

The Future(s) of Campus Experiences  
The Art & Science of  
Looking at the Future



**Garry Golden**  
Forward Elements  
March 21, 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

?

?

?

?

?

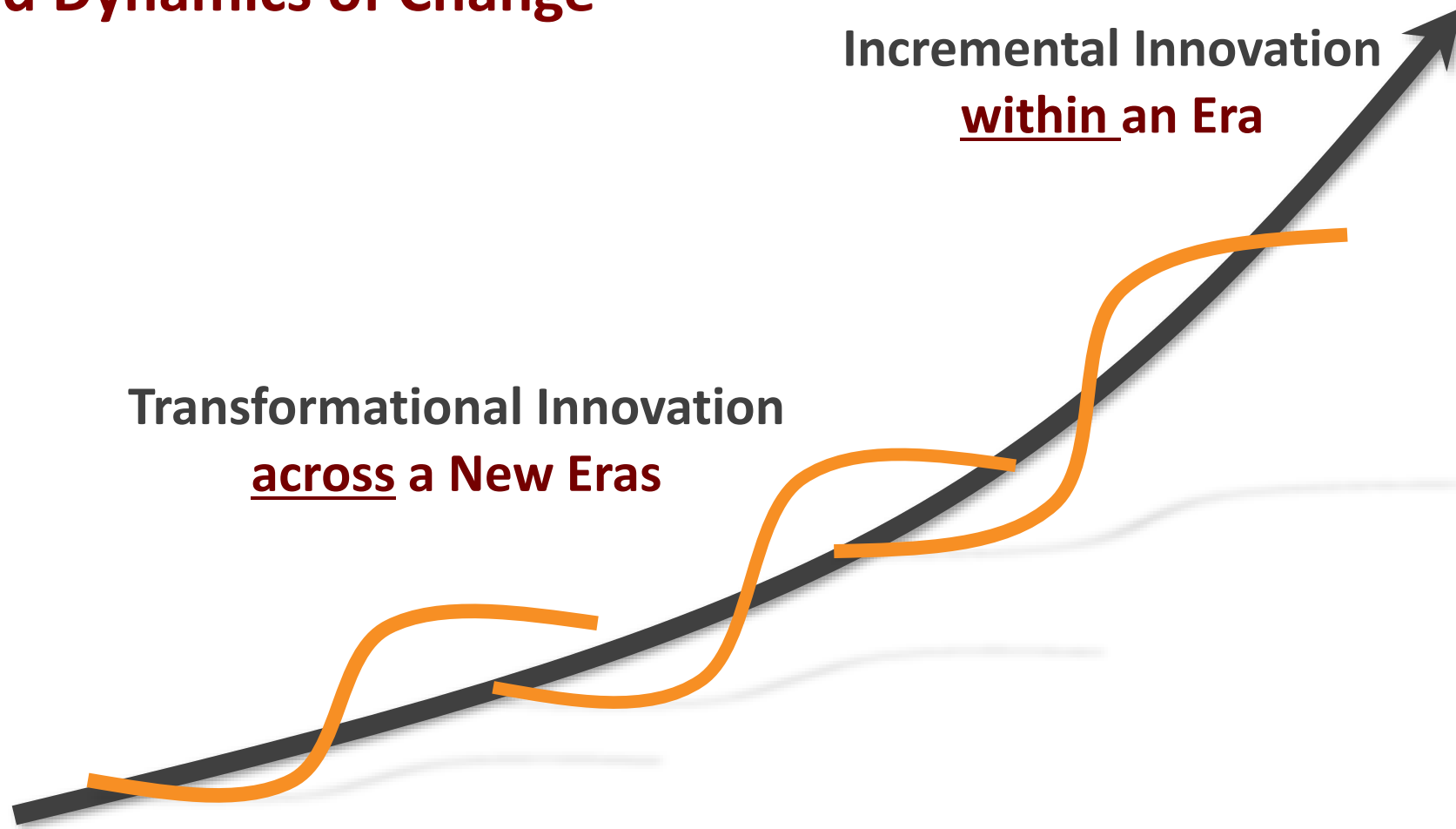
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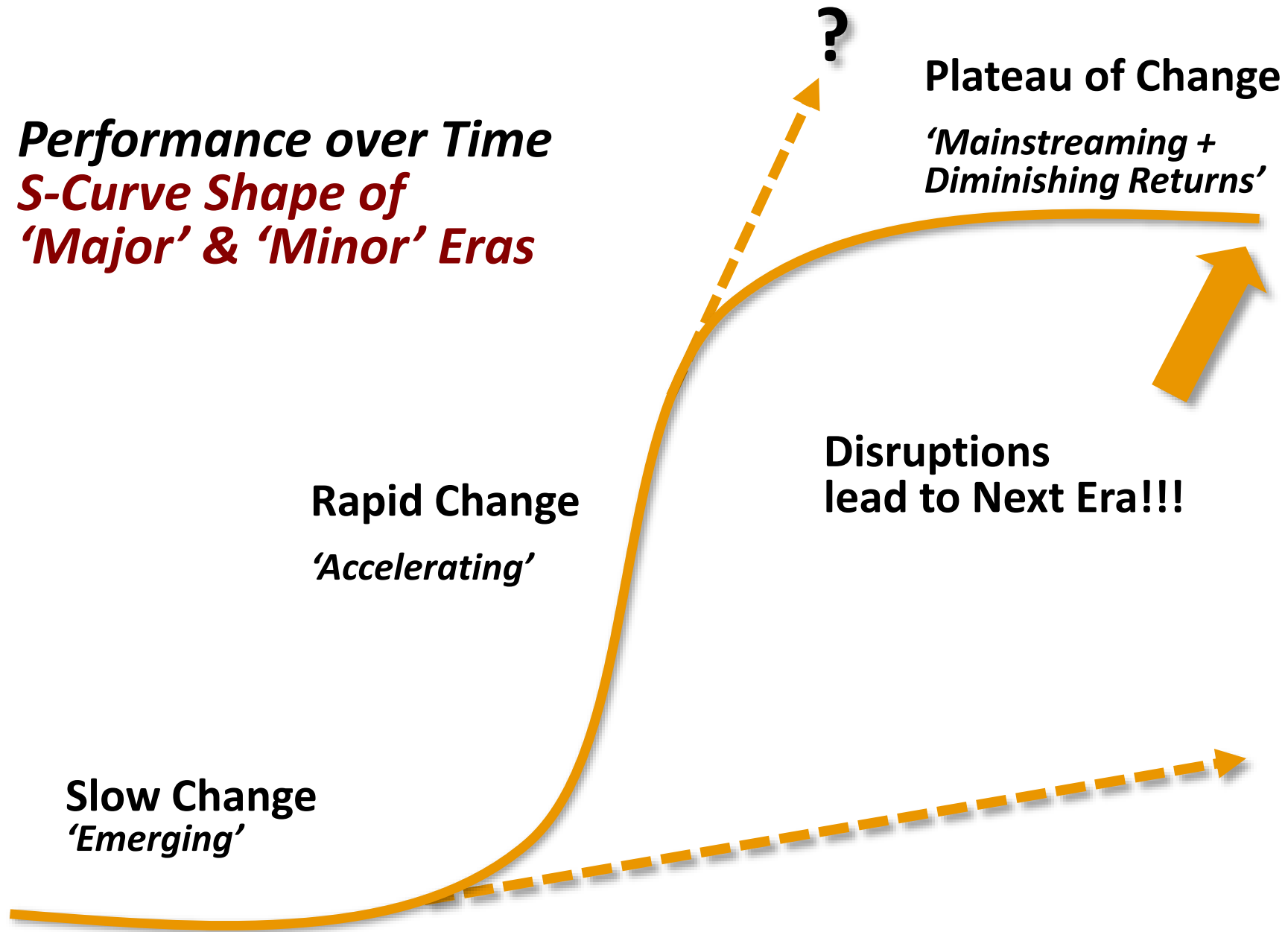
Image set removed

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'*

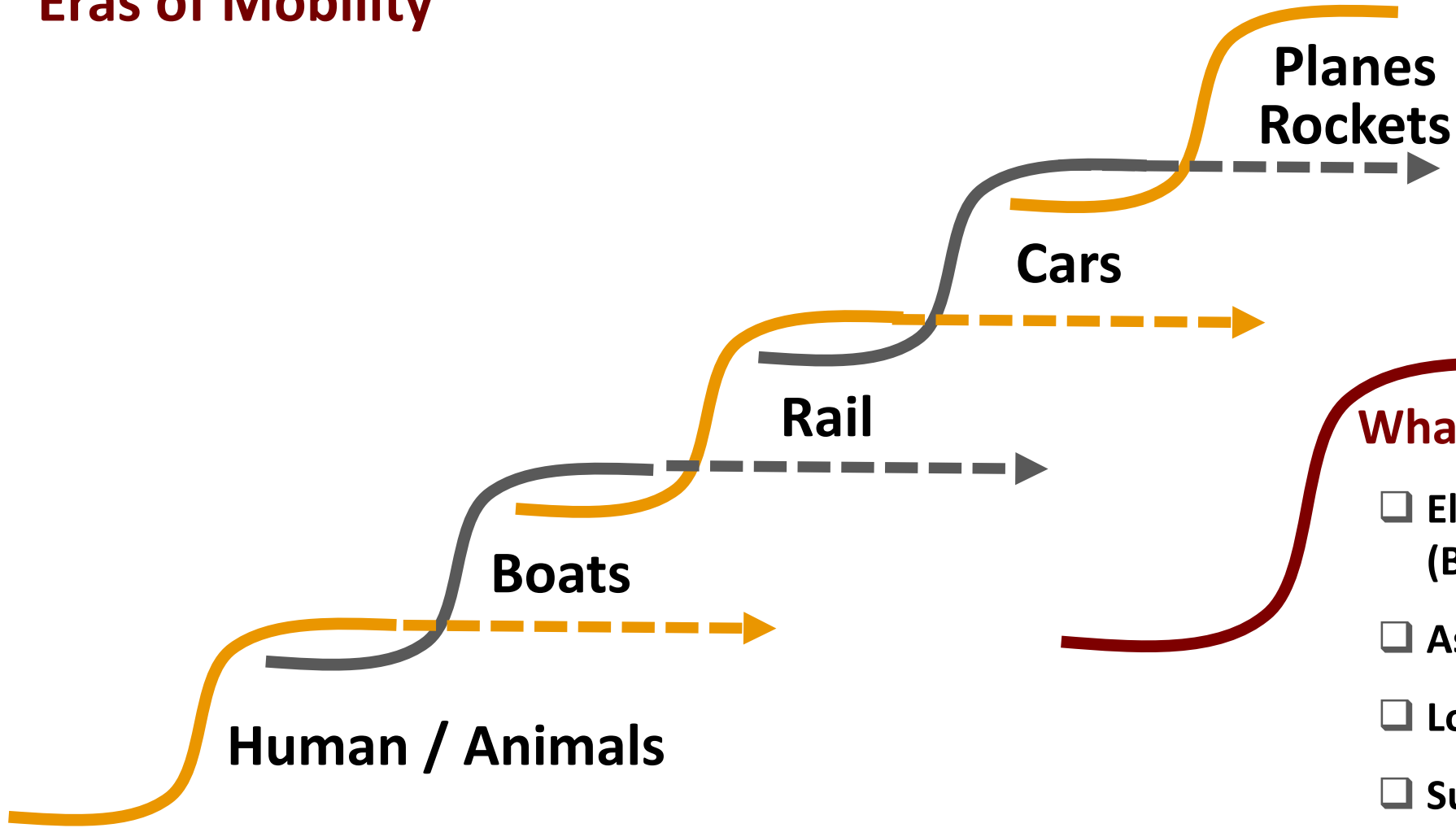
**Rapid Change**  
*'Accelerating'*

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

**Slow Change**  
*'Emerging'*



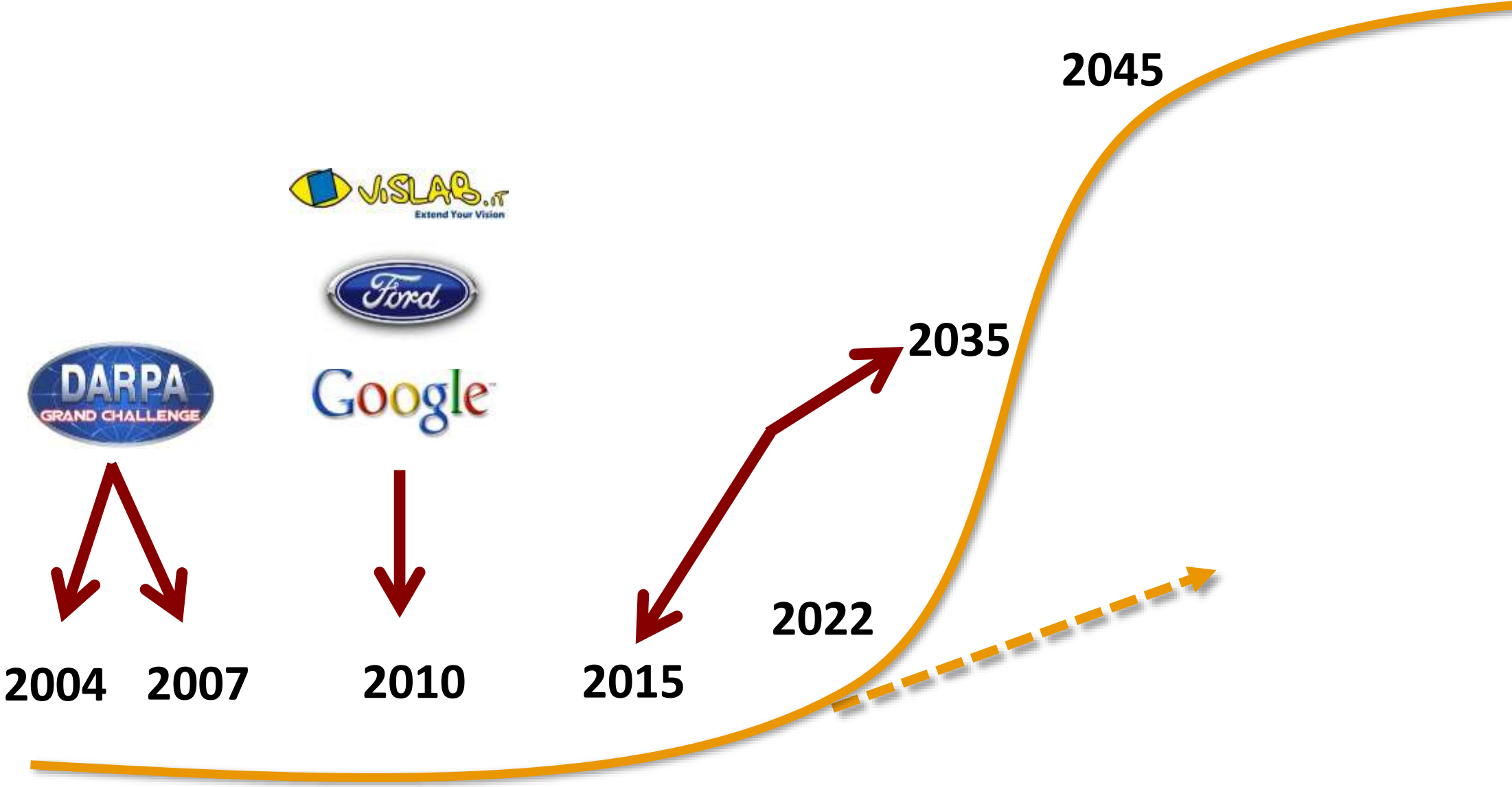
# Eras of Mobility



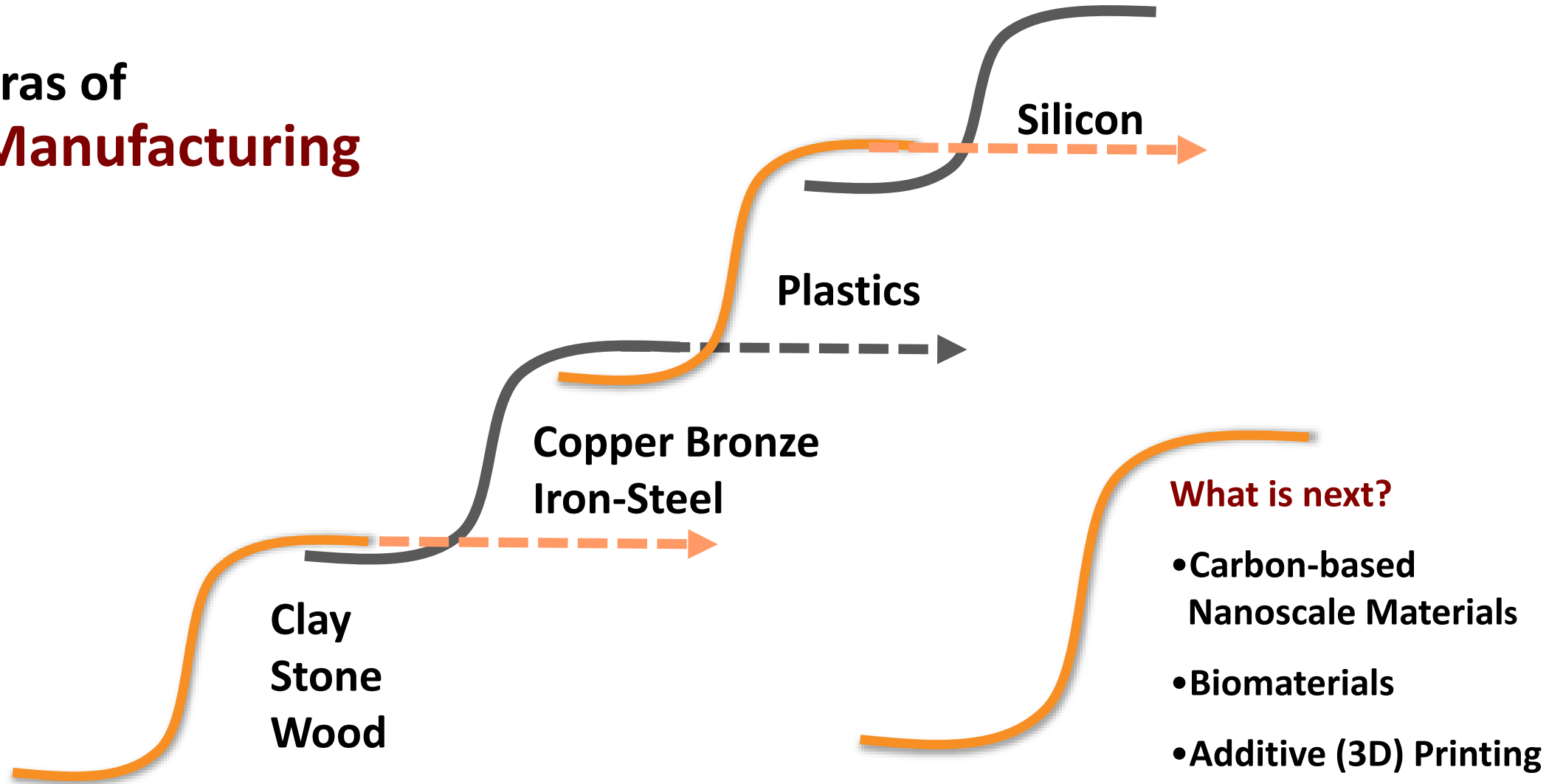
## What is next?

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

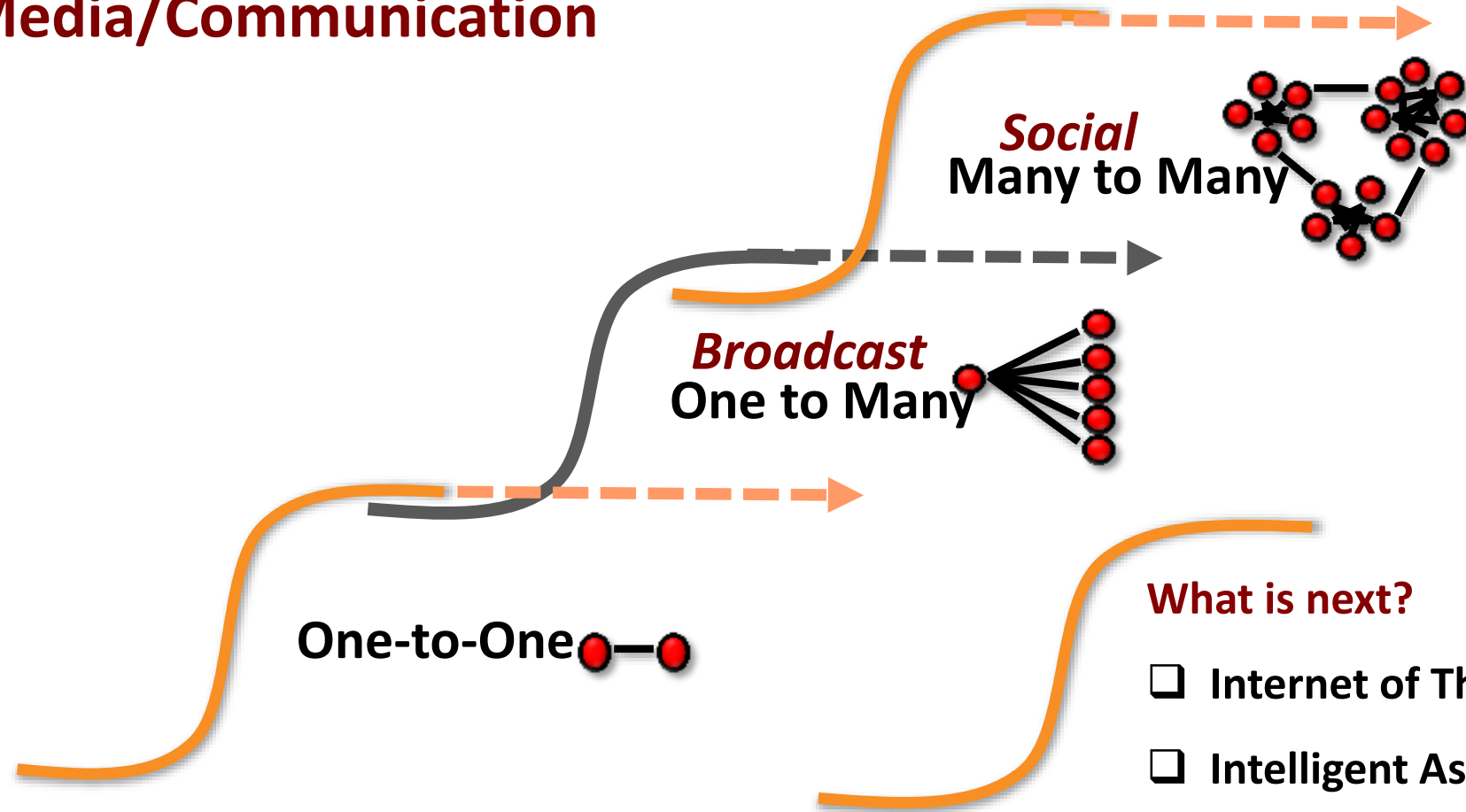
# Tapping Your Inner Futurist: Monitoring Signals of Change



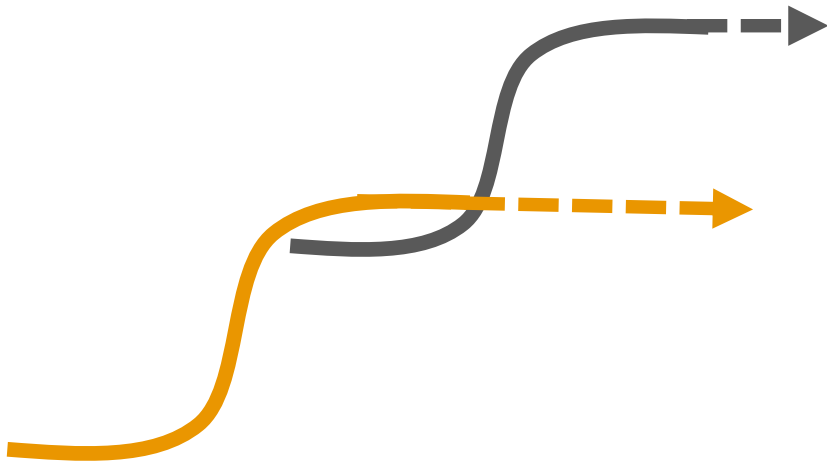
# Eras of Manufacturing



# Eras of Media/Communication



# How will societies navigate S-curve transitions for...?



## **Education / Learning**

Life stage to Lifelong; Online to AI / Augmented

## **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

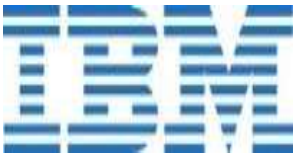
# Four Futures Thinking



**Continued  
Growth**



**Disciplined  
Constrained**



**Transformed**



**Decline  
Collapse**



**Continued  
Growth**



**Disciplined  
Constrained**



**Transformed**



**Decline  
Collapse**

Thinking Like a Futurist?





# Foresight 101: Cone of Plausibility

Multiple Outcomes, Multiple Time Horizons

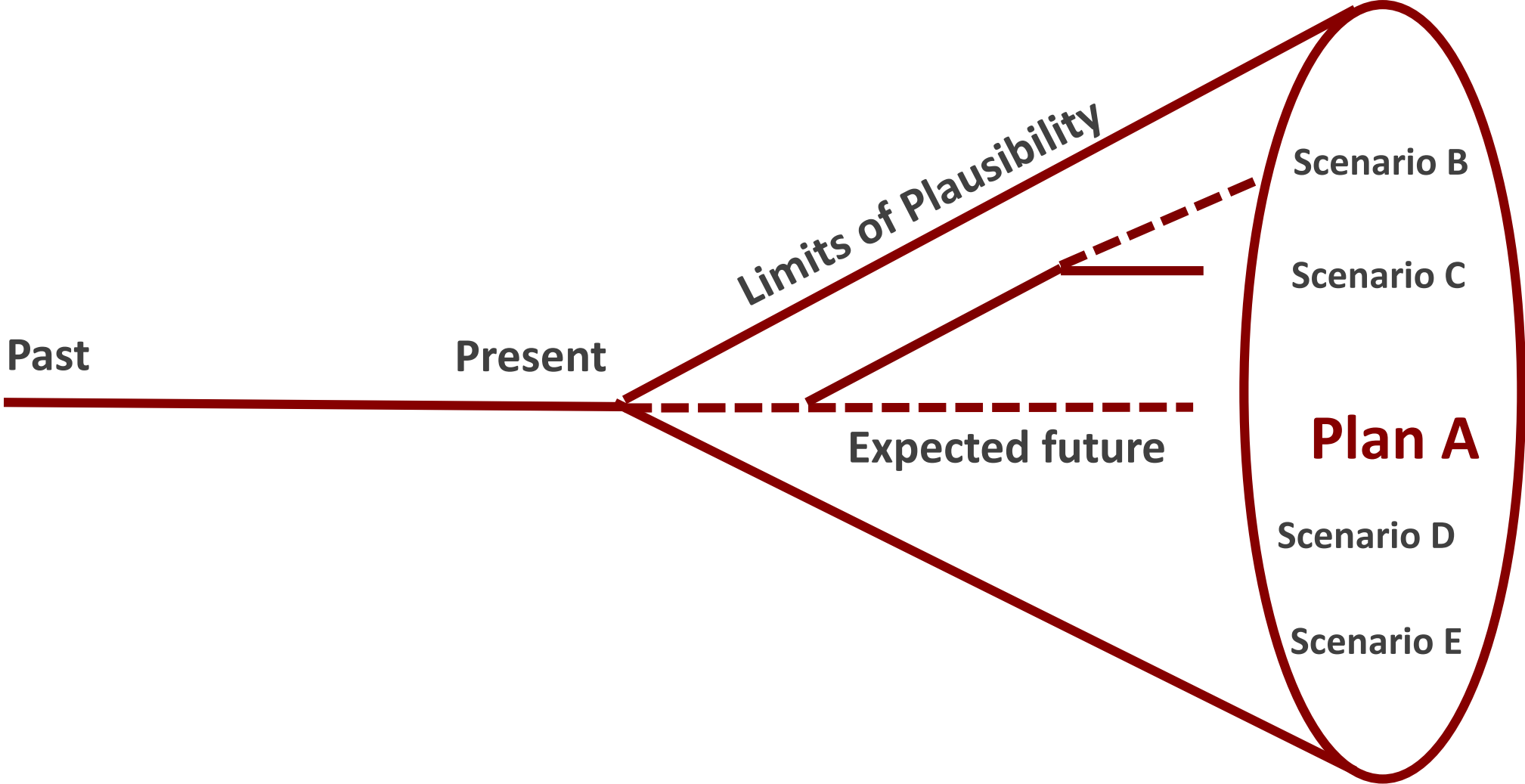


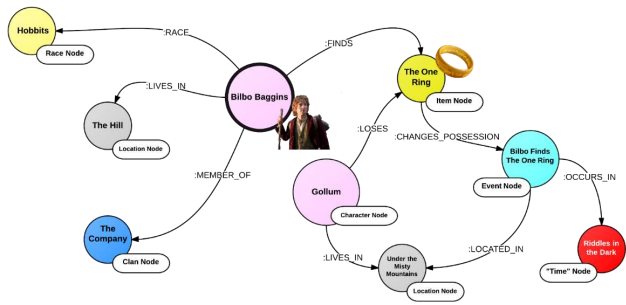
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**Every day I make an effort to move toward  
what I do not understand.**

**- 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?**





# 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**

# Social Norms for the Anonymous-Access Web

1993



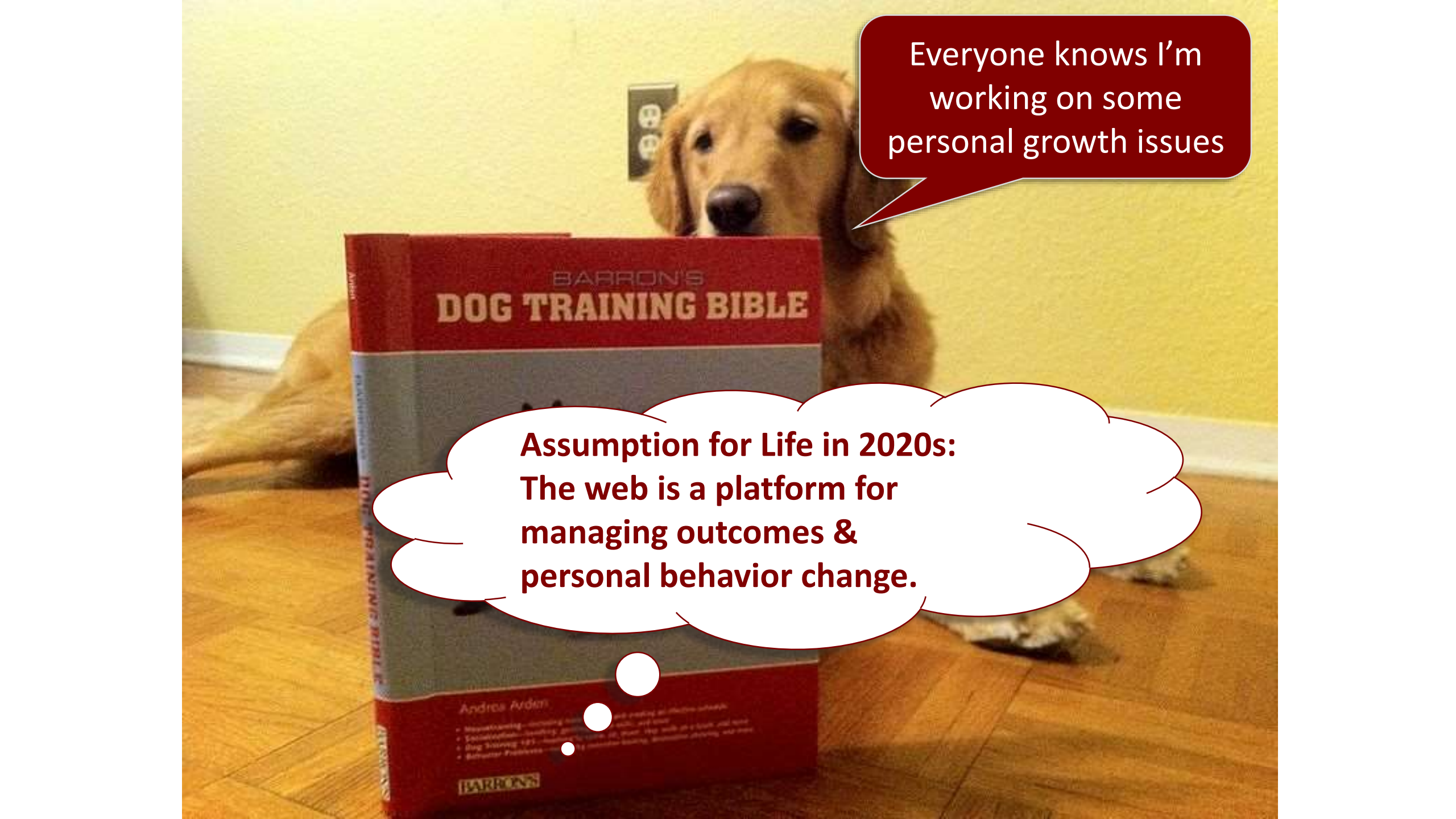
*“On the Internet, nobody knows you’re a dog.”*

“On Facebook, 273 people know I’m a dog.  
The rest can only see my limited profile.”

# Social Norms & the Social Web

2008





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.**

**Outputs Mission:**

**Access to Collections**



**Outcomes Mission:**

**Behavior Change &  
Development of Skills**



# 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”**





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

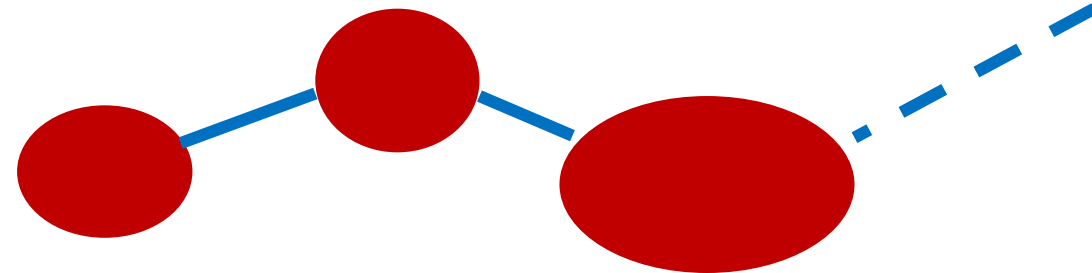
- Sarah **read** an article on blockchain for automating compliance
- Sarah **opened** an Evernote folder on blockchain solutions
- Sarah **watched** a Youtube video introducing the Ethereum blockchain
- Sarah **searched** for Ethereum Meetups in NYC
- Sarah **attended** the Crypto Compliance conference 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



The slide features a dark blue background with a white 'W' logo in the top left corner. The main title is 'xAPI xAPRIL Spotlight: Volume & Privacy'. On the right side, there are two circular headshots of Sarah Lindsell and Steve Tomlinson, with their names and titles listed below them. Sarah Lindsell is the Global Chief Learning Strategist at PwC, and Steve Tomlinson is the 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



**Understanding  
LMS/CMS Activity**

**Expanding  
Video-based Analytics**

**ExperienceAPI (xAPI) L&D integration with focus on training for Service, Sales, Leadership & Marketing.**

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?**



# 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...**



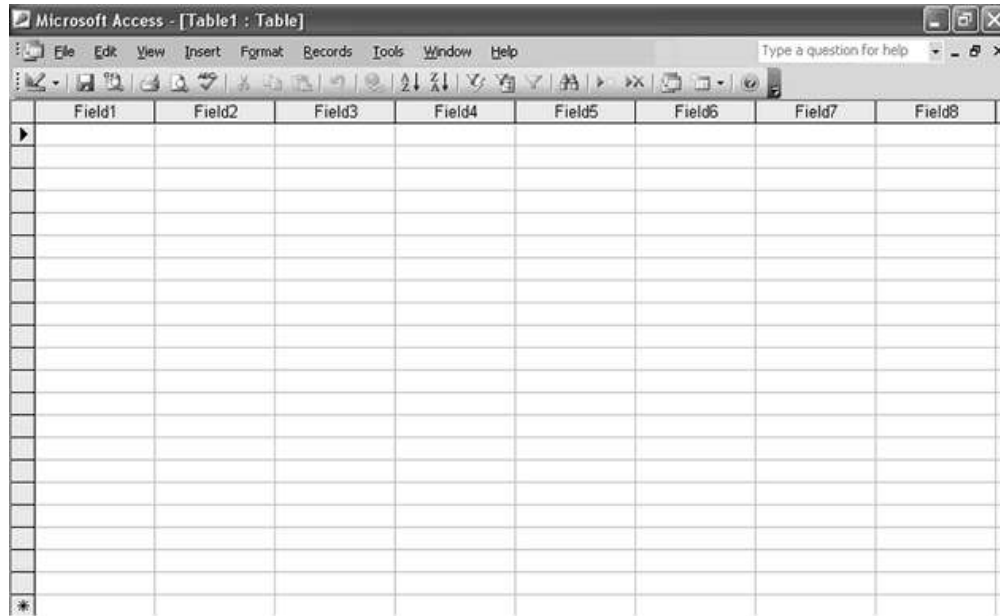
**“I did this...”**  
Statements

**How do we approach regulations?**

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

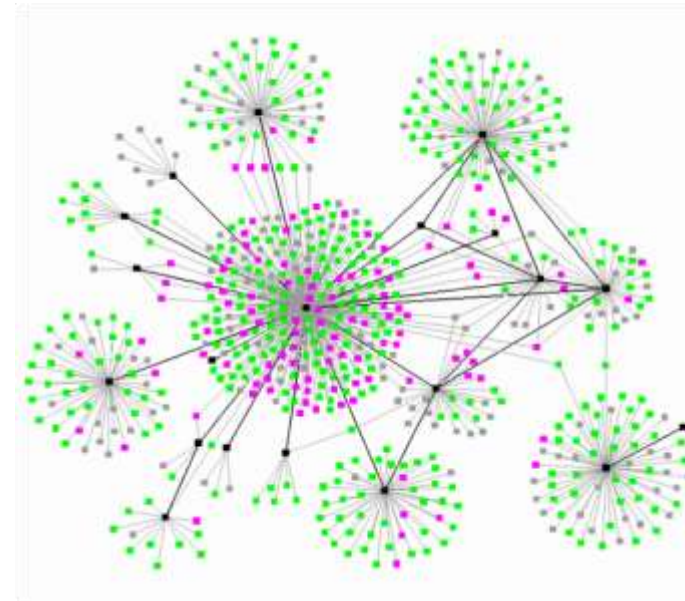
**How do we make sense of it?**

# Building a Connected Data Foundation for Innovation



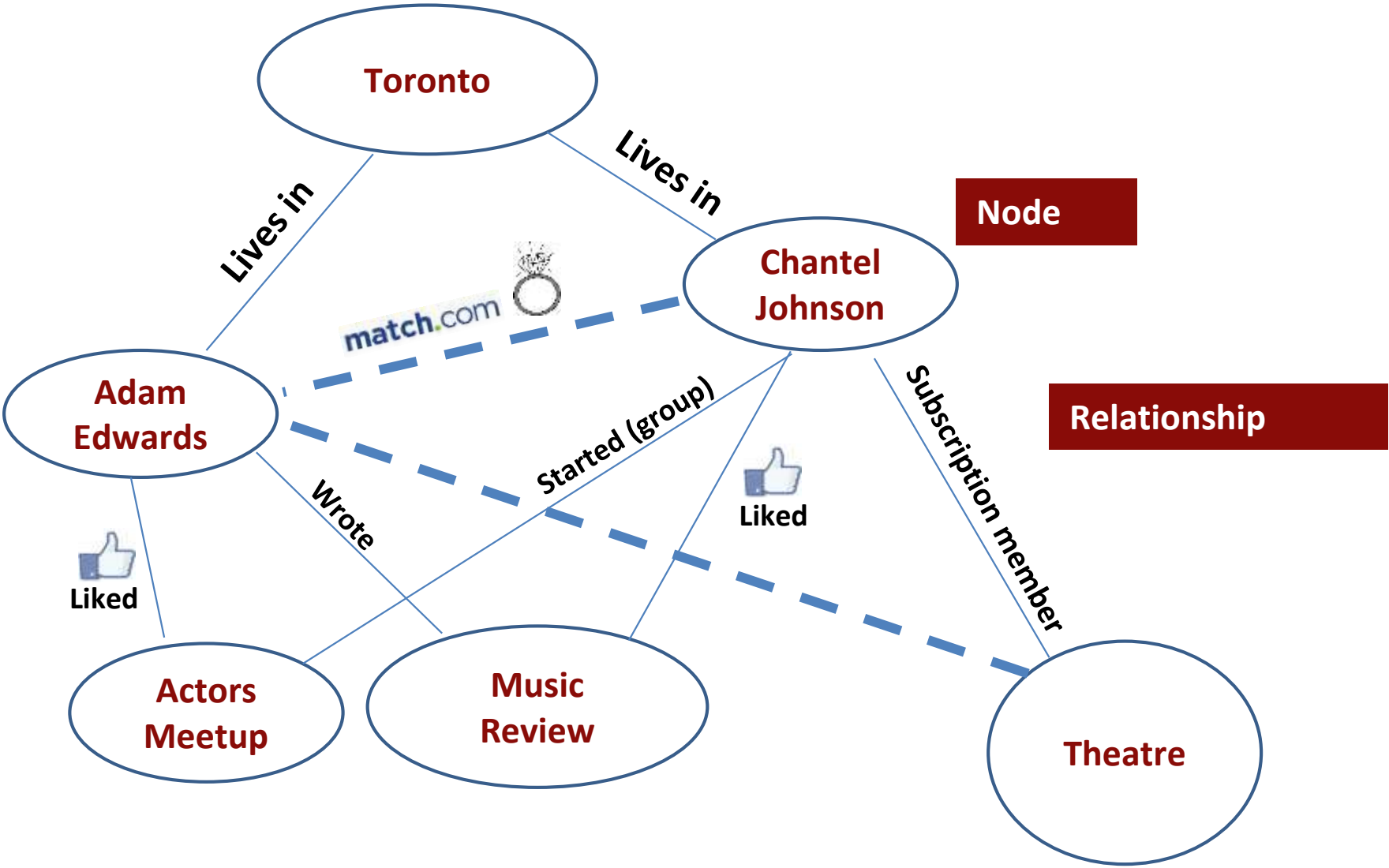
A screenshot of the Microsoft Access application window. The title bar reads "Microsoft Access - [Table1 : Table]". The menu bar includes "File", "Edit", "View", "Insert", "Format", "Records", "Tools", "Window", and "Help". A search bar contains the text "Type a question for help". Below the menu bar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

**Tables = Past**

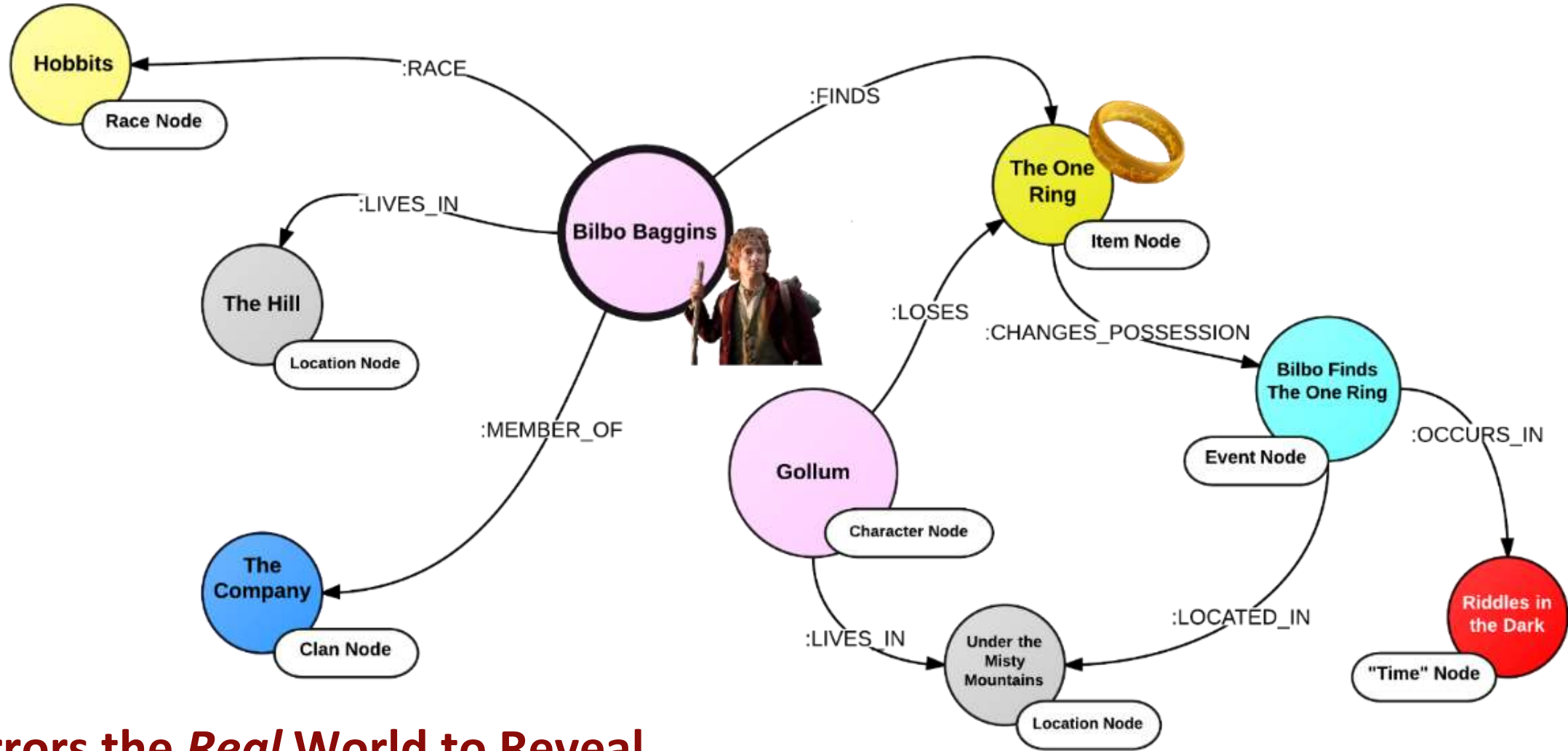


***Graph Thinking = Future***

# Graph Database = Understanding Relationships + Connections



# Graph Solutions for Understanding the Campus Journey vs Outcomes



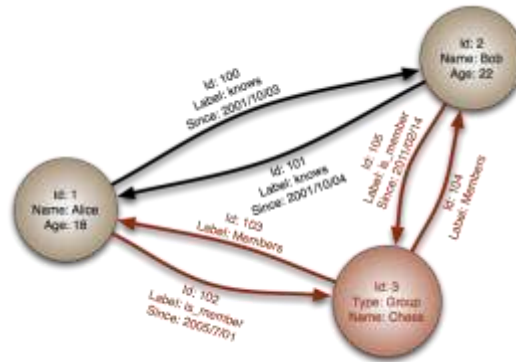
Mirrors the *Real World* to Reveal  
Influencer Profiles, Decision Pathways and Recommendations

# Noah is *Connecting Things on his Experience Graph*

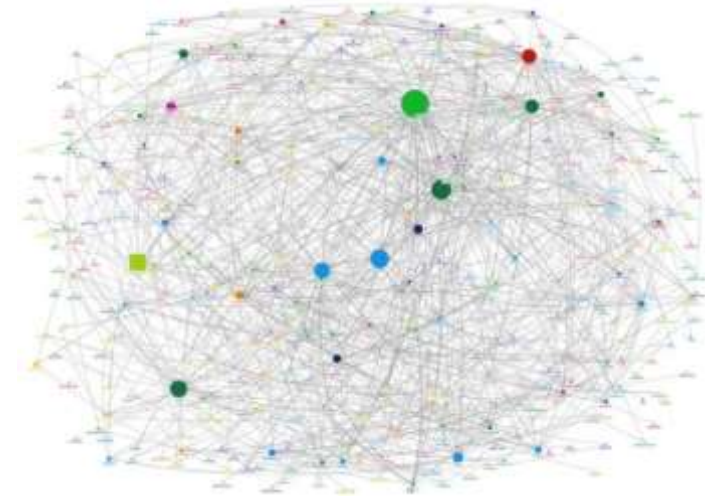


**Who might have permission to see connections of experiences?**  
Learner, Teachers, Parents, Libraries, Museums, Park Staff...

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



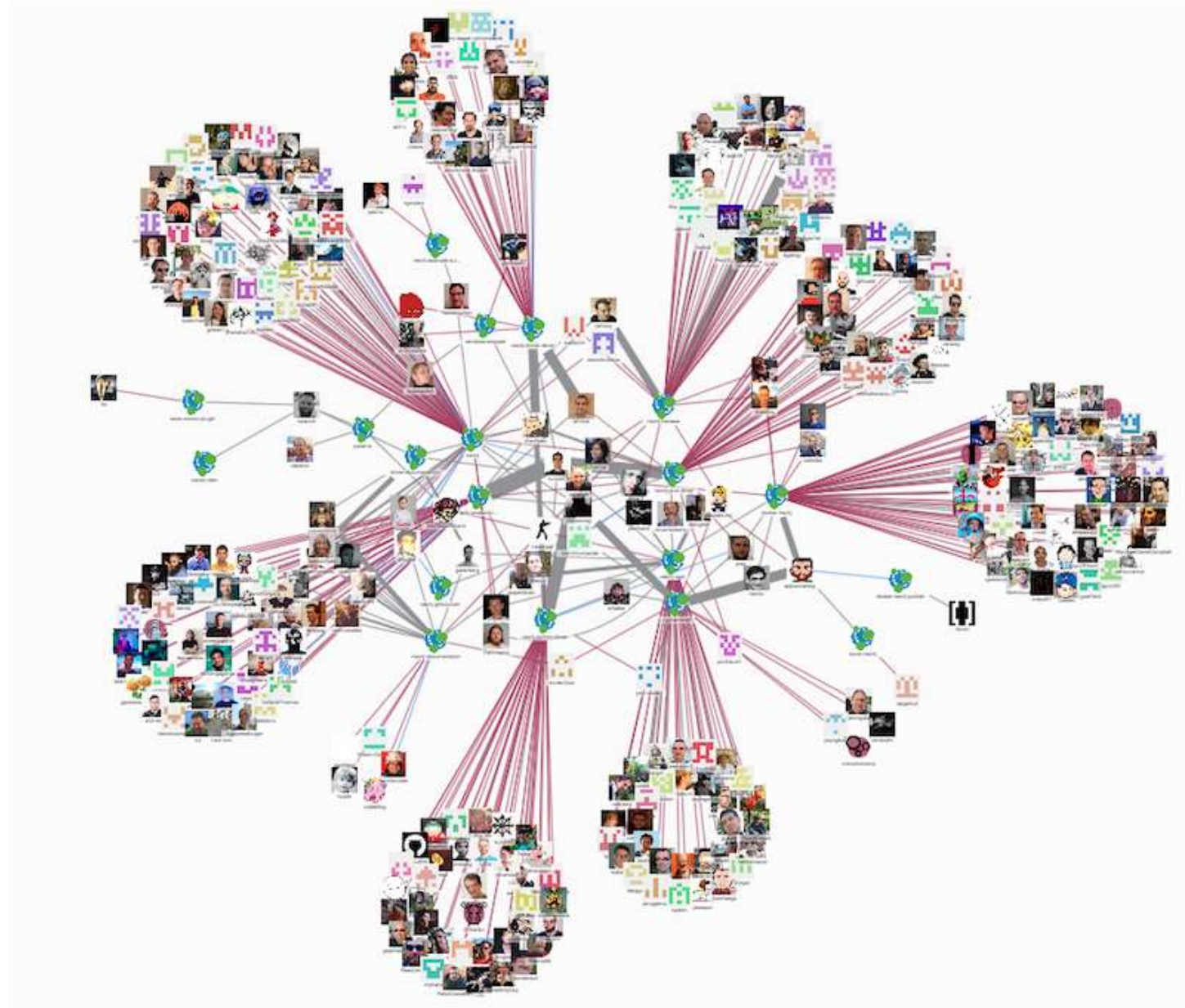
Era of  
Social Graph



Era of  
Experience Graph



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



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



Members – Companies – Jobs – Skills – Schools – Knowledge



# How might we understand ourselves and tell our stories?



Resume



Portfolio



Presence



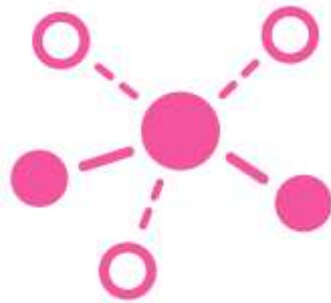
# Scenario: Campus Life Meet Connected Experience Data

## 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 LRS  xapiapps

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

 neo4j

 JanusGraph

 GraphDB

 OrientDB®

**Graph Analytics**

# Breaking News

VOL. XI - no. 4350

NEW ISSUE

News  
from  
2025

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

College students successfully argue their right to learning and performance analytics in the classroom and beyond in the workplace. Ripple effect will likely go beyond campus into the workplace as society tries to understand implications of this strange 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**

Having won its right to experience data, more than 70% of the Class of 2024 have open-sourced their Learning Pathways to be shared across the World. Anyone eager to learn similar subjects and skills now have learning pathways to explore.

# BREAKING FAKE NEWS

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News  
from  
2032

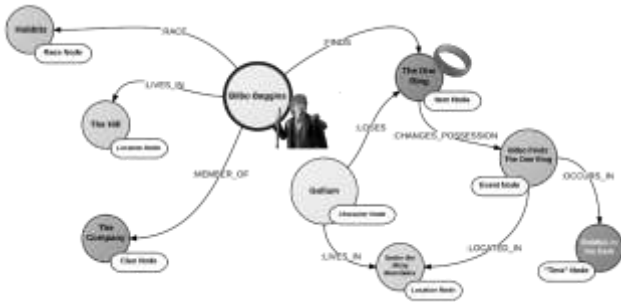
## **FBI Investigating Massive Hacking of U.S. Workforce Experience Graph**

Nearly 125 million privately managed Experience Graphs were hacked in 2031 across some of America's leading corporations. Older Millennials now pointing fingers at younger siblings: "You should have stuck with the Social Graph".



**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

## Here's What Clay's Semicolon Tattoo on '13 Reasons Why' Actually Means



Amy Bleuel



By DANIELLE JACKSON  
Published On 05/21/2018  
@DanielleKnecole



tommy.dorfman  
1.4m followers

View Profile



# 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

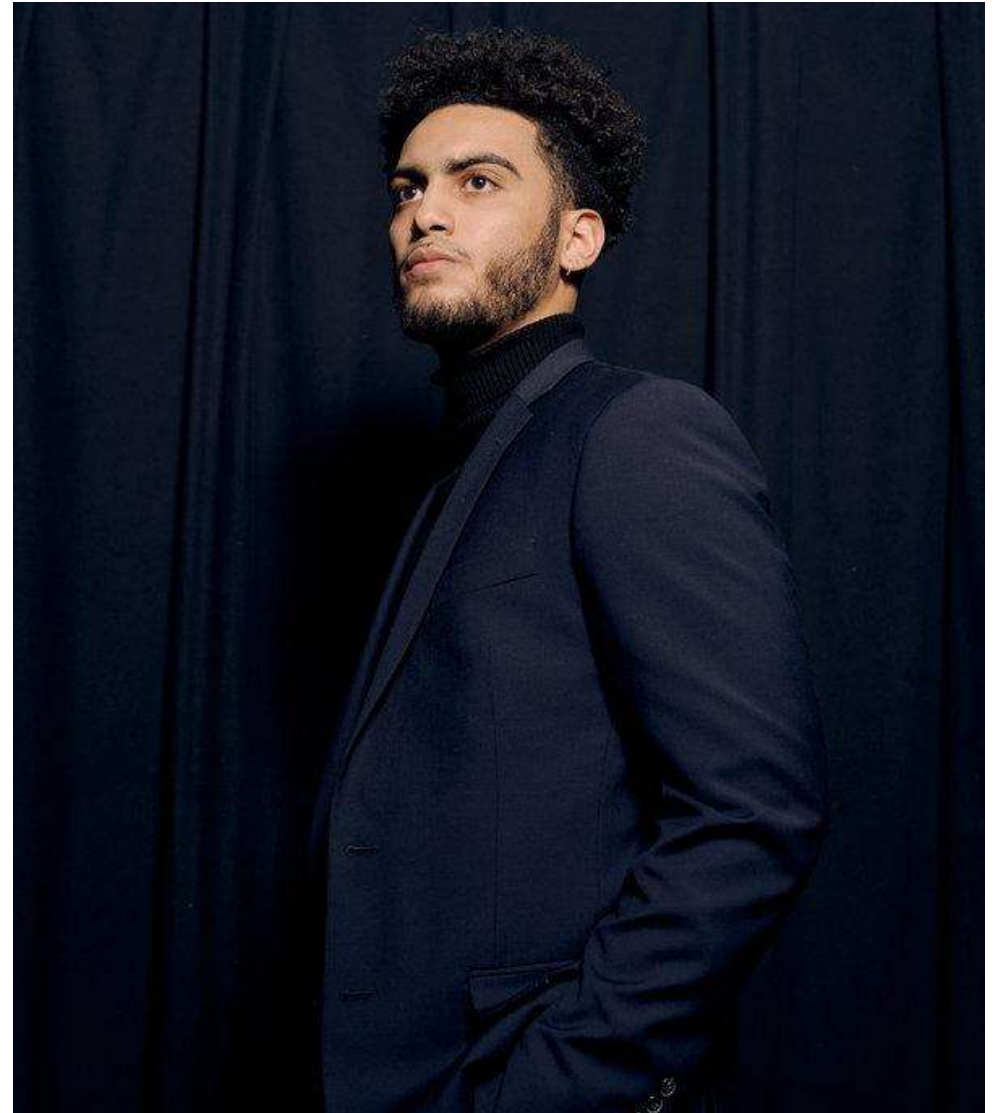
By Pat Borzi

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](#)



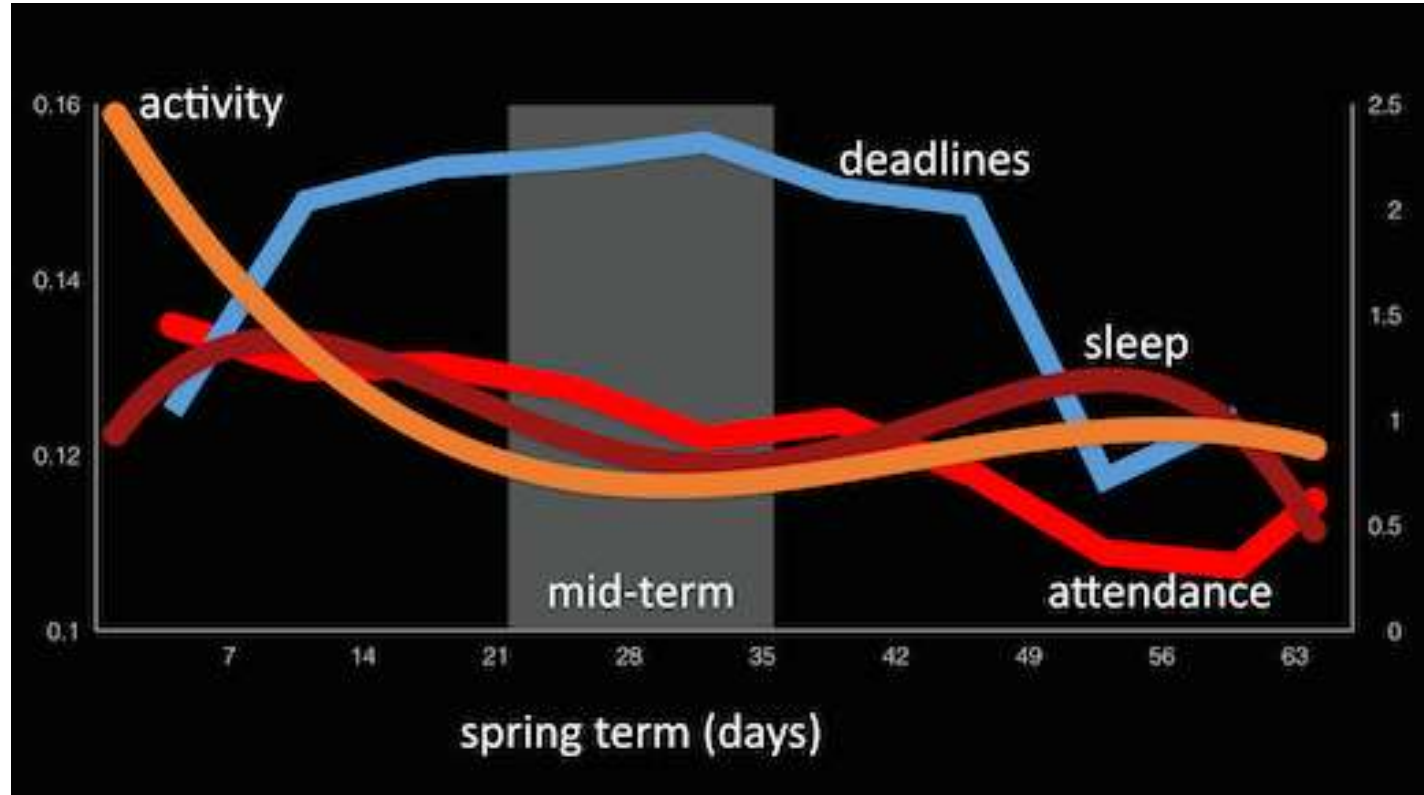
Vincent Tullo for The New York Times

# 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

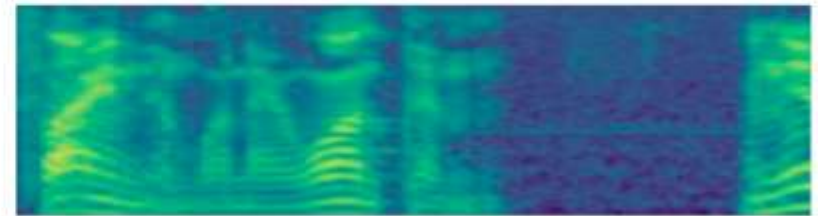
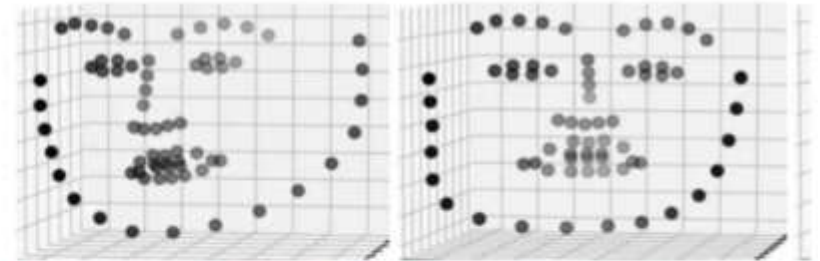
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## Your smartphone's AI algorithms could tell if you are depressed

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?

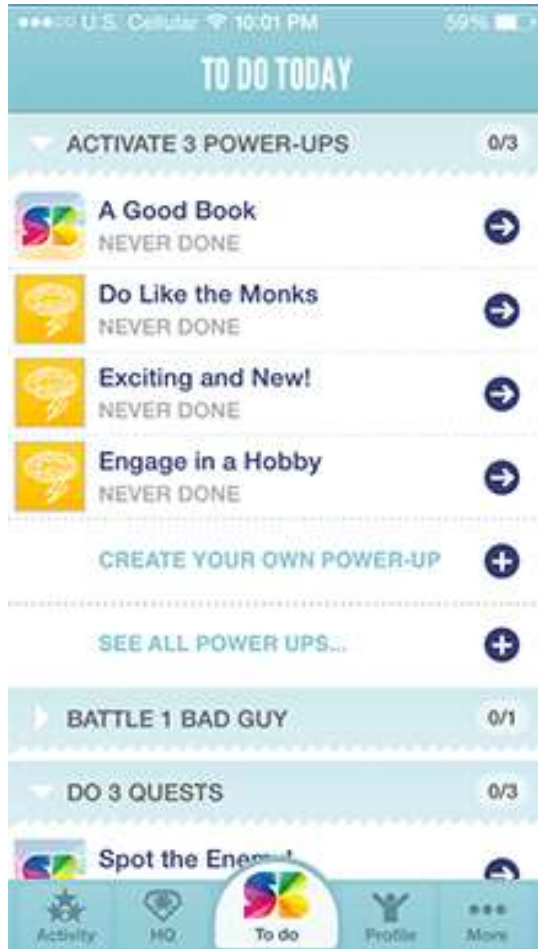
*Million Data Points  
Per Person*

*Dr Lee Hood*



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.

**Garry is going to talk about that Graph thing again...**

## **Era of Population Health / Social Determinants**

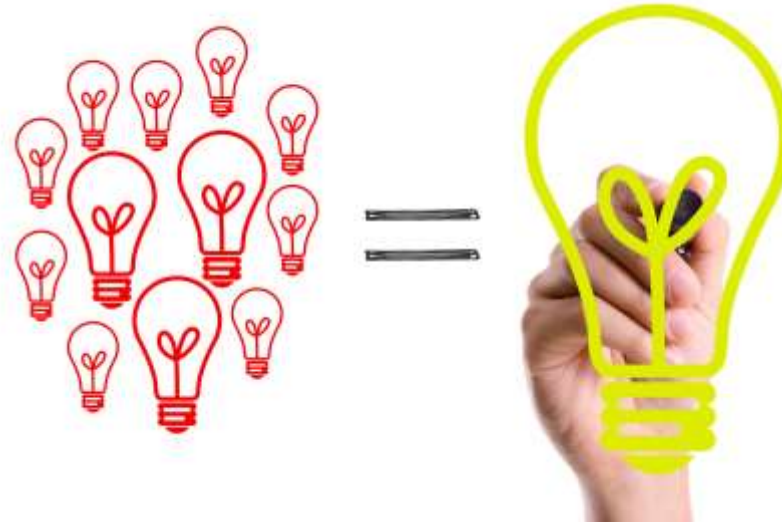


**Could we build a Population Health Graph  
to Transform Care Coordination & Wellness Outcomes?**

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

# Health & Wellness Experiences

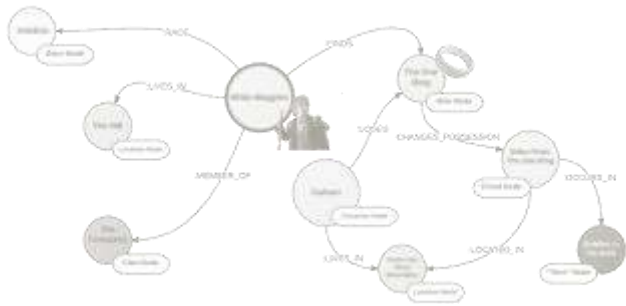
# *How might we rethink health + wellness integration?*



**Start**

**Stop**

**Continue**



Age of  
Experience Graph



Health  
& Wellness



**Role of  
Place**



# Role of Place



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





# Pedestrian Friendly Zones



# “Pop Up” Culture



**PA unveils digital library at Central Mall**

Story



Sherry Koonce

**PA digital library**

# Places for Connections: Live Experiences, Together



A YouTube video player showing a crowd of people at a bar reacting to Game of Thrones. The scene is dimly lit with green ambient lighting. In the foreground, a man with a beard and a floral shirt has his arms raised in excitement. Next to him, a woman with blonde hair is also reacting. The video player interface includes a progress bar at 2:56 / 11:24, a play button, and various control icons.

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



# 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**



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

## 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

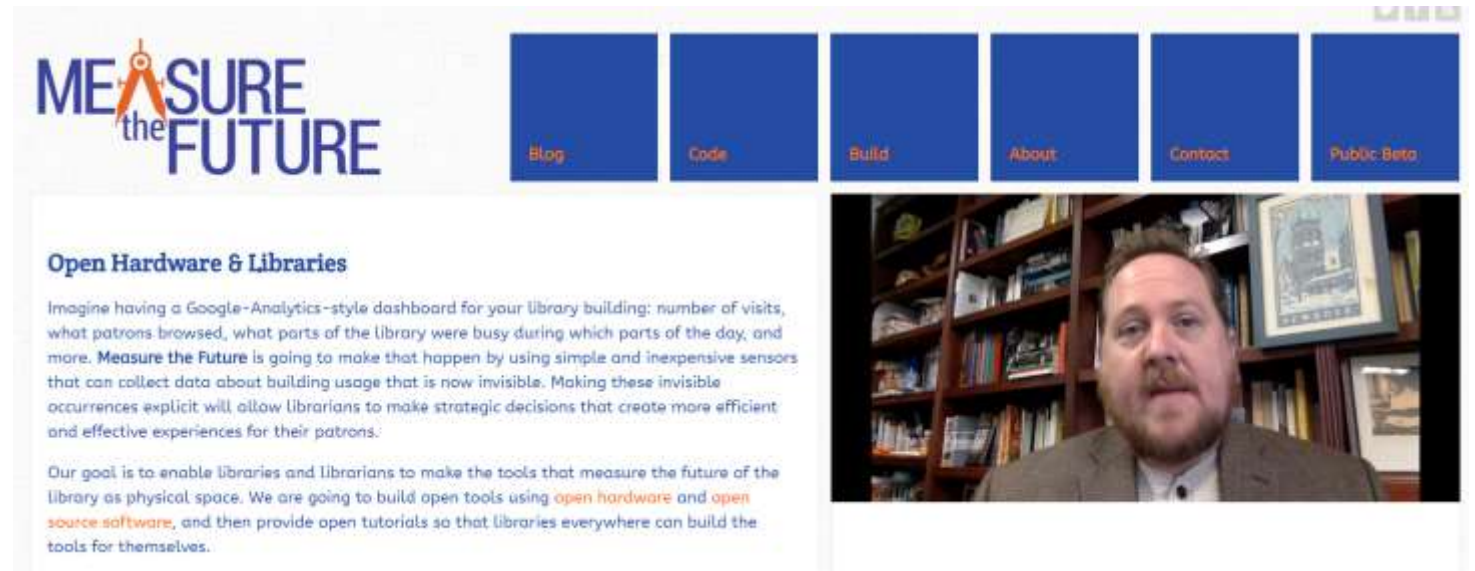
**Library Teaches  
Place-based  
Programming**





## Place Use-Data

*...Google Analytics for the libraries and campus buildings?*




**MEASURE the FUTURE**

Blog Code Build About Contact Public Beta

### Open Hardware & Libraries

Imagine having a Google-Analytics-style dashboard for your library building: number of visits, what patrons browsed, what parts of the library were busy during which parts of the day, and more. **Measure the Future** is going to make that happen by using simple and inexpensive sensors that can collect data about building usage that is now invisible. Making these invisible occurrences explicit will allow librarians to make strategic decisions that create more efficient and effective experiences for their patrons.

Our goal is to enable libraries and librarians to make the tools that measure the future of the library as physical space. We are going to build open tools using **open hardware** and **open source software**, and then provide open tutorials so that libraries everywhere can build the tools for themselves.



### Open Hardware



### Smart Libraries



### Open Tutorials



Jason Griffey



# On-Demand(ness)

Scheduling Here or Anywhere

The image shows the homepage of the LiQUIDSPACE website. At the top left is the LiQUIDSPACE logo, which consists of a circular icon with a grid pattern and the text "LiQUIDSPACE". To the right of the logo are three navigation links: "Find Space", "List Space", and "Enterprise". The main content area features a large, bright photograph of a modern office interior with wooden tables, chairs, and large windows. Overlaid on this image is the text "Office Smarter" in a large, white, sans-serif font. Below this is a subtitle: "Engage the largest commercial real estate network to find and book office space." Underneath the subtitle is a horizontal navigation bar with three buttons: "Find" (highlighted in teal), "List" (in dark grey), and "Connect" (in dark grey). Below the navigation bar is a white search box with the placeholder text "Where do you need space?" and an orange "Find Space" button to its right.

# 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 Campaigns. [www.lincolnshire.gov.uk/home](http://www.lincolnshire.gov.uk/home)

# #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.

METROPOLITAN POLICE

DMCT102



## 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...?

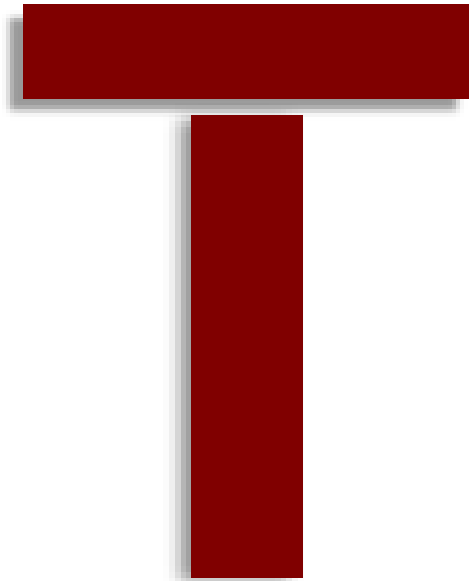


“I” Shaped Person  
Success via Specialization



“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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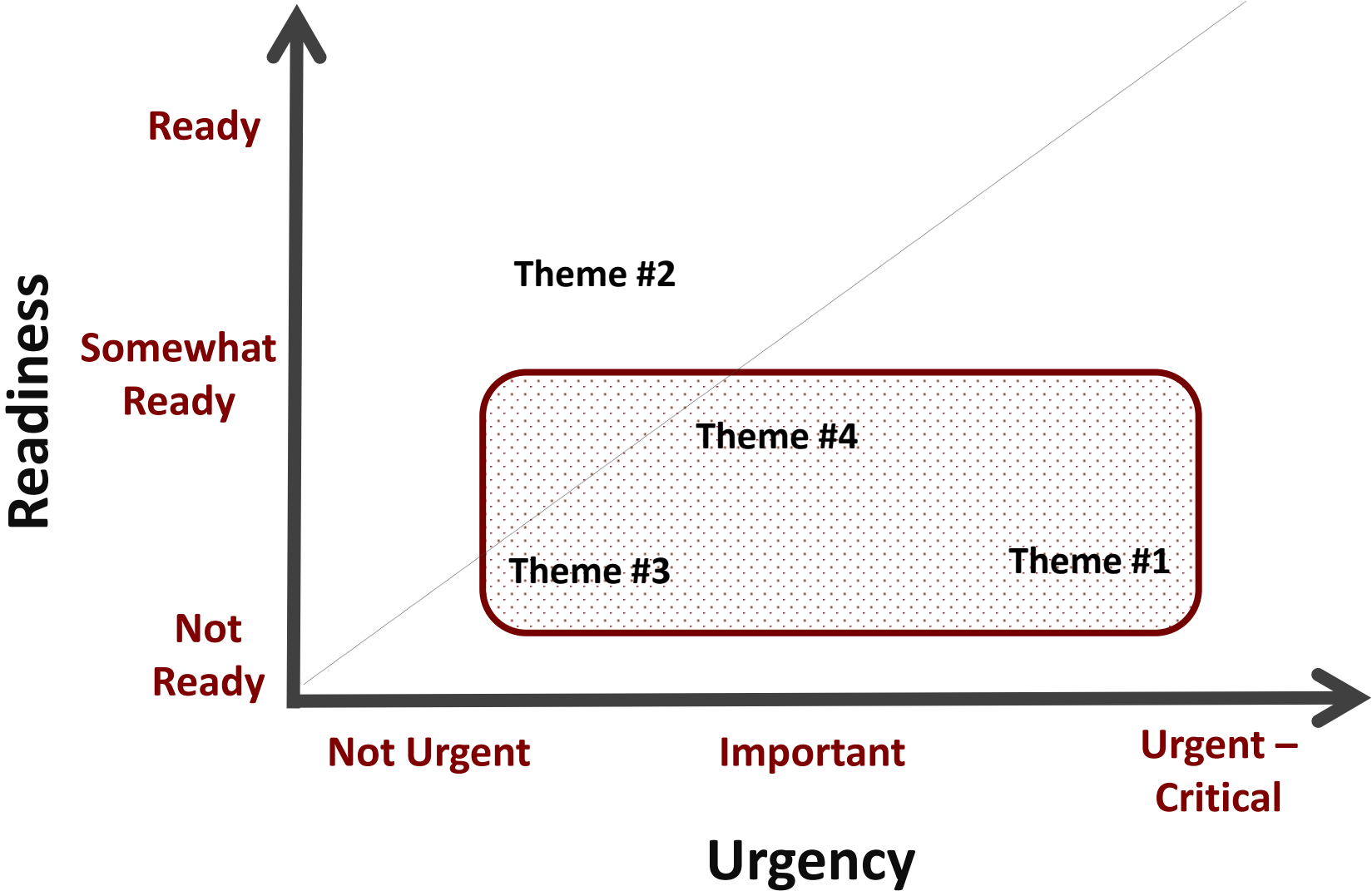
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# Take a Pulse Check on Emerging Trends vs Organizational Appetite

## Top Trends/Themes

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



## **In Five Years...**

Generate weekly questions that spur conversations about the future of your organization and our community.

### ***In five years***

***... what is a function, department or role that does not exist today but will be our most innovative solution?***

***... which popular consumer brand today makes us irrelevant?***

***... which organization becomes our most valued partner?***

**What is the biggest risk we should take over the next five years to align our businesses, government agencies and civic institutions with *possible and preferable futures*?**





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*Two Rs*

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