

The Future of Campus Experiences  
The Art & Science of  
Looking at the Future



Garry Golden  
Forward Elements

March 23, 2019

**Start**

**End**



***Foresight 101***



**Drivers of Change**



**Scanning  
for Signals**

**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**



**Next  
ten years**



2007



2017



2027

?

?

?

?

?

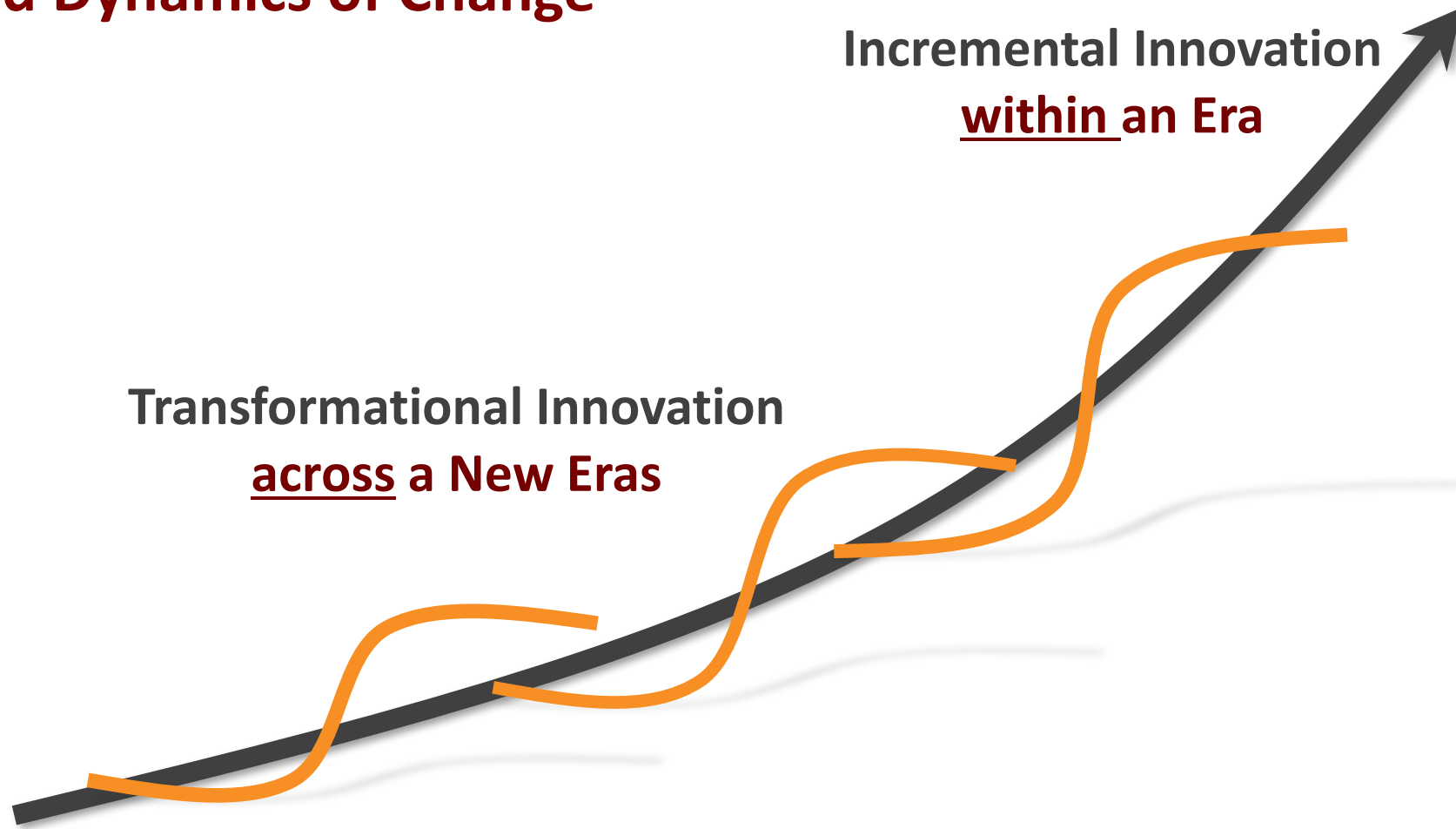
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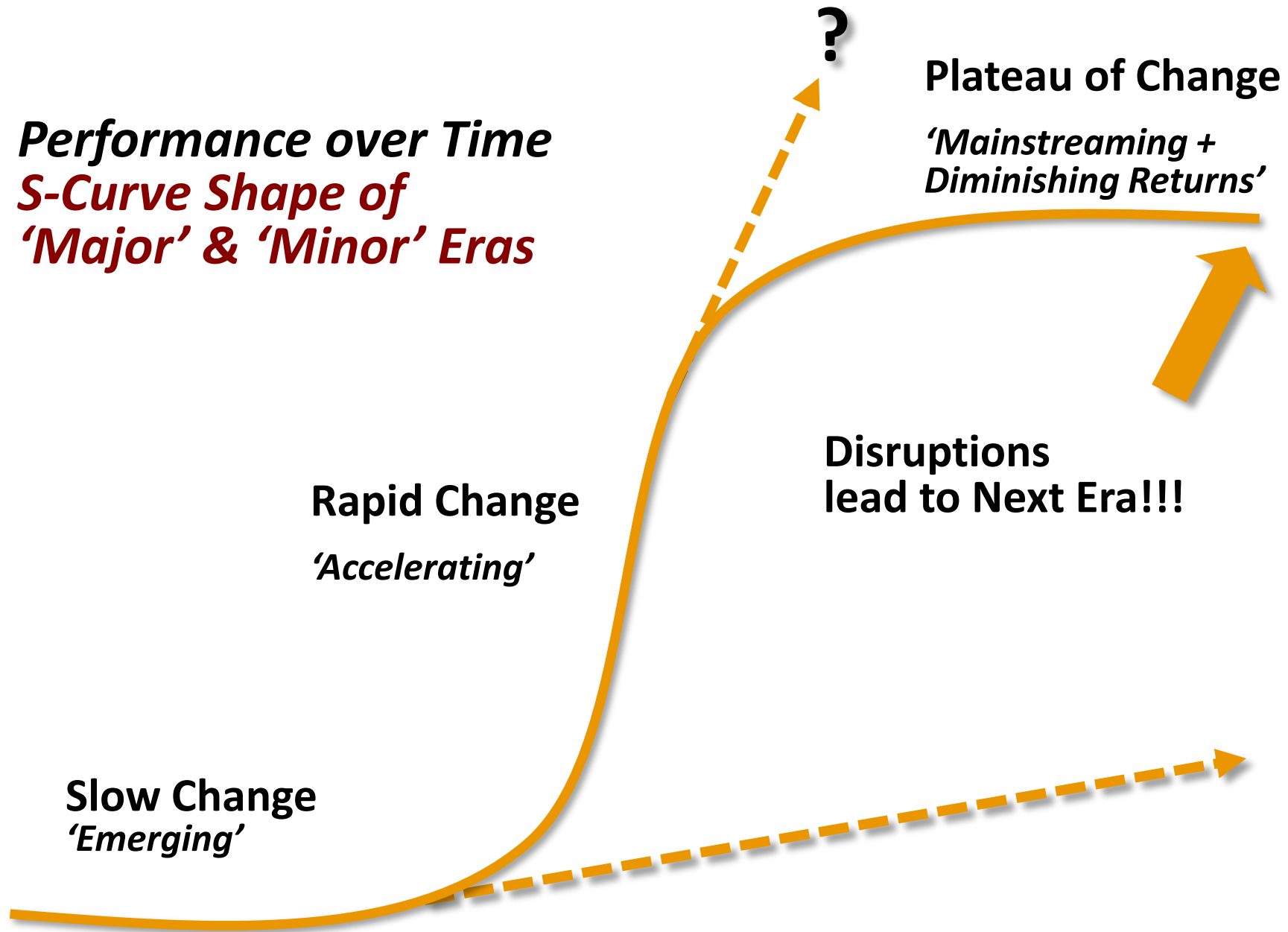
Removed pictures of my cute kids, because it is *creepy*

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'*

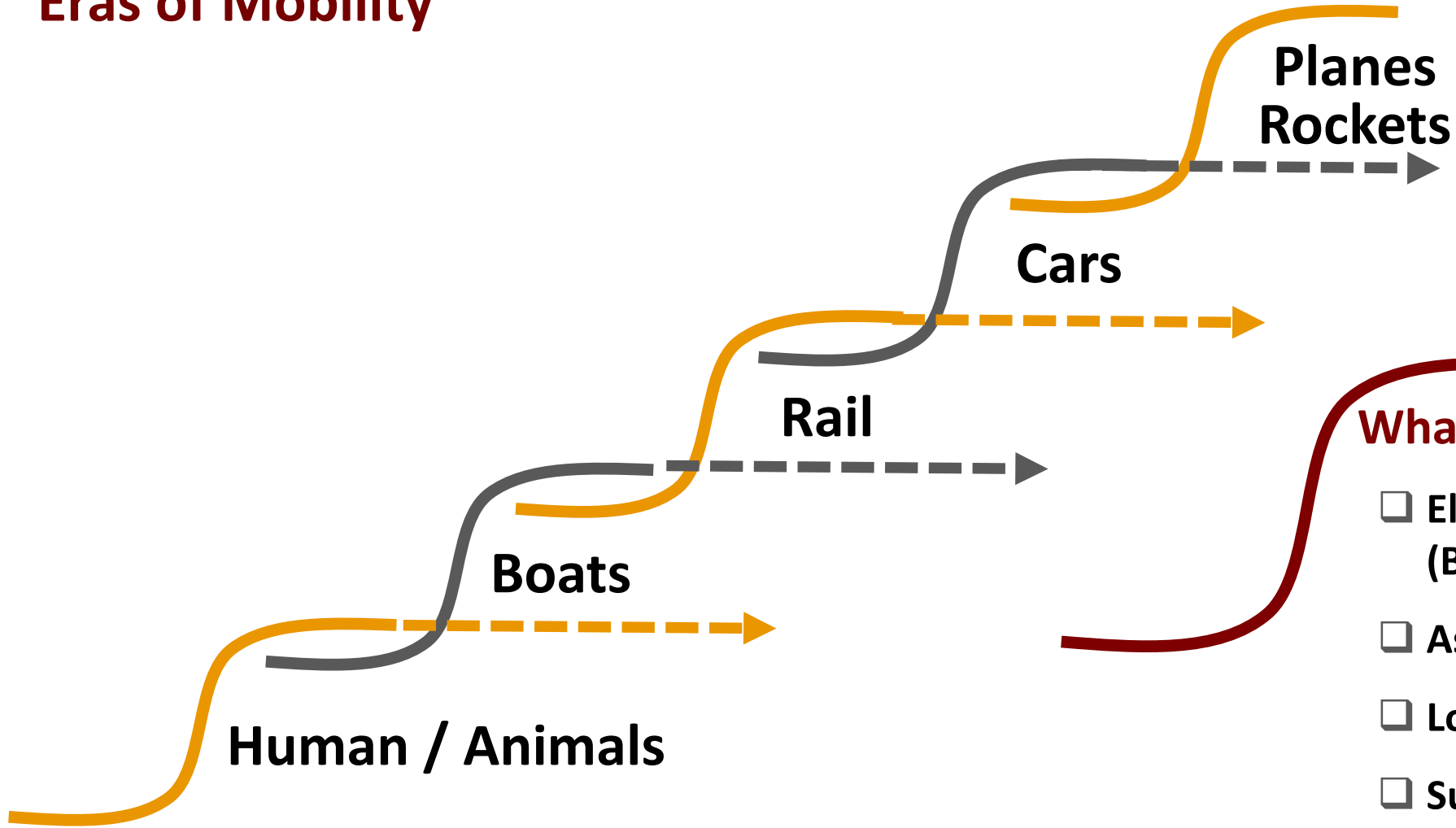
**Rapid Change**  
*'Accelerating'*

**Disruptions**  
**lead to Next Era!!!**

**Slow Change**  
*'Emerging'*



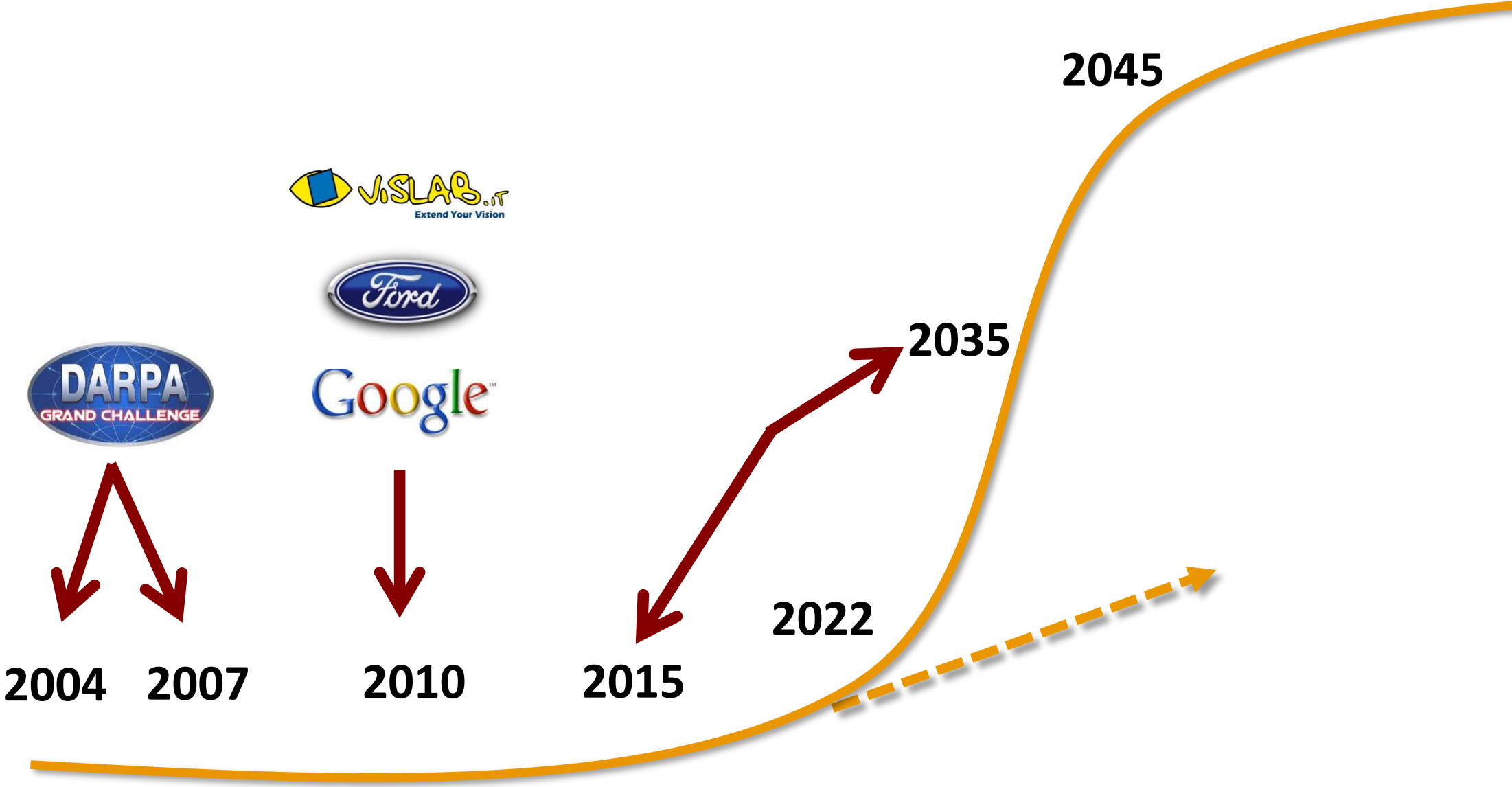
# Eras of Mobility



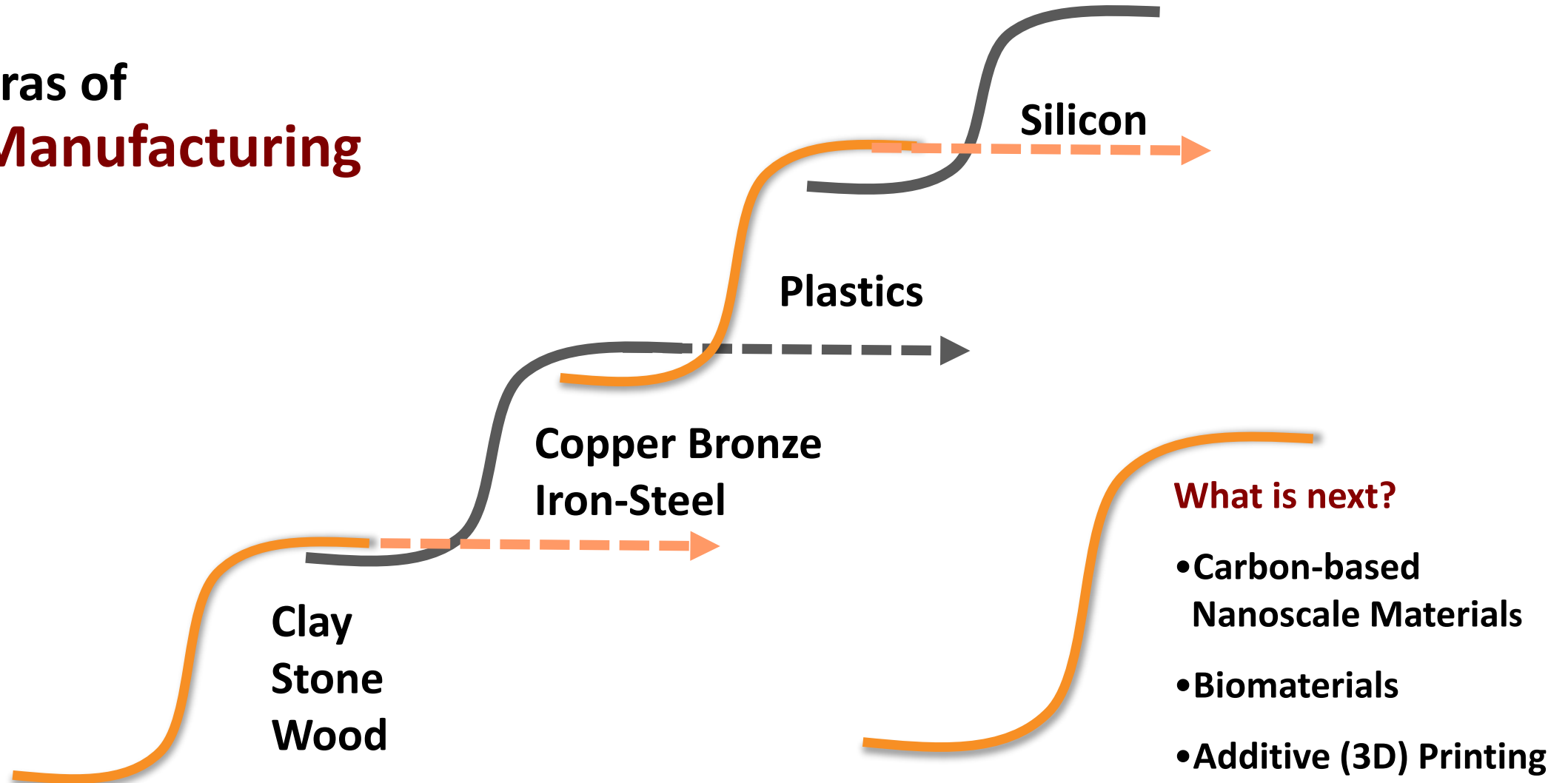
## What is next?

- Electric Vehicles  
(Battery + Fuel cell)
- Assistive + Autonomous
- Low-Volume Production
- Sub-orbital Space

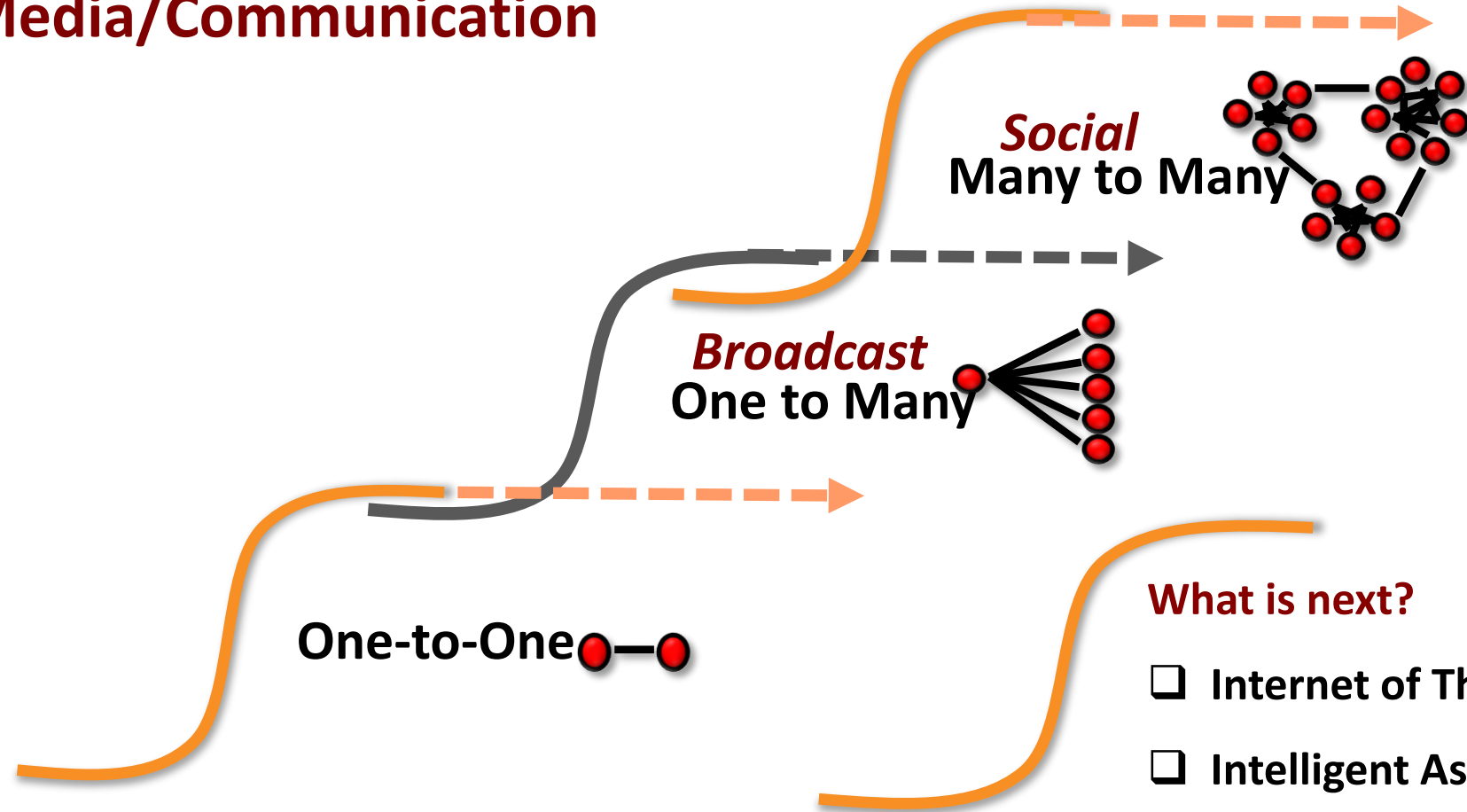
# Tapping Your Inner Futurist: Monitoring Signals of Change



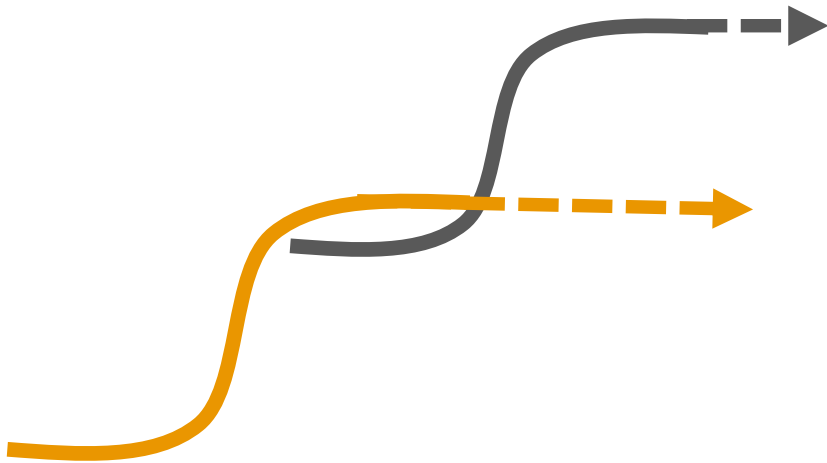
# Eras of Manufacturing



# Eras of Media/Communication



# 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

# Four Futures Thinking



**Continued  
Growth**



**Disciplined  
Constrained**



**Transformed**



**Decline  
Collapse**

# Leadership Challenge: Write Your Four Futures

?

**Continued  
Growth**

?

**Disciplined  
Constrained**

?

**Transformed**

?

**Decline  
Collapse**

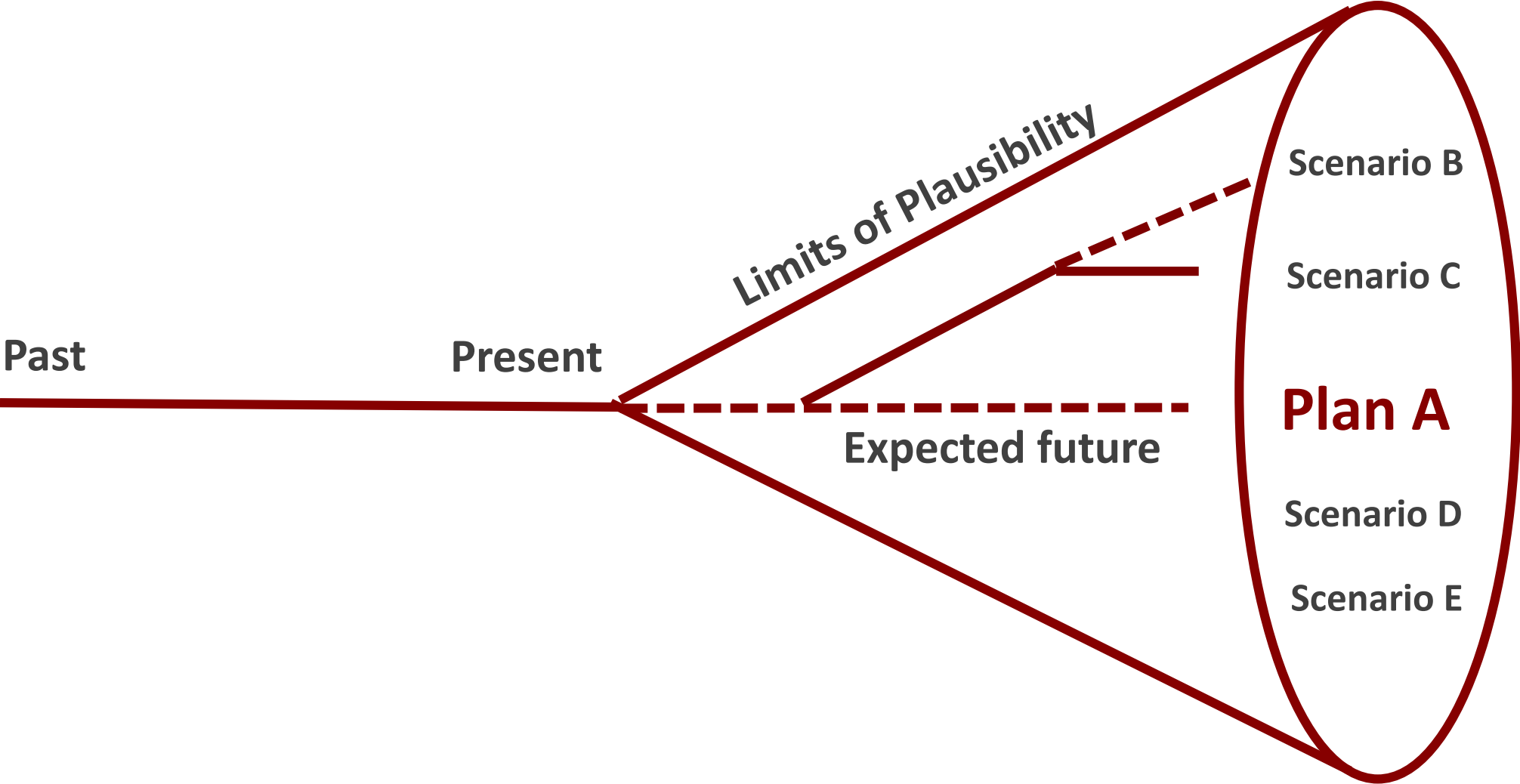
Thinking Like a Futurist?



Removed sequence

# Foresight 101: Cone of Plausibility

Multiple Outcomes, Multiple Time Horizons

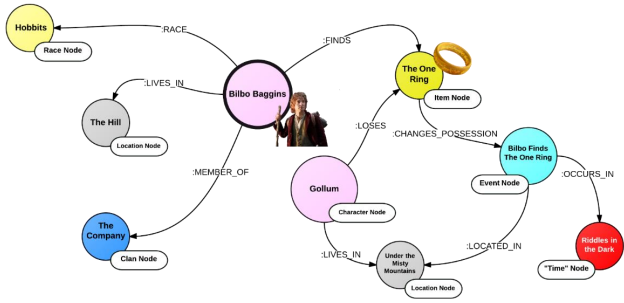


**Every day I make an effort to move toward  
what I do not understand.**

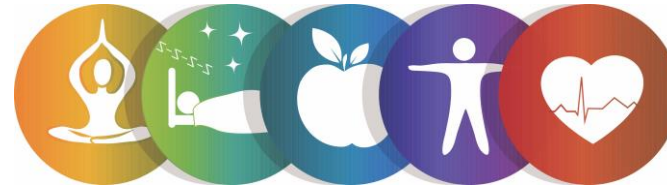
**- Cellist, Yo-Yo Ma**

**Plant some seeds for the 2020s**





## Age of Experience Graph



## Health & Wellness



## Role of Place



**2020 - 2030**

**How might data-driven change reshape the campus experience?**

**What might be the most valuable type of data in 2030?**



# How might we better understand ourselves and share our stories?



Resume



Portfolio



Presence





# In the News





Stanford Business School is piloting a program with **Experience.ai** to capture experience data from learning, project performance and decision processes within case study groups. Stanford's vision is for every student to retain rights to experience data and build a critical personal digital asset for the future.

True

False





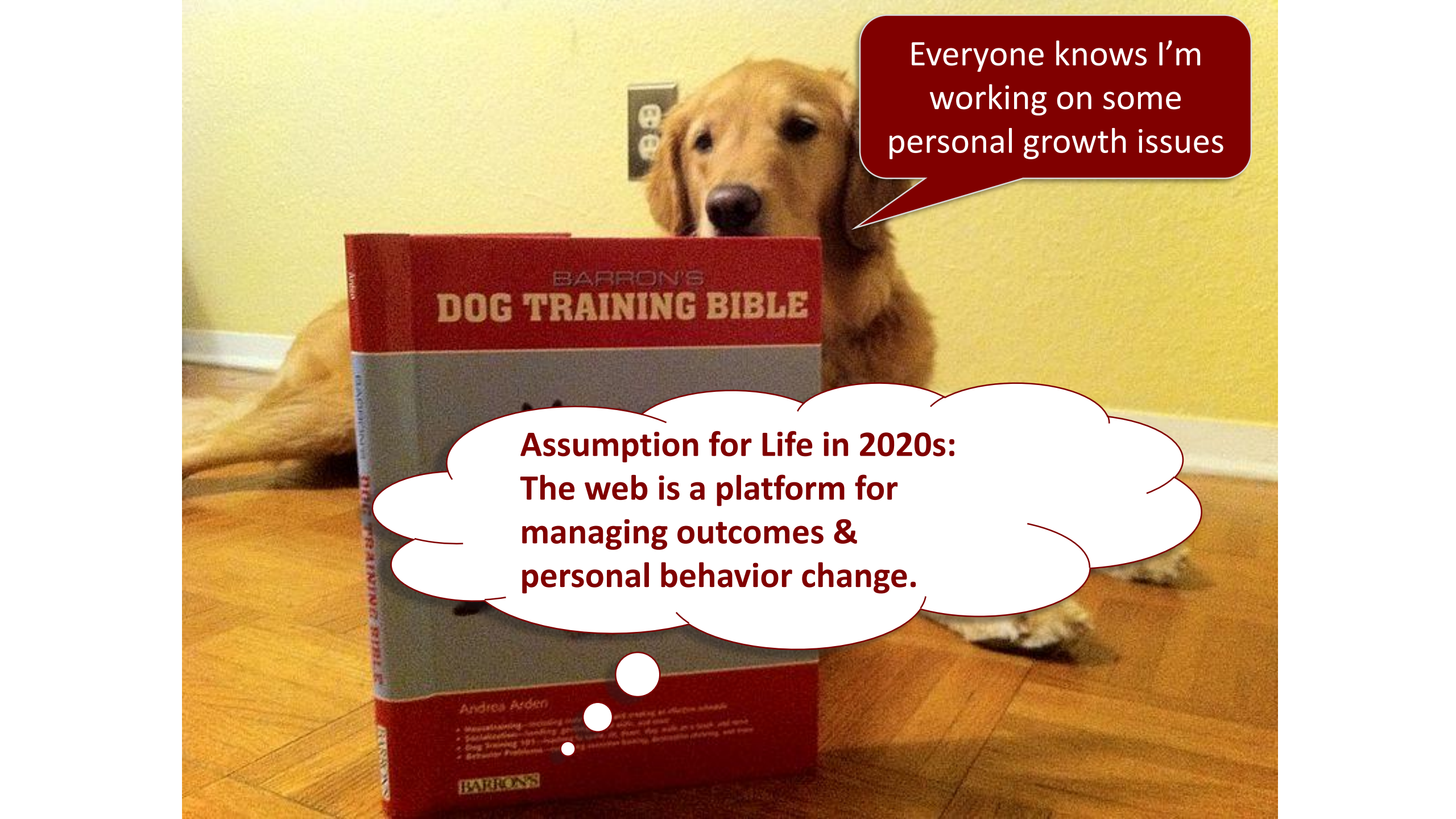
Context of the *Creepy Line*

Google

Inevitability of Dealing with the *Creepy vs Compelling Line in..*

AI-Driven Innovations

Removed 'dog' sequence surprise



Everyone knows I'm  
working on some  
personal growth issues

**Assumption for Life in 2020s:  
The web is a platform for  
managing outcomes &  
personal behavior change.**

# Outcomes-based Value Creation Depends on...



# Emergence of Data & Outcomes-driven World



**Social  
Data**



**Health  
Data**



**Device +  
Infrastructure**

EXPERIENCE  
API

“I did this...”

**Learning & Doing  
Experience Data**

*Data isn't truth, but language.*

*It can help us decide or express the truth, but data never is the truth.*

*- Deanna Day*

# Signal of Change from the Learning & Development (L&D) Community



EXPERIENCE  
API

**Activity Streams**  
<Actor, Verb, Object>  
**“I did this”**



Blackboard



canvas  
BY INSTRUCTURE





Course



**“I did this...”**

Statements

Seamless Integration into  
Manager & Team Tools



Real World

**Assumption:**

**Experience Data Appears Inside School, Workplace & Beyond**



# Scenario: Talent Embraces Experience Capture Analytics

- Sarah **read** an article on blockchain for automating compliance
- Sarah **opened** an Evernote folder on blockchain solutions
- Sarah **watched** a Youtube video introducing the Ethereum blockchain
- Sarah **searched** for Ethereum Meetups in NYC
- Sarah **attended** the Crypto Compliance conference in NYC
- Sarah **created** a List of 'Ethereum Developers' (People) on Twitter
- Sarah **interviewed** *the Head of Blockchain Solutions at JPMorgan*
- Sarah **mentored** *with Joe Lubin co-Founder of Consensys*
- Sarah **completed a course** on Ethereum's Solidity programming language
- Sarah **demonstrated** her pilot Ethereum application at a NYC Meetup
- Sarah **taught** a Coursera MOOC on Ethereum for KYC / AML
- Sarah was hired as Lead Developer of Blockchain Compliance Solutions at Fidelity

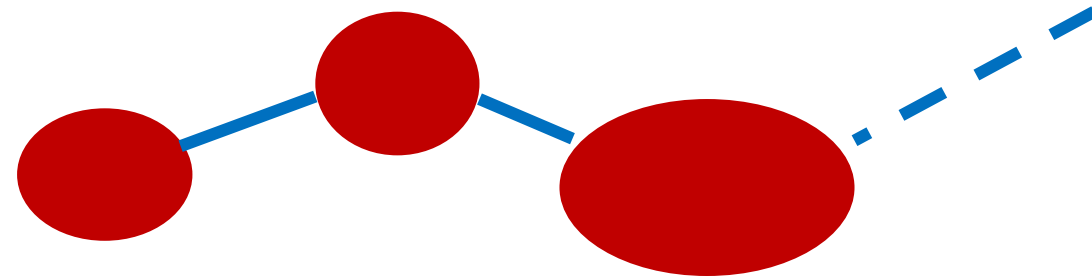


**"I did this..."**  
**Statements**

<Actor, Verb, Object>

“I did this”

- Thomas liked a Lucille Clifton poem he heard on iTunes
- Brentwood library invited Thomas to a Creative Aging poetry event
- Thomas enrolled in a creative writing class at Community College
- Thomas read Alice Walker for his creative writing course
- Brentwood library recommended an obscure Rita Dove poem
- Thomas performed his poetry at a local café event
- Brentwood library invited Thomas to a program on self-publishing
- Thomas self-published his first collection of poems
- Brentwood library added his book to their collection



# Enterprise L&D: Early Adopters Preparing to Scale

Brought to you by

**W**  
Watershed

**xAPI xAPRIL Spotlight:  
Volume & Privacy**

**pwc**

 **Sarah Lindsell**  
Global Chief Learning  
Strategist at PwC

 **Steve Tomlinson**  
Global Senior Learning  
Architect at PwC

*How did we do it?: Where are we now?*

## *April 2018:*

Over 3 million statements so far

Over **110,000** learners who are sending xAPI statements

We are using **1** LRS system which is segmented by data for each country

Last three months increased our total by 1 million statements

## *Summer 2019:*

We will have **250,000+** learners using it and sending xAPI

We will have a global learning analytics community of around 100 people whose role (full/part) is to look at learning data and help transform our learning

Start small and grow...this is a long journey

# Outcome: Seeing What People Need vs They Tell You They Need

Clicked  
Create  
Delete  
Downloaded  
Launched  
Listened  
Loggedin  
Opened  
Paused  
Read  
Searched  
Share  
Skipped  
Viewed  
Watched

## ***Searched verbs***

### *Running training needs analysis in real-time*

Using the searched verb we can analyse what people are looking for example:

- Tax legislation
- Tax processes legislation
- Excel macro creation
- Macro creation
- Coaching
- Coaching skills
- Coaching management skills

We can use this data to:

- Highlight need – see what learners want
- Match available learning to need and tag our content – dynamic curation
- Spotting holes in our learning – our gaps
- Global coverage – spotting patterns across countries, trending topics

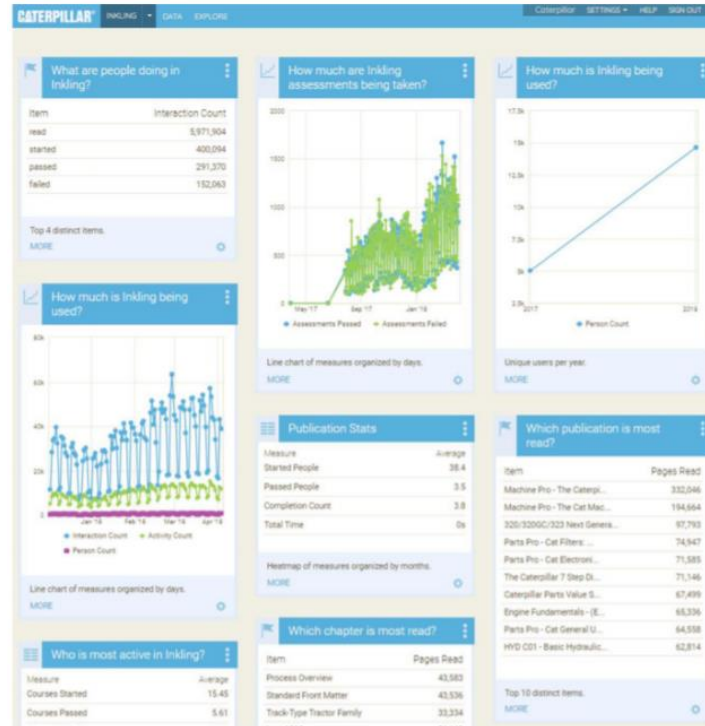
# Case Study: Caterpillar

When trying to help someone learn, the team considers these three vital questions:

1. Where does the learner want to go?
2. What does the learner know?
3. How can we develop the individual?



## Understanding LMS/CMS Activity



## Expanding Video-based Analytics



# Scenario for 2020s: 1<sup>st</sup> Year Students Experience Analytics



EXPERIENCE  
API

Assumption to Explore

**By 2025, Experience Data Will Become  
Our Most Valuable Digital Asset**

  
and Controversial

**If we capture experience data...**



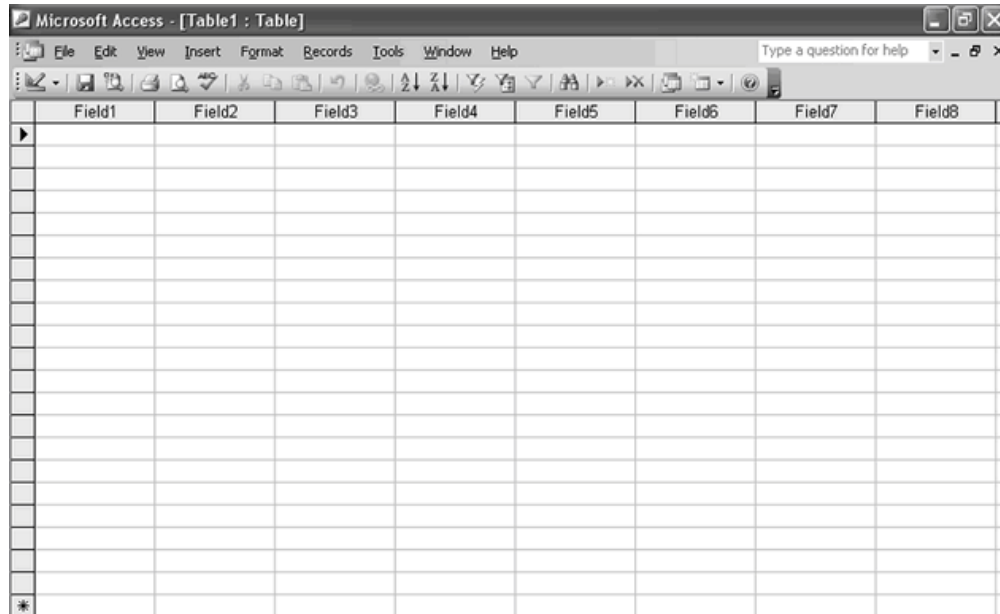
**“I did this...”**  
Statements

**How do we approach regulations?**

**How do we avoid the creepy line?**

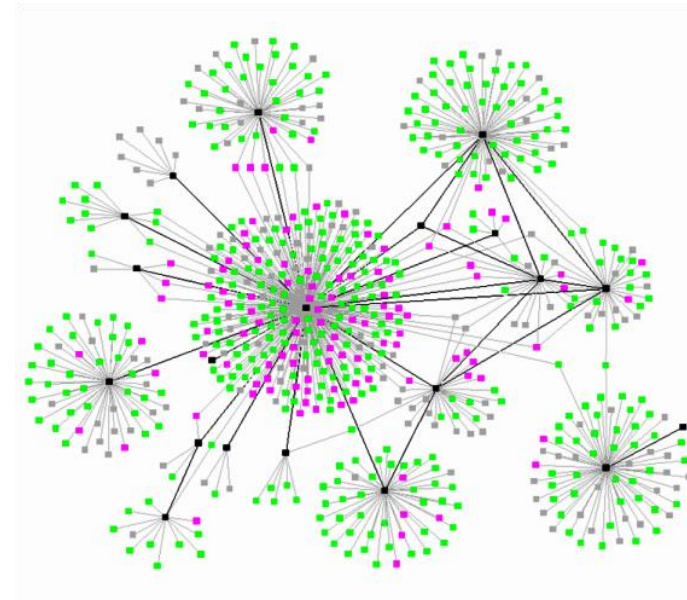
**How do we make sense of it?**

# Building a Connected Data Foundation for Innovation



A screenshot of the Microsoft Access application window. The title bar reads "Microsoft Access - [Table1 : Table]". The menu bar includes "File", "Edit", "View", "Insert", "Format", "Records", "Tools", "Window", and "Help". A search bar contains the text "Type a question for help". Below the menu bar is a toolbar with various icons. The main area is a table with 8 columns labeled "Field1" through "Field8" and approximately 20 rows. The table is currently empty.

**Tables = Past**

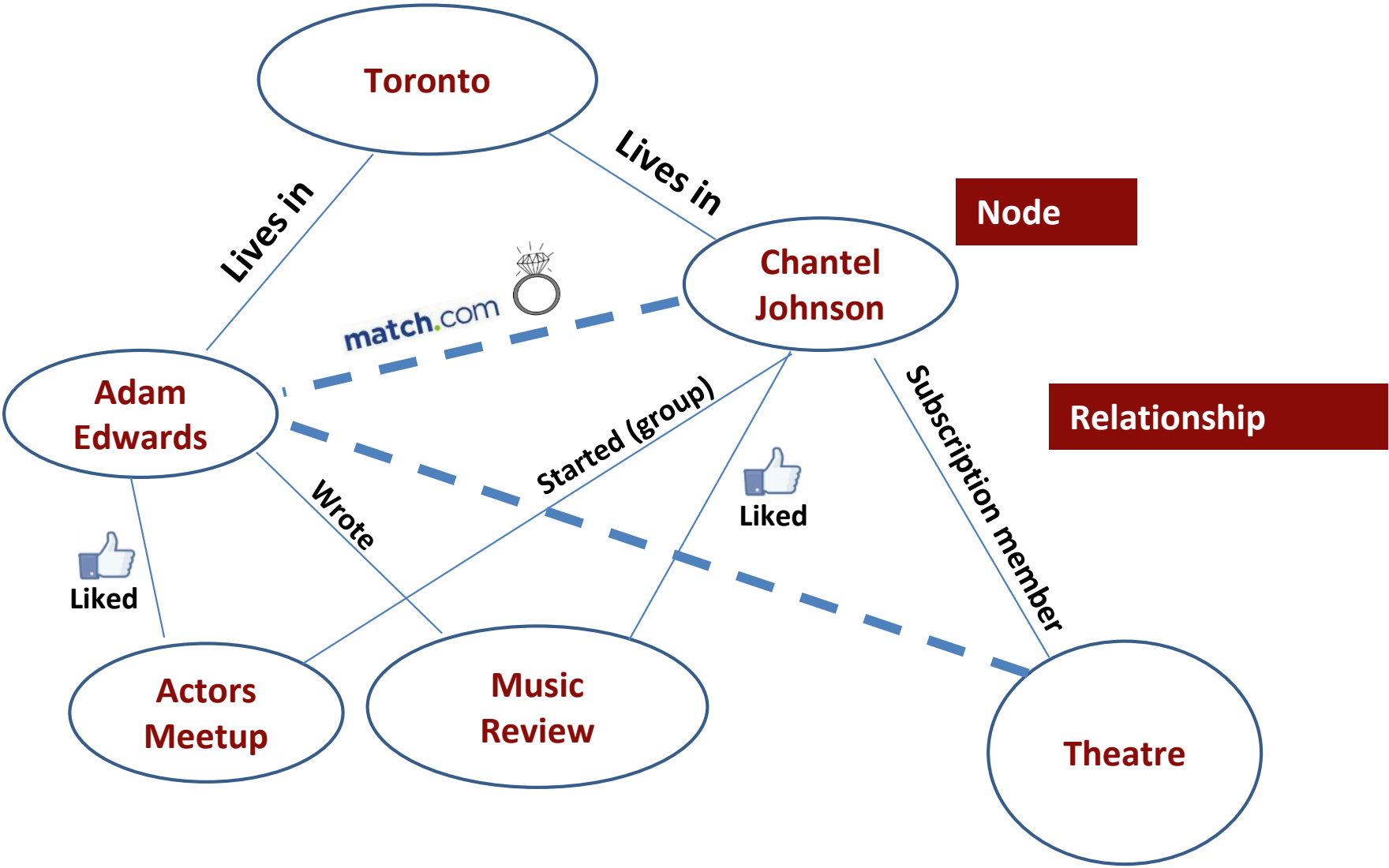


***Graph Thinking = Future***

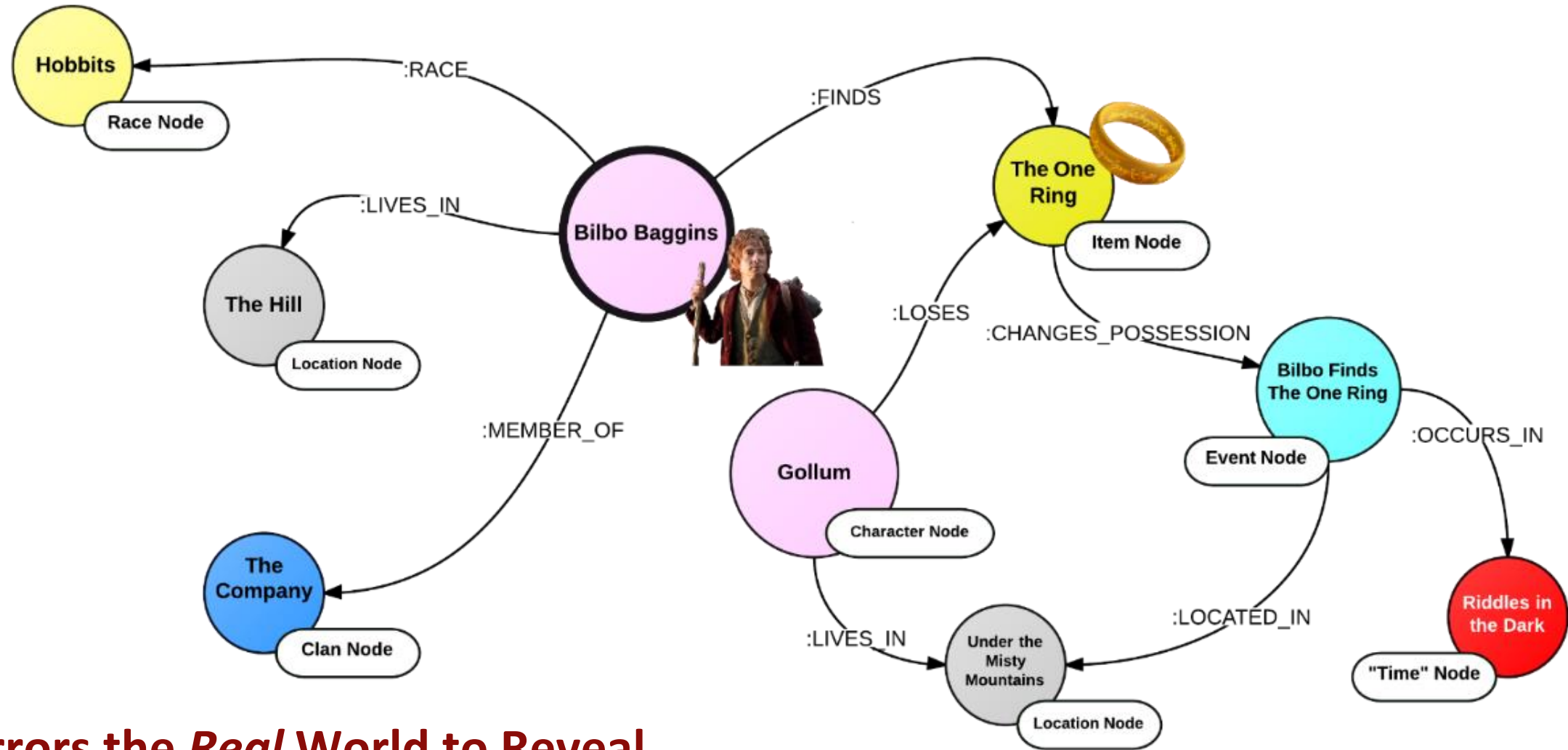




# Graph Database = Understanding Relationships + Connections



# Graph Solutions for Understanding the Campus Journey vs Outcomes



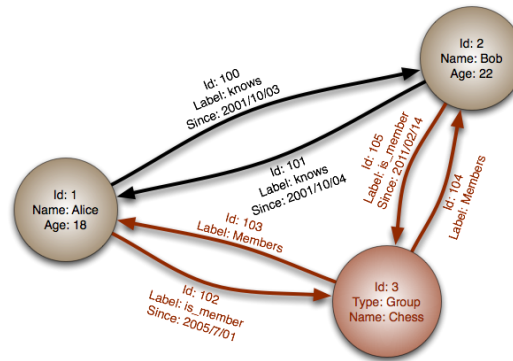
Mirrors the *Real World* to Reveal  
Influencer Profiles, Decision Pathways and Recommendations

# Noah is *Connecting Things on his Experience Graph*

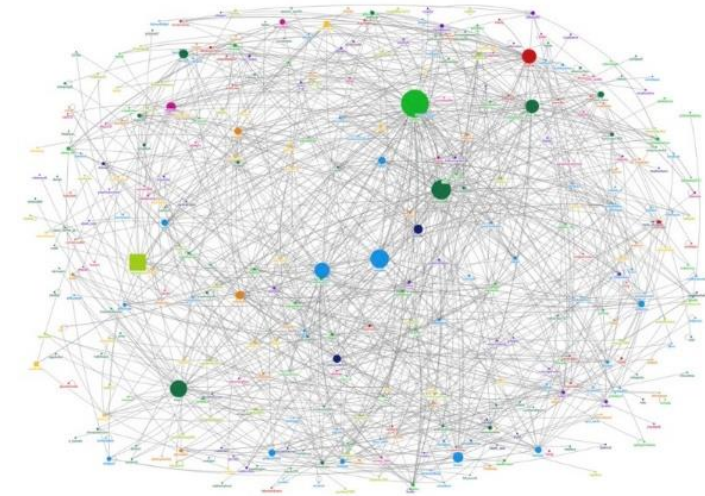


**Who might have permission to see connections of experiences?  
Learner, Teachers, Parents, Libraries, Museums, Park Staff...**

# How might we prepare for an era of lifelong learning data on campus?

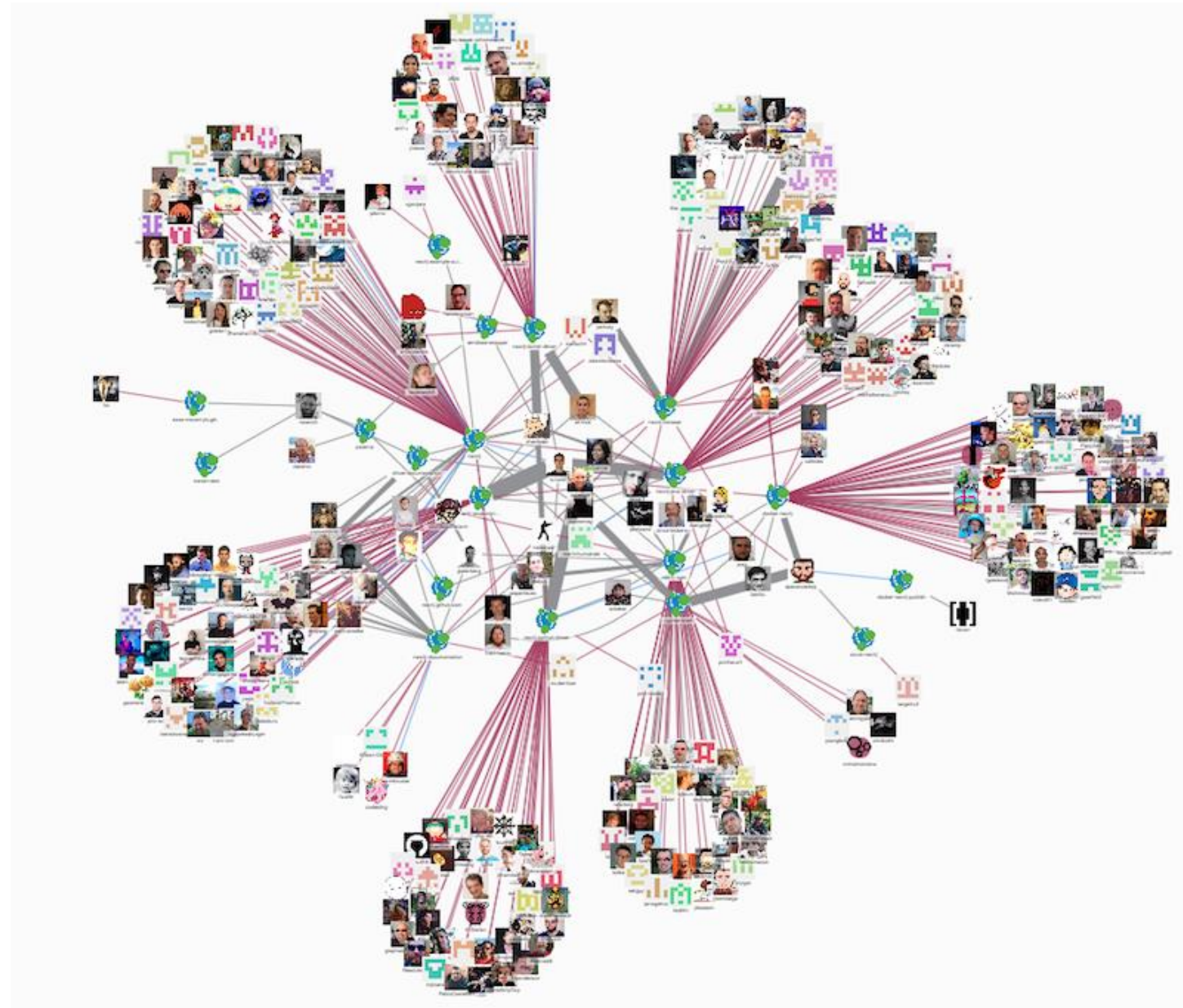


**Era of  
Social Graph**



**Era of  
Experience Graph**

**Imagine seeing connections of experiences (and outcomes) across campus communities...**



**Should we create a  
Campus Community  
Learning/Experience Graph?**



Members – Companies – Jobs – Skills – Schools – Knowledge

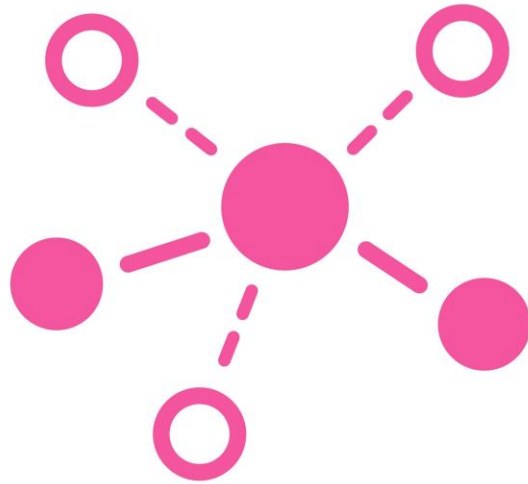
# Scenario: Campus Life Meet Connected Experience Data

## Short-term – 2019 -2023

- Map out opportunities & challenges
- What experience data could we create, capture and connect? (e.g. appropriate; actionable)
- Engage with existing efforts

## Long-Term – Beyond 2023

- Overcome Challenges (e.g. blockchain used for privacy)
- Align institutions, policies, social norms & technology capability



# Learning Curve

 Yet Analytics

Watershed<sup>LRS</sup>  xapiapps

**Experience Analytics**  
**Learning Record Stores**

 neo4j

 JanusGraph

  
 GraphDB

 OrientDB<sup>®</sup>

**Graph Analytics**



# Breaking News

VOL.XI - no.4350

NEW ISSUE

News  
from  
2025

## Supreme Court Upholds Students' Rights to Own Experience Data

College students earn the right to learning and performance analytics in the classroom. The ruling will now be tested beyond campus for workplace analytics as society tries to understand implications of this data-driven age.



“The resume is dead.  
Long live the Experience Graph”

# DAILY ALTERNATIVE FACTS

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## **Class of 2028**

### **Donates Experience Data**

More than 70% of the Class of 2028 have open-sourced access to their Learning Pathways. Anyone in the world eager to learn similar subjects and skills now have learning pathways to explore.

# BREAKING FAKE NEWS

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## FBI Investigating Massive Hacking of U.S. Workforce Experience Graph

125 million Experience Graphs hacked in 2031 across leading corporations.

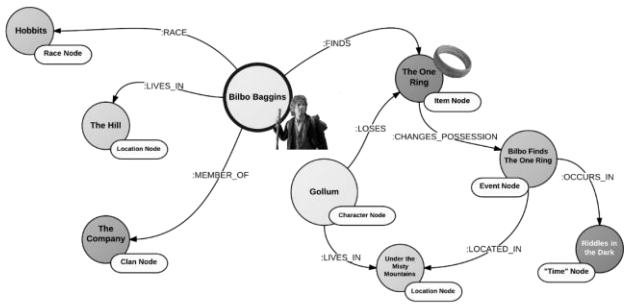
Older Millennials to younger siblings:  
“You should have stuck with the Social Graph”.



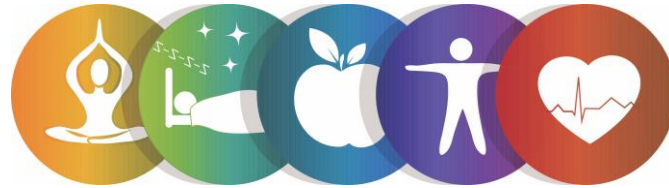
News  
from  
2032

**Break**





Age of  
Experience Graph



**Health  
& Wellness**



Role of  
Place

**2010 - 2019**

**Positive changes in  
health + wellness?**

**2020 - 2030**

**What challenges and opportunities do we  
anticipate will change around campus life?**



# Rise of Campaigns, Memes and Movements

## Semicolon tattoos in St. Cloud raise funds, stir hope, highlight mental health

Nora G. Hertel, Saint Cloud Times Published 5:04 p.m. CT March 2, 2019



Amy Bleuel



Cream City Tattoo Owner Ryan Schepp tattooed "smile" with a semicolon for the letter I on Teresa Nelson Saturday, March 2. Artists tattooed semicolons on dozens of people in St. Cloud Friday and Saturday to promote suicide awareness and raise funds for nonprofit The Beautiful Mind Project. The semicolon has come to symbolize there is more life to live for those people facing and affected by mental illness. (Photo: Nora G. Hertel, [nhertel@stcloudtimes.com](mailto:nhertel@stcloudtimes.com))

# Institutional Capacity & Culture



Programs: Repost, Mindful Mountaineers, Take 10, Semicolon Week



Emotional



Environmental



Financial



Intellectual



Occupational



Physical



Social



Spiritual



# Evolution in Dealing with Disciplinary Challenges

## Training Staff in Restorative Practices

An emerging social science that studies how to strengthen relationships between individuals as well as social connections within communities.



### Five Universal Truths of Human Interaction

1. People want to be treated with dignity and respect.
2. People want to be asked rather than being told to do something.
3. People want to be told why they are being asked to do something.
4. People want to be given options rather than threats.
5. People want a second chance when they make a mistake.



George J. Thompson III,  
PH.D., *Verbal Judo*

# Student-led & Peer Driven Change



HEALTH

## A New Sign That Teens Know They Aren't Struggling Alone

Their worries about mental health might have a bright side.

AMANDA MULL FEB 25, 2019



## NCAA Awards Grant for UK College of Education Mental Health Research

By [Amanda Nelson](#) Feb. 28, 2019

# Student Athlete Voices on Mental Health

The New York Times

By Pat Borzi

March 14, 2019

## *A Top Scorer Changes the Definition of the Complete Player*

“A lot of people in my position wouldn’t want to say anything,” Marquette guard Markus Howard, the Big East player of the year, said of going public about seeking mental health counseling.

...Olympians [Michael Phelps](#) and [Gracie Gold](#) to the N.B.A. star [Kevin Love](#)



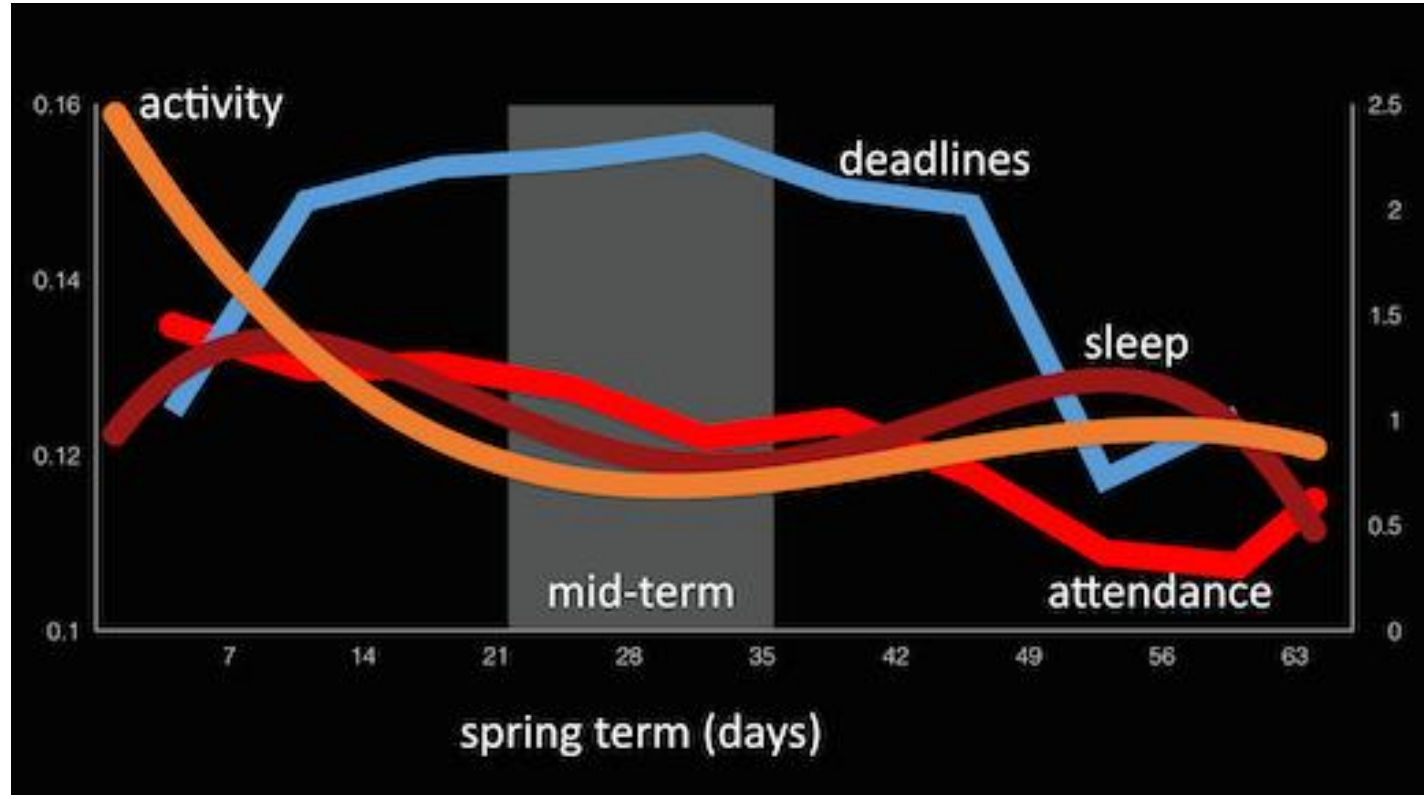
Vincent Tullo for The New York Times

# Projects to Understand (Campus) Population Health



## Student Life (2014 – 2015)

- ❑ Passive and automatic sensing phone data
- ❑ 48 Dartmouth students; 10 week term
- ❑ Mental health
- ❑ Academic performance
- ❑ Behavioral trends



**The Next Element = Interventions**

# The Debate will be 'should we'...



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## Intelligent Machines

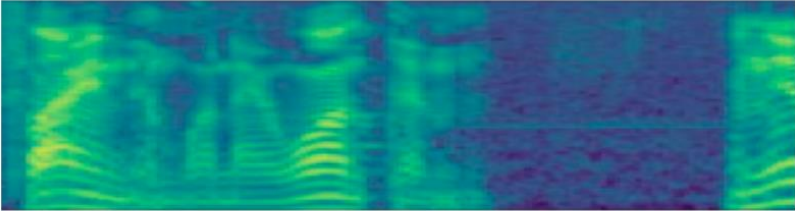
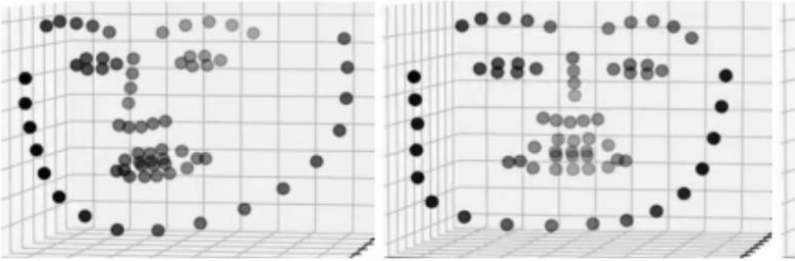
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# Your smartphone's AI algorithms could tell if you are depressed

Smartphones that are used to track our faces and voices could also help lower the barrier to mental-health diagnosis and treatment.

by Will Knight December 3, 2018

MIT  
Technology  
Review



um . . . yeah . . . . i mean

2020 -2030:

# How much wellness data will students have vs understand?

*Million Data Points  
Per Person*

*Dr Lee Hood*

**Dense, Dynamic Personal Data Clouds**

**iPS CELLS**  
0100101011010101101  
0110101010101011010  
1010101101010101010

**GENOME**  
GCGTAGTC  
ATGCGTAG  
GGCATGCT  
ATGCCATG  
ATAGCTGC

**TRANSCRIPTOME**  
CUUAGUGC  
UAUGCGUA  
GCUAGGCG  
CAUGCUUC  
GAGUGAUA

**TRANSACTIONAL**  
0100101011010101101  
0110101010101011010  
1010101101010101010

**SINGLE CELL**  
0100101011010101101  
0110101010101011010  
1010101101010101010

**PROTEOME**  
arg-his-pro-val-  
gly-leu-ser-thr-  
ala-trp-tyr-val-  
met-phe-arg-

**PHENOME**  
Na 143 K 3.7  
BP 110/70  
HCT 32  
BUN 12.9  
Pulse 110  
PLT 150  
WBC 92

**METABOLOME**  
0100101011010101101  
0110101010101011010  
1010101101010101010

**EPIGENOME**  
0100101011010101101  
0110101010101011010  
1010101101010101010

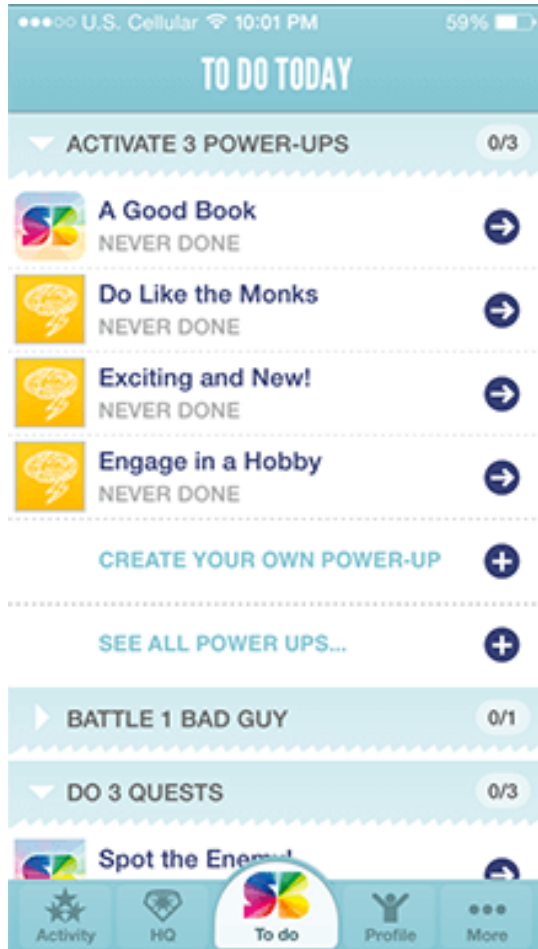
**SOCIAL MEDIA**  
11010100010  
10101011010  
10101001000  
10110100111  
10110101010

**These data clouds are the essence of Precision Medicine**

Institute for Systems Biology

2020 - 2030:

What services/expectations will they bring to campus?



Amazon develops 'health and wellness team within Alexa division'



PRODUCTS May 16, 2018

MetLife and Ernst & Young Create Multi-Channel Wellness Program

The solution will focus on behavioral change by providing personalized wellness plans, according to MetLife.

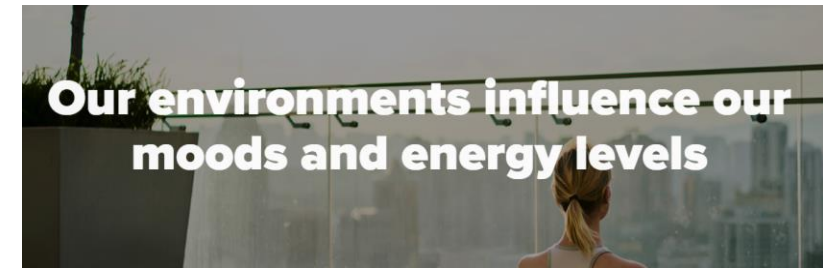
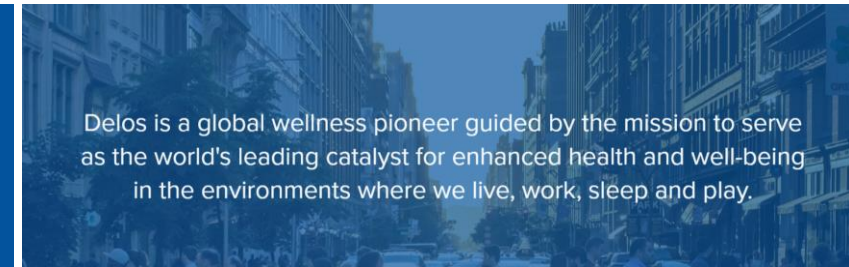
# 2020 - 2030:

# Will health factors for indoor environments be seen differently?

## SoFi and Delos Partner to Bring Delos' Home Wellness Solutions to Homeowners

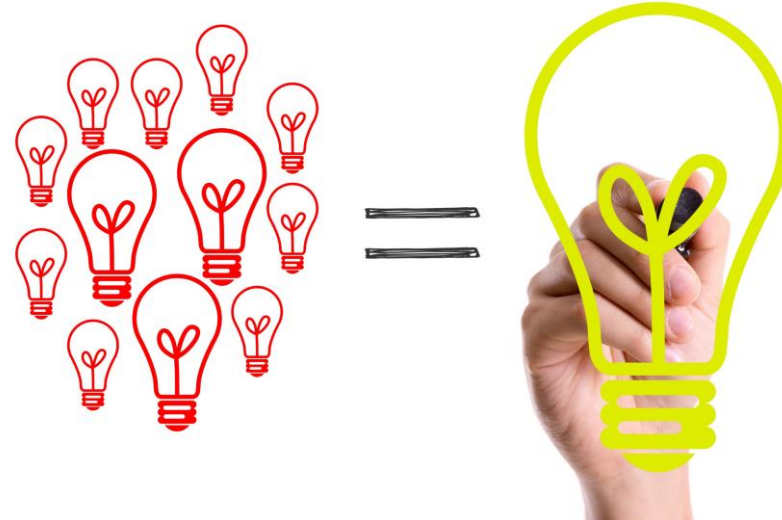
Mar 22, 2019 0

Wellness real estate and technology company, Delos™, is collaborating with online personal finance company, SoFi, to ensure homeowners will have an accessible financing path to implement Delos' DARWIN Home Wellness Intelligence Network, a fully-integrated residential solution designed to enhance the health and well-being of residents.





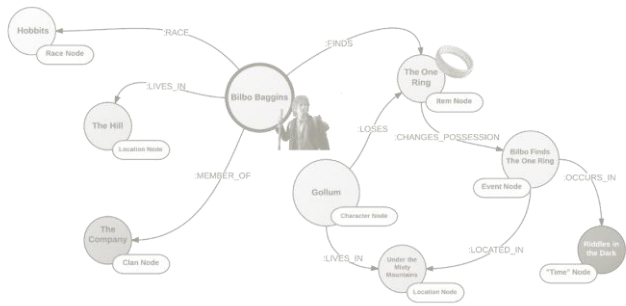
# *How might we rethink health + wellness integration?*



**Start**

**Stop**

**Continue**



## Age of Experience Graph



## Health & Wellness



## Role of Place

# Role of Place



***Third Place***  
**is a Real Thing**





## Pedestrian Friendly Zones



PARK(ing) Day is an annual worldwide event where artists, designers and citizens transform metered parking spots into temporary public parks.

PARKing Day – 2005 led by Rebar - SF

## PA unveils digital library at Central Mall

Story



Sherry Koonce

PA digital library

# “Pop Up” Culture



Places for Connections

# Live Experiences, Together



GAME OF THRONES Reactions at Burlington Bar S6E10 /// WINDS OF WINTER Pt 1 \\\



Sean L

Subscribe 53,725

1,397,048 views

+ Add to Share More

16,797 875

# Retail Healthcare Everywhere





# A Space Apart

College libraries contemplate meditation rooms

By [Ronnie Wachter](#) | January 2, 2018

**Places to Pause...**  
**Mindfulness**  
**Meditation**  
**Sensory Enhancements**  
**Sensory Deprivation**  
**Play with Dogs and Cats**



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

# HUMBOLDT STATE UNIVERSITY



## Brain Booth

~ 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

### Rotating Program Takeover

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



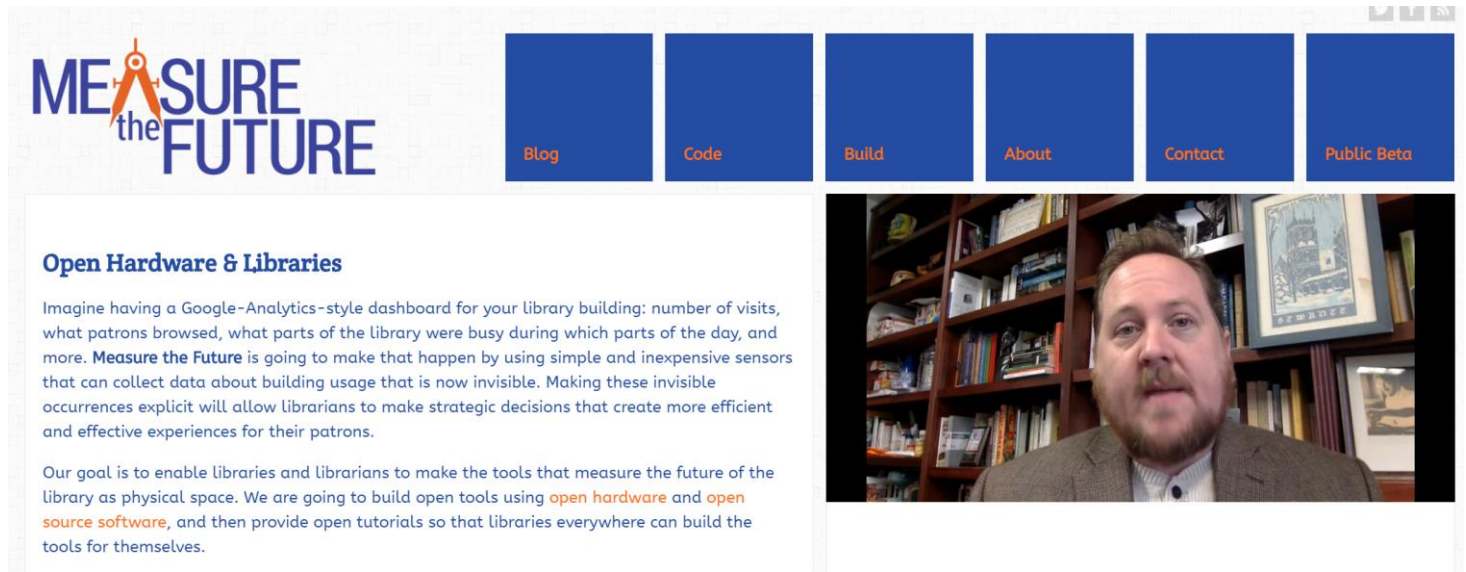
A Fun, New Experience in NYC, DC, San Francisco & Chicago

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



## Place Use-Data

*...Google Analytics for the union/center and campus buildings?*



The screenshot shows the homepage of the 'Measure the Future' website. At the top left is the logo, which features a stylized orange figure holding a measuring tool above the text 'MEASURE the FUTURE'. To the right of the logo is a navigation bar with six blue buttons labeled 'Blog', 'Code', 'Build', 'About', 'Contact', and 'Public Beta'. Below the navigation bar is a main content area with the heading 'Open Hardware & Libraries'. The text below the heading describes the project's goal: to create a Google Analytics-style dashboard for library buildings using simple sensors to track building usage. It mentions the use of 'open hardware' and 'open source software'. To the right of the text is a video thumbnail showing a man with a beard and mustache, wearing a grey jacket, speaking in front of a bookshelf.

### Open Hardware



### Smart Libraries



### Open Tutorials



Jason Griffey

 The Librarybox Project

## 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.

TIMOTHY B. LEE - 6/27/2018, 11:19 AM



Kroger and Nuro Expand Unmanned Grocery Delivery to Houston

# On-Demand(ness)

Scheduling Here or Anywhere

**LIQUIDSPACE** Find Space List Space Enterprise

## Office Smarter

Engage the largest commercial real estate network to find and book office space.

Find List Connect

Where do you need space? Find Space

# Place-based Messaging & Personal Safety Staff Trained on Cues

Courtesy of Safer Communities Sexual Violence and Abuse Partnership, Lincolnshire. Originators of the 'Ask for Angela' poster campaign part of the #NoMore sexual violence and abuse in Lincolnshire awareness Campaign. [www.lincolnshire.gov.uk/nomore](http://www.lincolnshire.gov.uk/nomore)

## #ASK FOR ANGELA

“ HI I'M ANGELA,

ARE YOU ON A DATE  
THAT ISN'T WORKING OUT?

DO YOU FEEL LIKE  
YOU'RE NOT IN A  
SAFE SITUATION?

IS YOUR TINDER OR  
POF DATE NOT WHO  
THEY SAID THEY WERE  
ON THEIR PROFILE?

DOES IT ALL FEEL  
A BIT WEIRD?

IF YOU GO TO THE BAR AND ASK FOR 'ANGELA'  
THE BAR STAFF WILL KNOW YOU NEED SOME HELP GETTING  
OUT OF YOUR SITUATION AND WILL CALL YOU A TAXI OR  
HELP YOU OUT DISCREETLY - WITHOUT TOO MUCH FUSS ”

[www.met.police.uk/AskforAngela](http://www.met.police.uk/AskforAngela)

Call **101** for non-emergency enquiries,  
to report an incident or get help.

If you're deaf or hard of hearing,  
use our textphone service on **18001 101**.

Call **999** if it's an emergency or a crime is in progress.



DMCT122



## 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





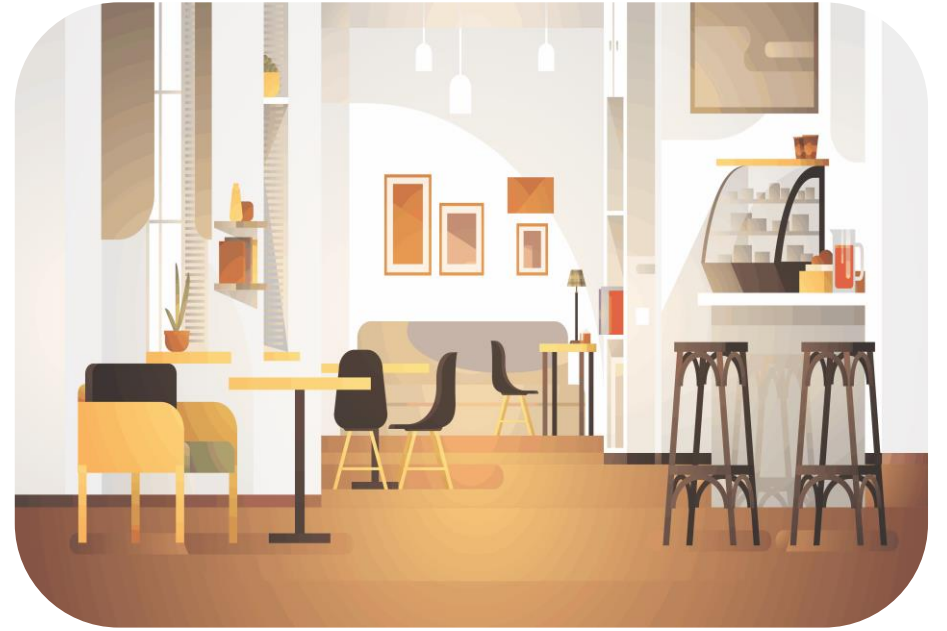
# Mobility + Accessibility

Safety, Equity + Access

Autonomous People Movers Coming Soon!



**How might the nature of place surprise us in 2029?**



*End*



*Discussion*

# 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

Behavior Science

Cyber Security

Aging

Systems Thinking

Experience Design

Service Design

Psychology

Data Science

Crypto / Blockchain

Restorative Practice

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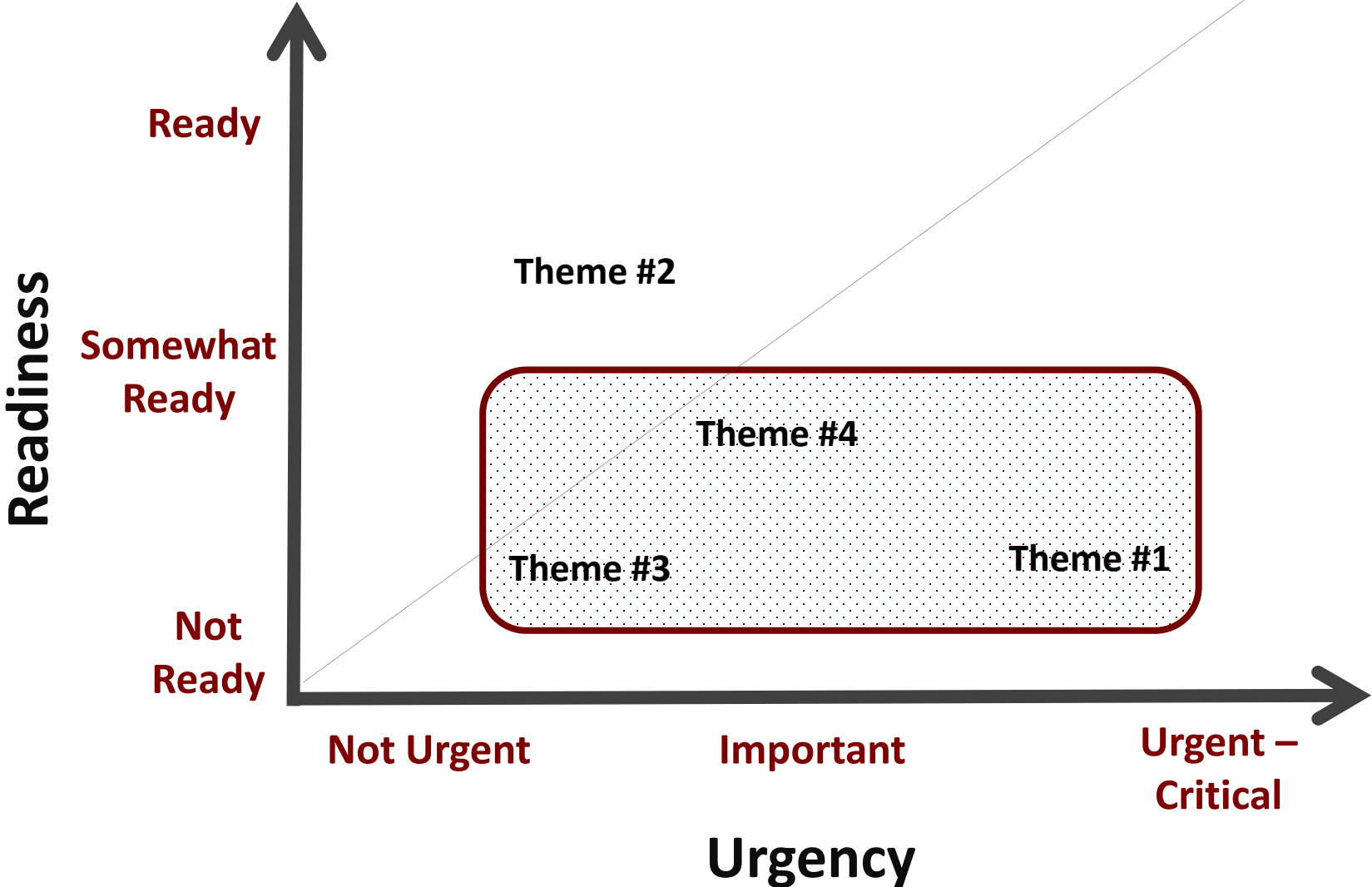
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# Take a Pulse Check on Emerging Trends vs Organizational Appetite

## Top Trends/Themes

- 1)
- 2)
- 3)
- 4)
- 5)





**Garry Golden**

*[garrygolden@gmail.com](mailto:garrygolden@gmail.com)*

***PDF: [garrygolden.com/March23](http://garrygolden.com/March23)***

*Two Rs*

*Tags:*

*[diigo.com/user/garrygolden/KEYWORD](http://diigo.com/user/garrygolden/KEYWORD)*





# Signals

## Strap on the Fitbit: John Hancock to sell only interactive life insurance

BUSINESS NEWS SEPTEMBER 19, 2018 Suzanne Barlyn



(Reuters) - John Hancock, one of the oldest and largest North American life insurers, will stop underwriting traditional life insurance and instead sell only interactive policies that track fitness and health data through wearable devices and smartphones, the company said on Wednesday.

# Why Build a Habit in Scanning for Signals?

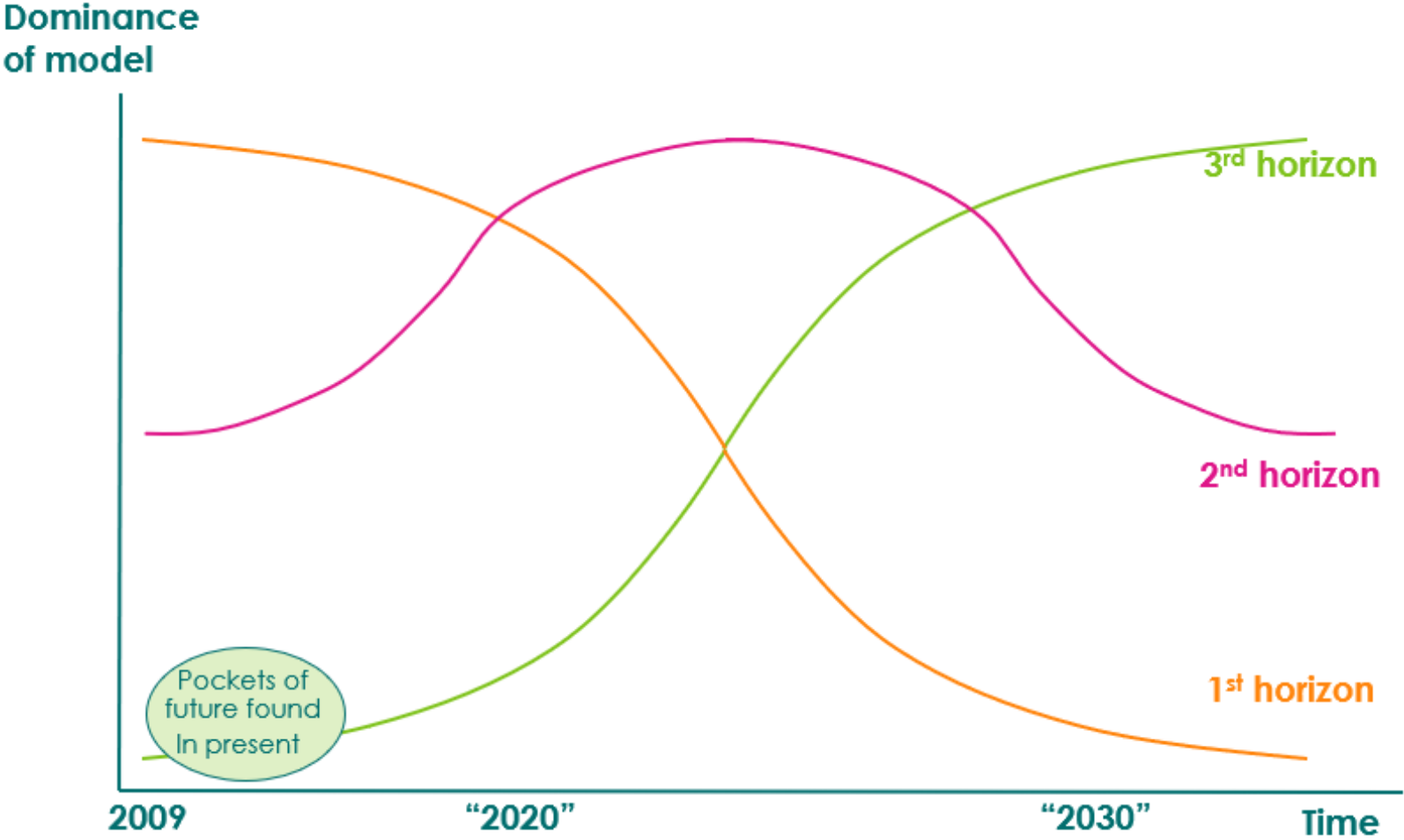
Outcomes & Outputs



**Building Knowledge  
(Framework Forecast)**

# Horizon Scanning, Meet the Three Horizons

“Three Horizons” Model of Change (Bill Sharpe)



Graphic courtesy of Andrew Curry, The Futures Company

## **Signals Scanning & Street Light Effect**



# Developing a Practice of Horizon Scanning

