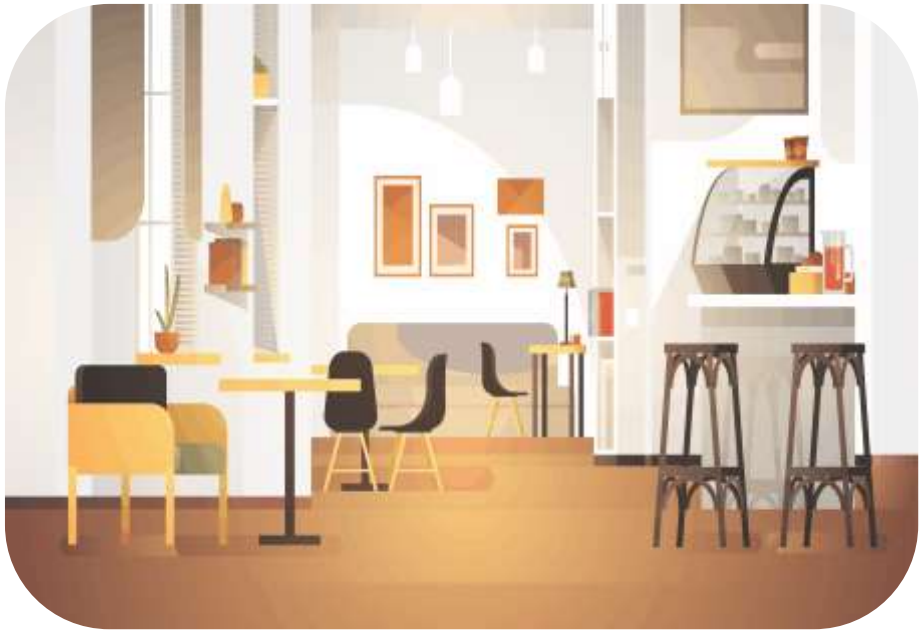
"It's not a delivery vehicle, it's an autonomous store on wheels," CEO tells Ars.

Kroger and Nuro Expand Unmanned Grocery Delivery to Houston

Place-based Messaging & Personal Safety

Staff Trained on Cues

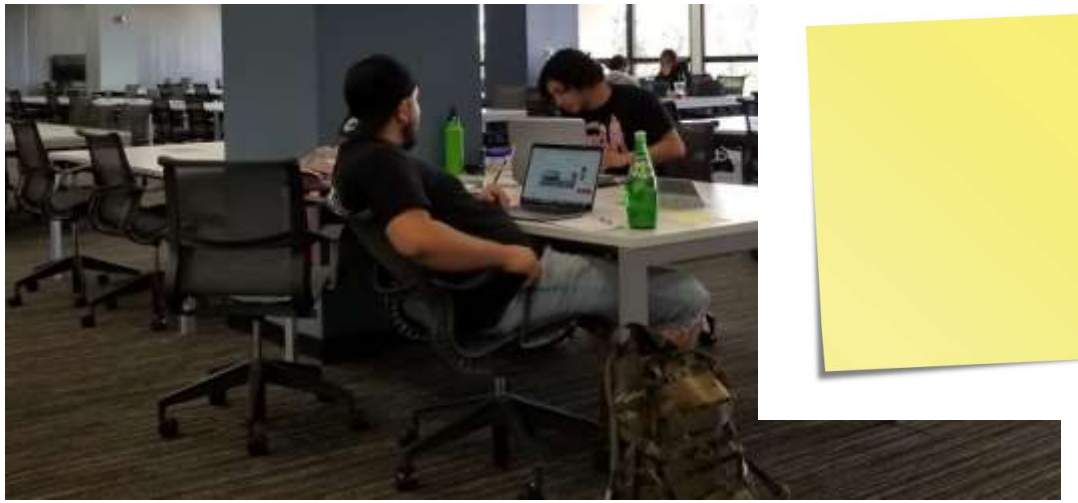
What are themes you see in the changing nature of place?



Generate Ideas to Transform Place/Space-based Library Experiences

Innovation Spaces

Campus Spaces (including Parking!)

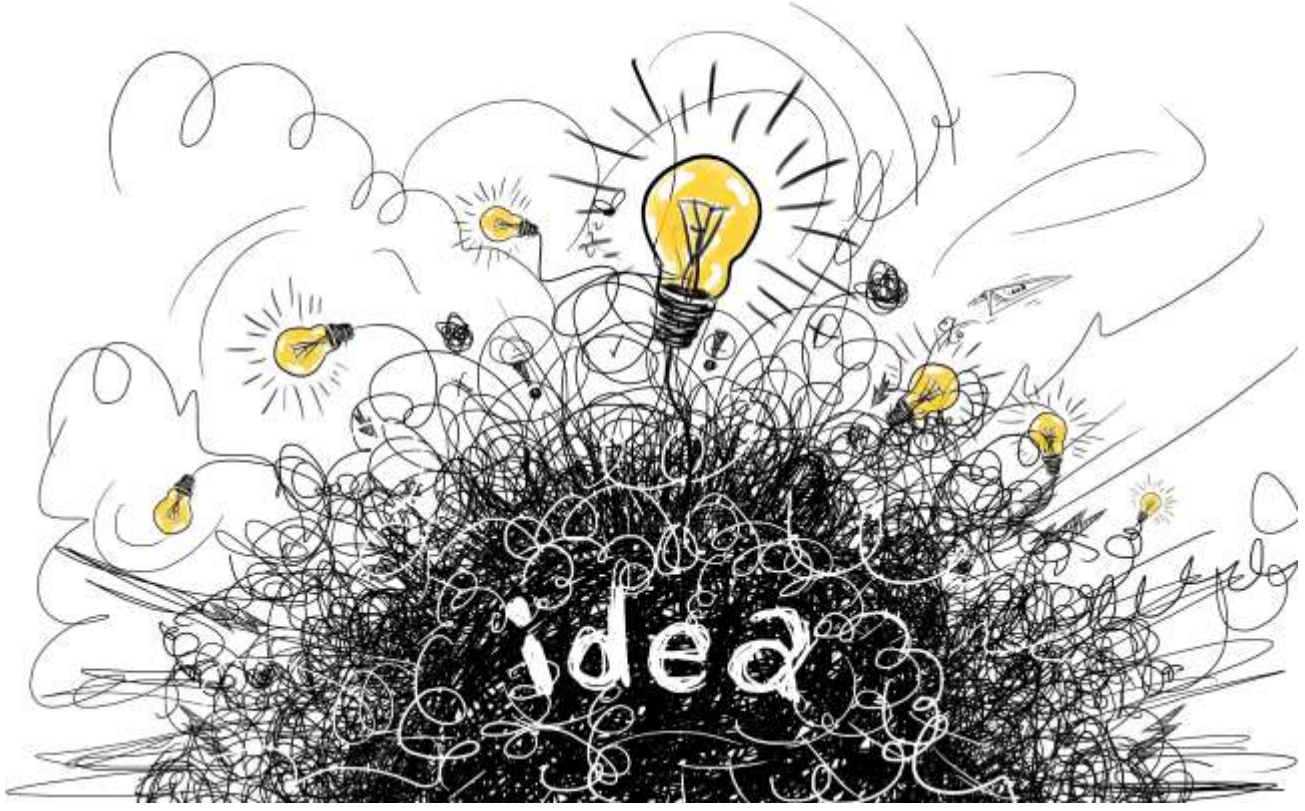


Study (Social) Spaces

Brainstorming

Guidelines

- Push for quantity
- Don’t censor
- Build on other ideas
- Seek wild ideas



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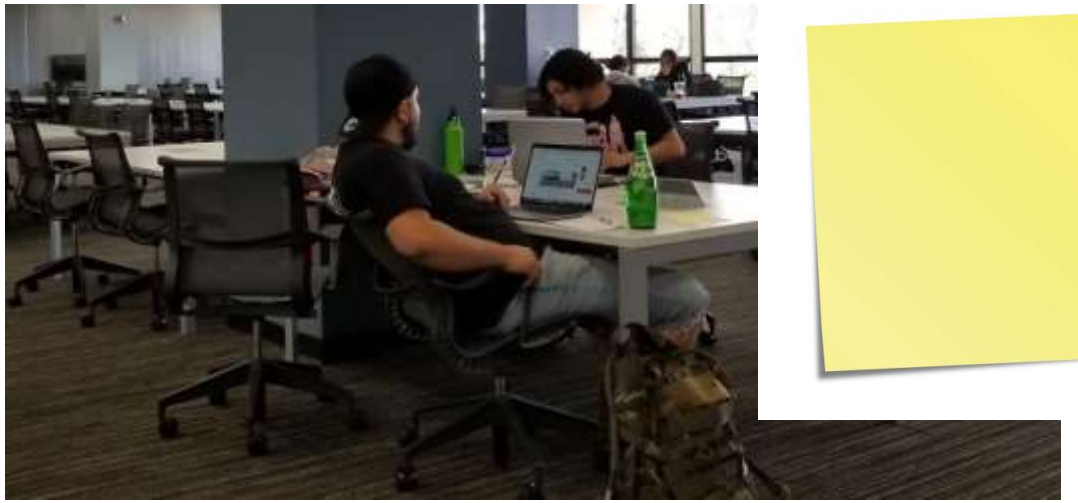
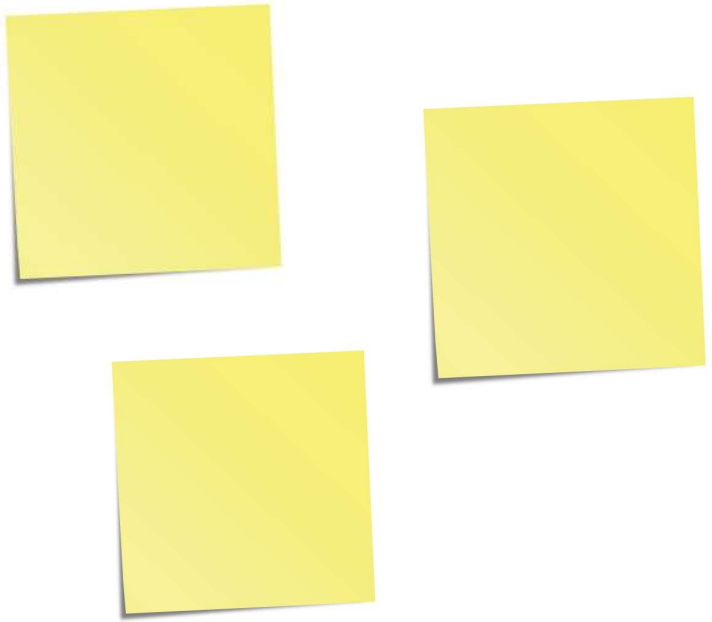


Study (Social) Spaces

Ideas to Transform Place/Space-based Experiences



Share with Partner

(Synthesize… New Ideas)

Gets You Fired!!

(Sorry, too radical for us…)

Framing Ideas to Transform Place-based Experiences

Future Role
of Place (Space)

**Future of
Learning (Teaching)**

Future of Learning (Teaching)

Library Instruction
(Smart Classrooms)

Digitized & Electronic Materials

Expanding Information Literacies

Digitized &
Electronic Materials

DIGITAL LITERACY

Expanding Information Literacies

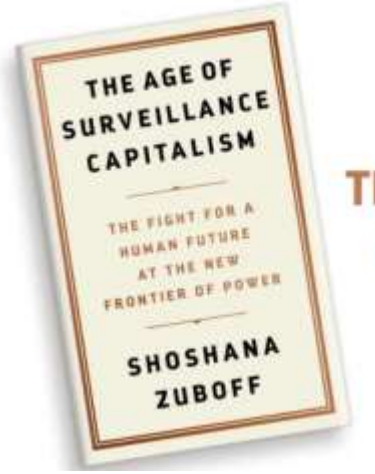
INSIDE HIGHER ED

Information Literacy's Third Wave

> The daunting complexity of becoming information literate today.

By Barbara Fister

// February 14, 2019



THEY'RE WATCHING YOU...
WITH YOUR FULL CONSENT.

How might this definition change? (Be challenged)

Cornell University defines digital literacy as “the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet.”

Evolution of New (Data and Digital) Literacies

Campus Elevation of Issues on AI, Ethics, Algo Bias

Annabel Daou

American Artist's Faraday Study is a small room library visitors can use to read, study, and plan, absent of any cell service or WiFi signal.

Expanding Information Literacies

Is Privacy Dead?
Or Being Defined Around Agency?

Let’s not Forget Reading Literacy & the Prepared Mind

Digitized & Electronic Materials

vs Print for Comprehension

The Reading Mind in the Digital Age

3 views

LIKE DISLIKE SHARE SAVE ...

Start 3:25

How might we rethink digitization to digital literacies, and role of print in age of digital mind?

Start **Stop** **Continue**

Future of Learning

Library Instruction
(Smart Classrooms)

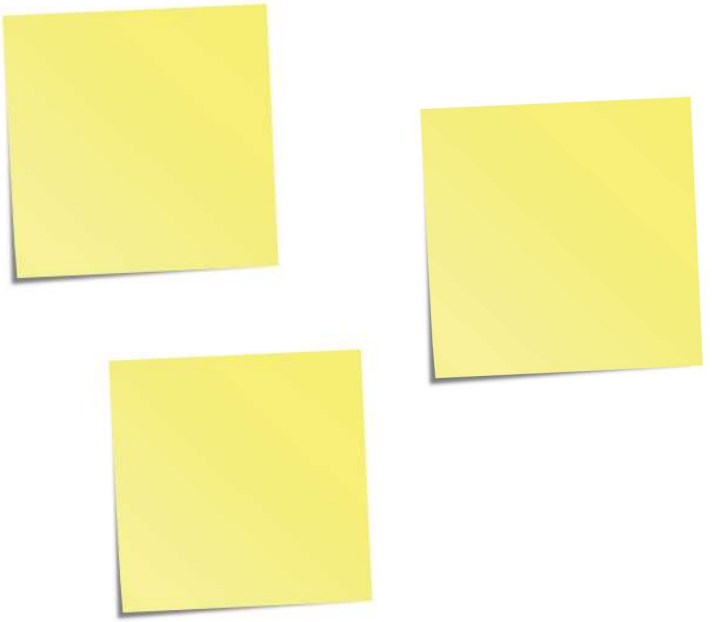
Digitized &
Electronic Materials

DIGITAL LITERACY

Expanding Information Literacies

Generating New Ideas (Criteria) for Library Instruction

1. Not Something You Have Done Before
2. Have Serious **WOW** Factor
3. Transform Library Instruction in a positive way



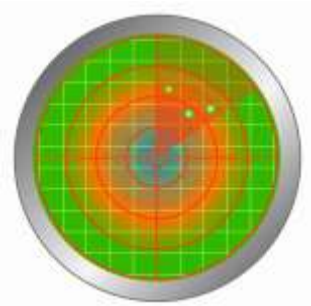
Library Instruction
(Smart Classrooms)

End

Foresight 101
Era-based Change

IMAGINE
BEACH 2030

Generating Ideas



Scanning for Signals

Wrap up *Next Steps*

Signal Slides Removed

End

Foresight 101
Era-based Change

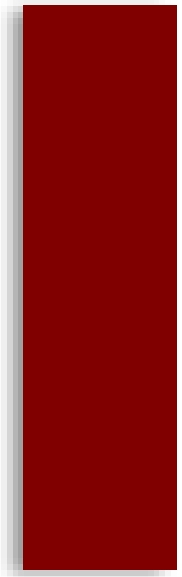
IMAGINE
BEACH 2030

Generating Ideas

Scanning
for Signals

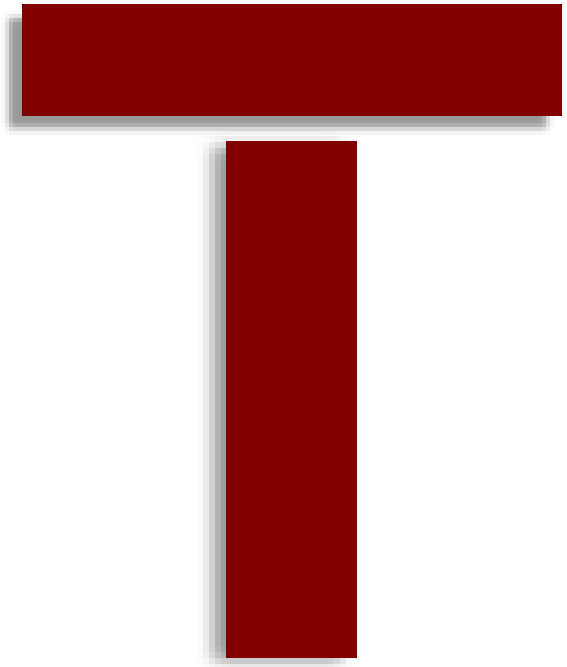
Wrap up
Next Steps

Launch Conversation on Who do we want to be…?



“I” Shaped Person

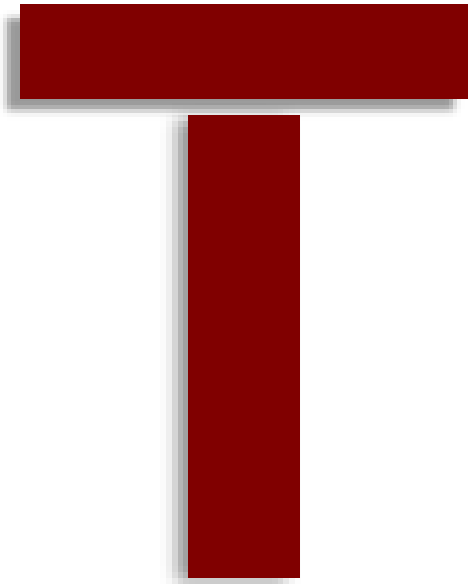
Success via Specialization



“T” Shaped Person

Success via Integration

What do we want to be as T-Shaped Individuals?



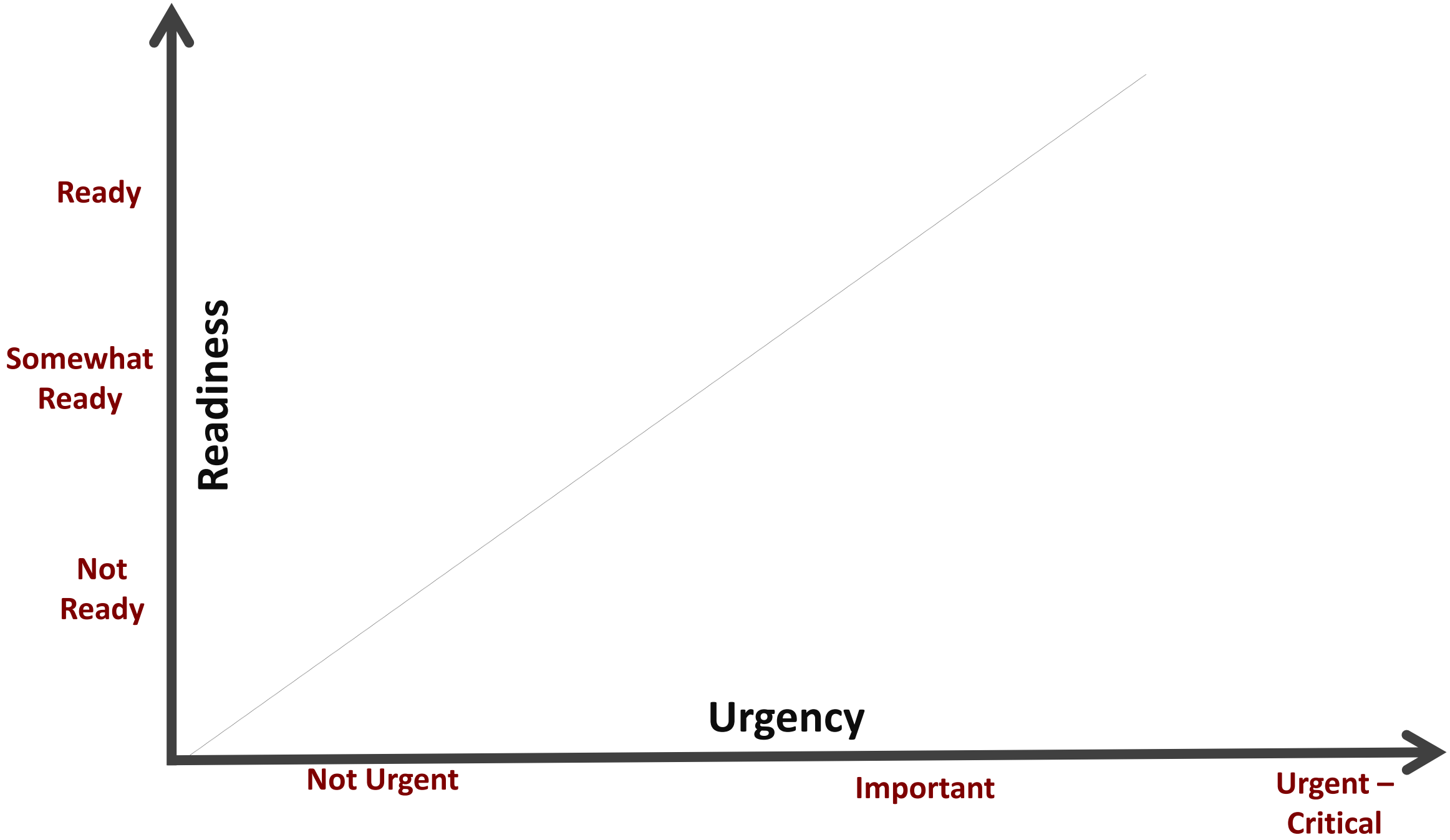
"T" Shaped
Professional Community

Also Trained in ….?

Ethics	Psychology
Behavior Science	Data Science
Cyber Security	Crypto / Blockchain
Aging	Restorative Practice
Systems Thinking	3D Design & Manufacturing
Experience Design	_____
Service Design	_____
	_____

Write three T-Shaped skill sets and/or mindsets

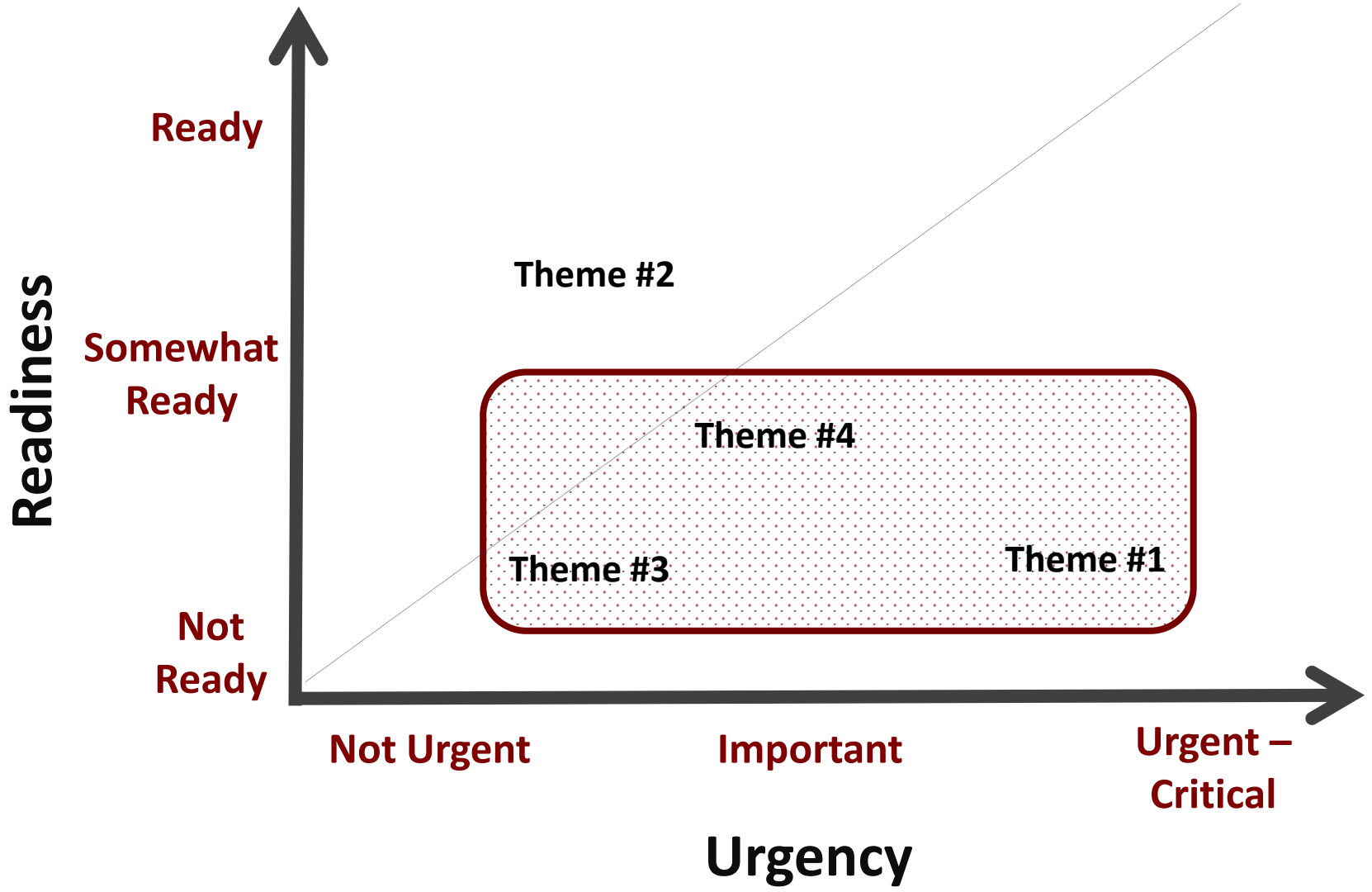
The Most Ah-Ha Idea of the Day…


Ready
Somewhat Ready
Not Ready
Readiness
Urgency
Not Urgent
Important
Urgent – Critical

Take a Pulse Check on Emerging Trends vs Organizational Appetite

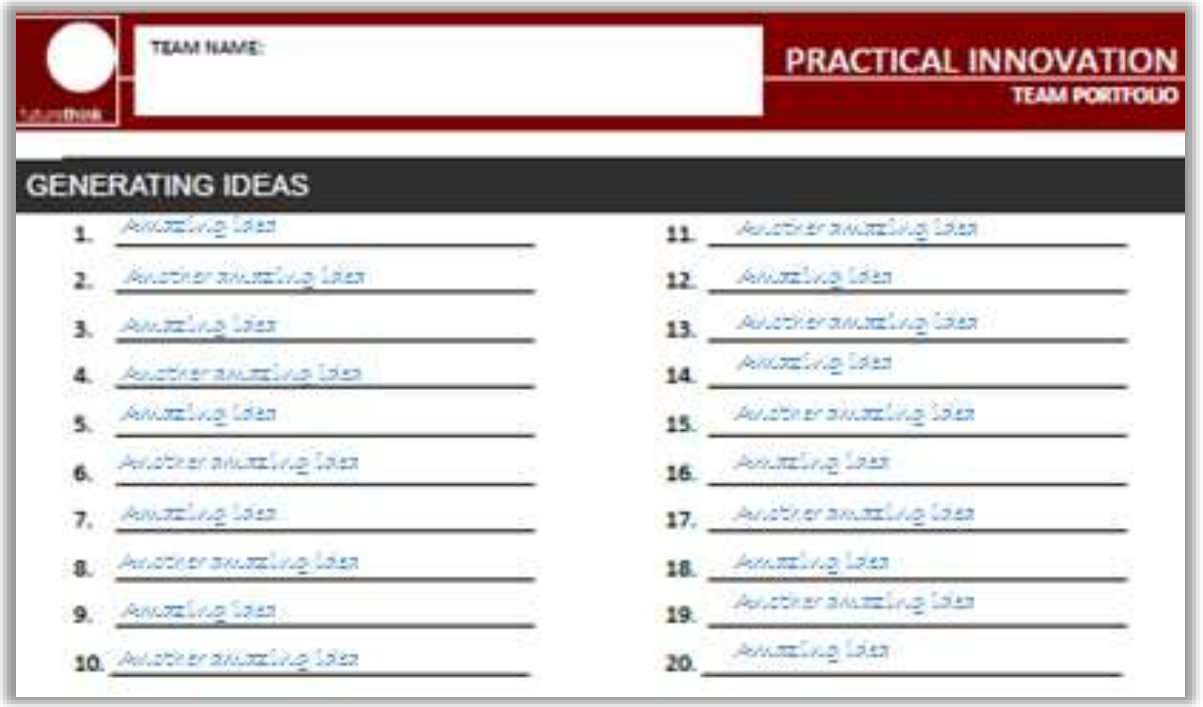
Top Trends/Themes

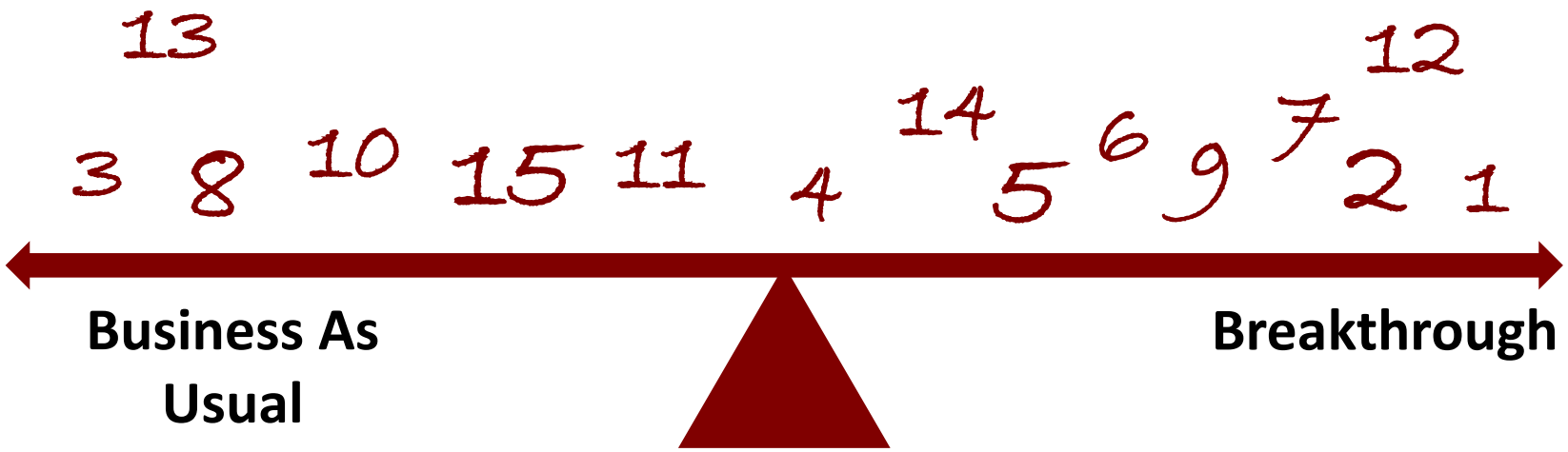
1)
2)
3)
4)
5)



Balancing Your Ideas Portfolio

1. Write **Business as Usual** and **Breakthrough** at either end of the spectrum
2. Consider each idea and **place it** somewhere along the line





Next Steps

IMAGINE
BEACH 2030