

Anticipating the Future



Garry Golden
Forward Elements
May 22, 2018

Start

End



***Warm up
Foresight 101***



**Changes Ahead
2018 – 2030**



Learning More



In the News

UK's NHS (CHOICES) is partnering with Google's DeepMind Health to bring AI-driven healthy living to families with children.

During the pilot, families receive a stipend for food purchases in exchange for Google's AI guiding supermarket purchases and meal preparation. Food stipends are increased when youth health outcome targets are met.



choices



DeepMind Health

True

False

Context of the *Creepy Line*



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

Health & Wellness Experiences

Member Experiences

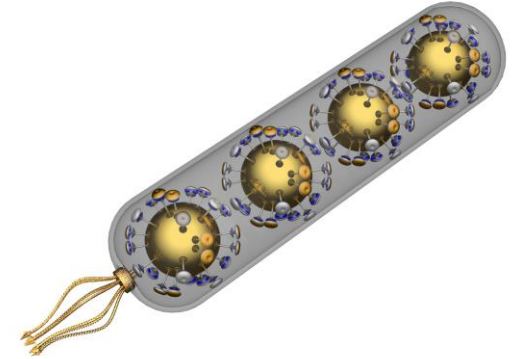
The *Not so Far Away* Creepy vs Compelling Lines of...



CRISPR/Cas9

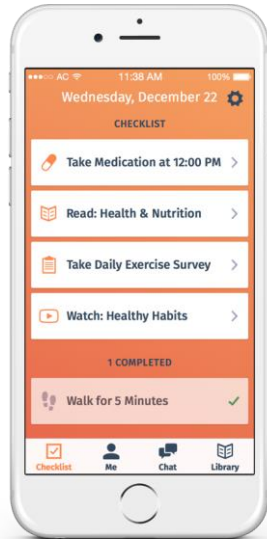


**Sequencing
Everything**



**Functional
Nano-materials**

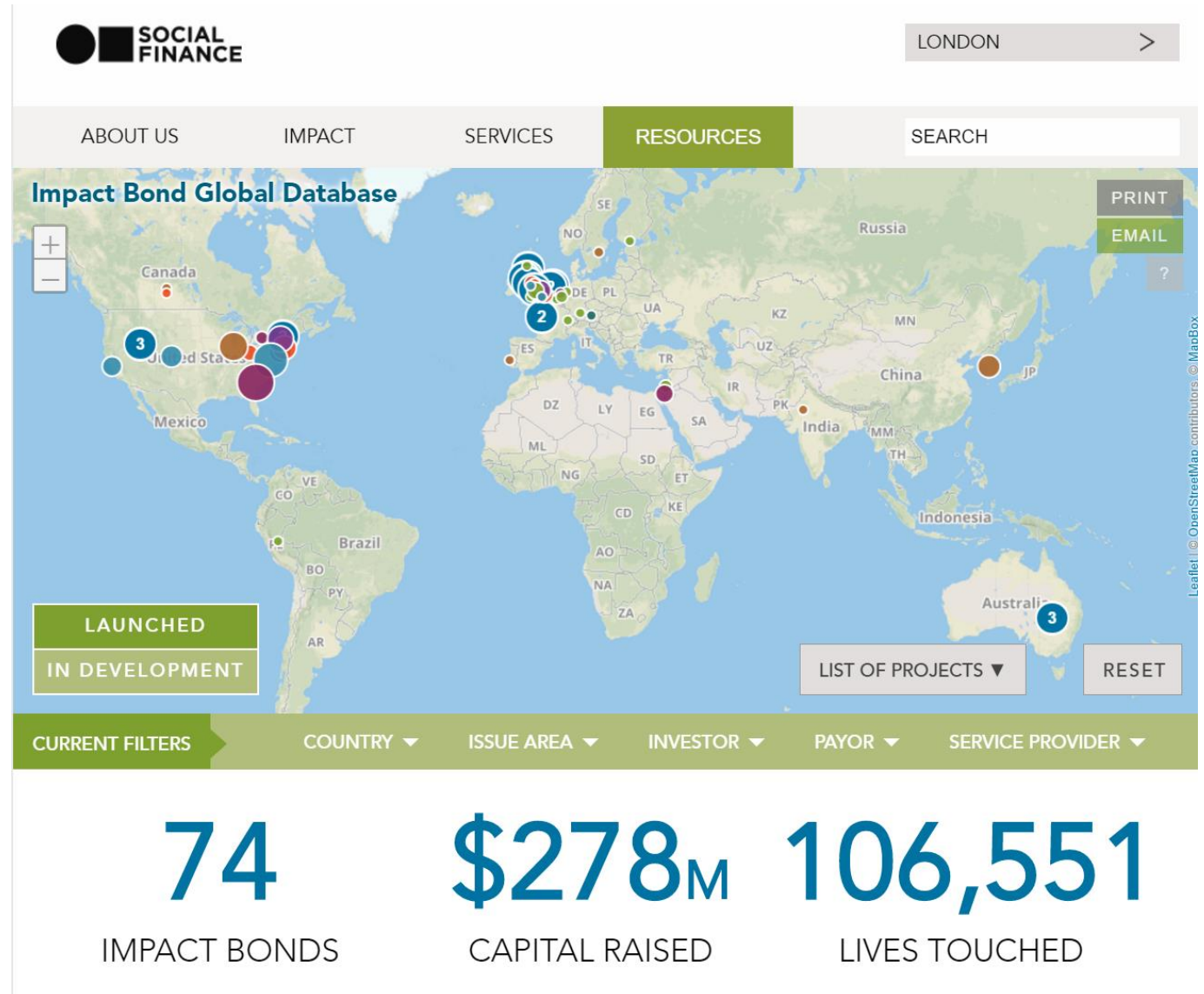
The Creepy vs Compelling Line of... Digital... Design Thinking... Behavioral Science



Hi, I'm Cortana.



Creepy vs Compelling Funding Models: Social Impact Bonds



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

- Cellist, Yo-Yo Ma

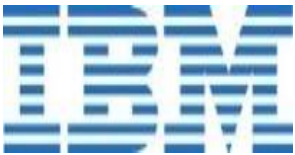
Four Futures Thinking



**Continued
Growth**



**Disciplined
Constrained**



Transformed



**Decline
Collapse**

Four Futures Thinking



**Continued
Growth**



**Disciplined
Constrained**



Transformed



**Decline
Collapse**

End

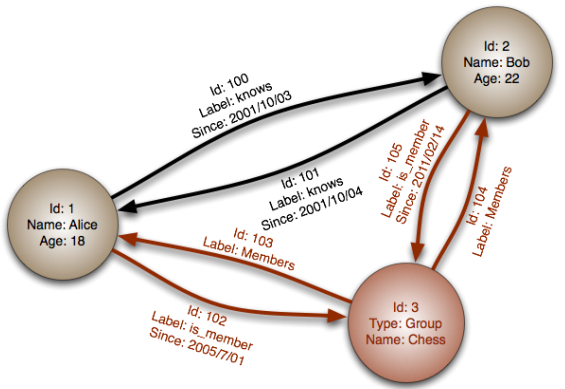


**Changes Ahead
2018 – 2030**



Learning More

What is our Bridge Strategy to 2030?



Data-Driven Innovation
People, Partnerships & Policies



Health & Wellness

The AARP logo is displayed in a bold, red, sans-serif font. The letters 'A', 'A', and 'R' are connected at the bottom, and the 'P' has a distinctive shape with a curved top. A registered trademark symbol (®) is located to the upper right of the 'P'.

2018 – 2030

How might we rethink our investments in people, partnerships and policies that are able to bring data-driven innovation to our members?

Lots of talk about Data & Outcomes....

Data & Experience Design



Johanna Blakley @Mojojohanna · 1h

"Why don't we give data like we give blood?" - Alan Freeman #neaarts #NEACVP
#artsdata

Can we all agree...?

Data isn't truth, but language. It can help us decide or express the truth, but data never is the truth.

- Deanna Day

Social Norms for the Anonymous-Access Web

1993



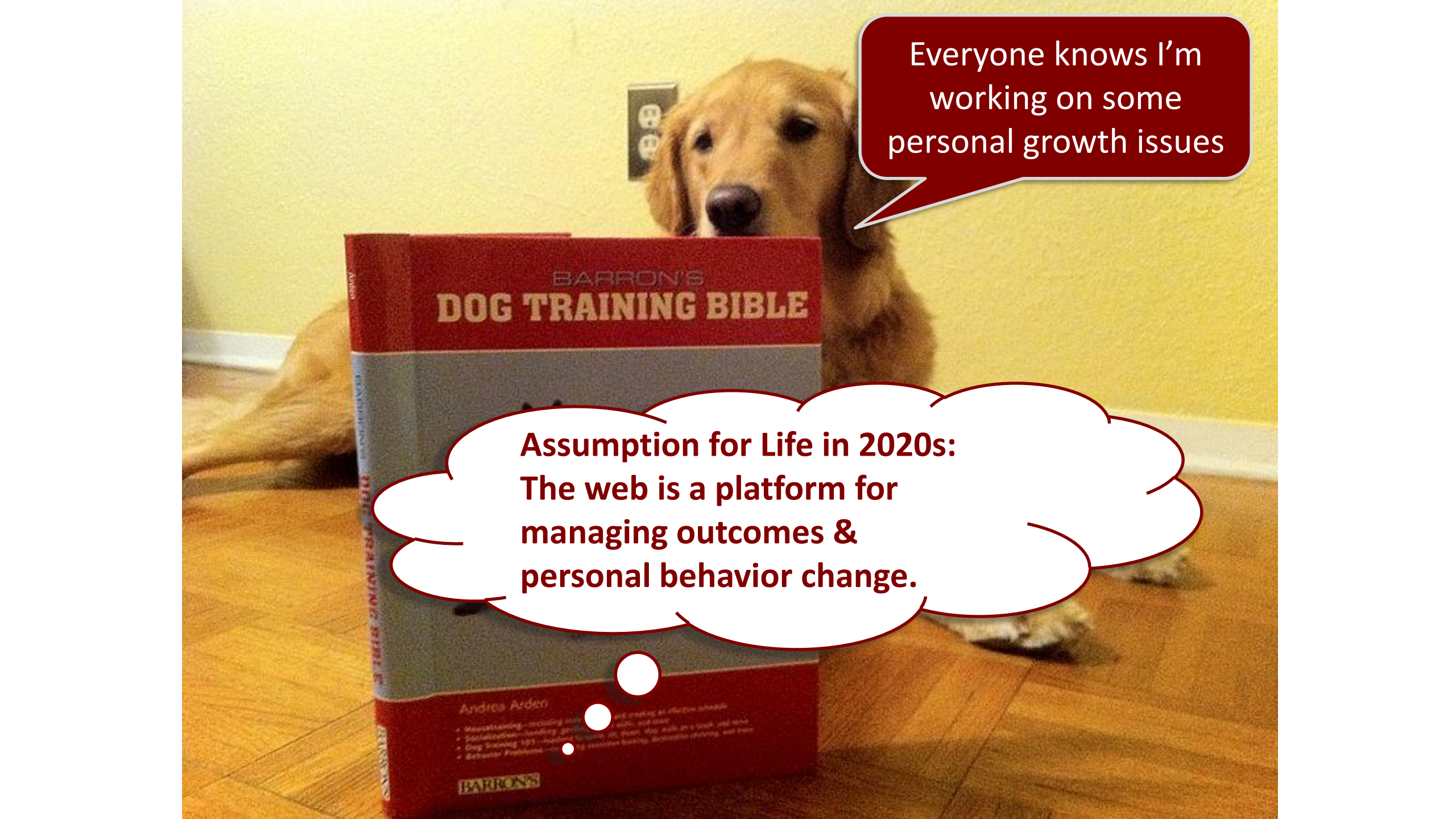
“On the Internet, nobody knows you’re a dog.”

“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.**



**Social
Data**



**Health
Data**



**Device +
Infrastructure**

EXPERIENCE
API

“I did this...”

**Learning & Life
Experience Data**

Signal from L&D : Experience Data is coming (How far might it go?)



EXPERIENCE
API

Activity Streams
<Actor, Verb, Object>

“I did this”

Learning Management Systems (LMS)

First Demand for Experience Data? Connect Training to Outcomes



Course



“I did this...”

Statements

Seamless Integrated into
Software + Connected Devices



Real World

Scenario for 2020s: Experience Data Leaps from L&D Into Everyday World

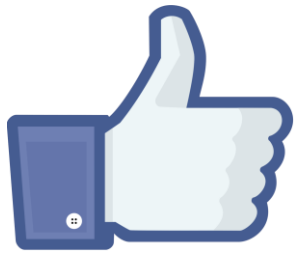
Scenario: Talent Embraces Experience Capture Analytics



"I did this..."
Statements

- Lucy **read** an article on virtual reality for aging populations
- Lucy **opened** an Evernote folder on aging solutions
- Lucy **watched** a Youtube video on Social VR Experiences for Aging Boomers
- Lucy **interviewed** the Director of MIT's Age Lab
- Lucy **attended** an MIT workshop on VR simulations
- Lucy **wore** an 'aging suit' at MIT Age Lab
- Lucy **mentored** with the Director of MIT Aging Lab
- Lucy **designed** a new VR social space using Facebook Oculus dev kit
- Lucy **demonstrated** her VR experience for Aging populations at a NYC Meetup
- Lucy **wrote a blog post** highlighting VR social engagement for seniors
- Lucy **taught** a Coursera MOOC on Universal Design and VR experiences
- Lucy **was hired** as head of Social VR for Aging Populations at AARP

Scenario: AARP Members Embrace Experience Analytics



EXPERIENCE
API

Assumption to Explore

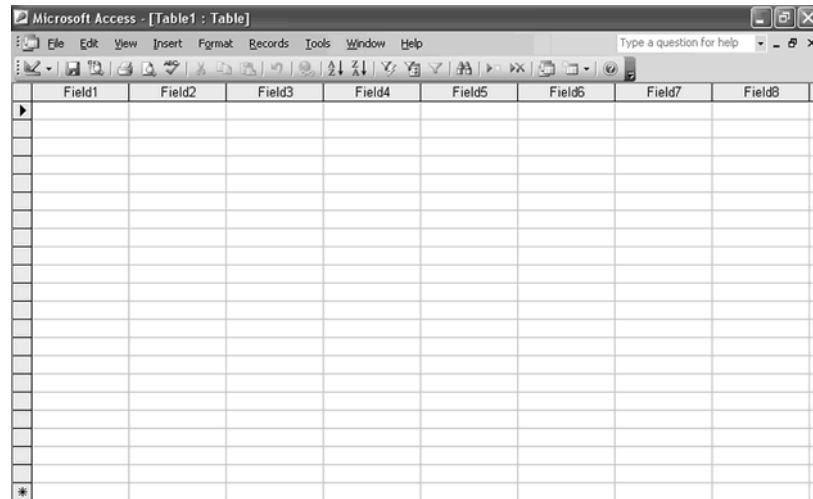
**By 2025,
Experience Data Will Become Our
Member's and Our Organization's
Most Valuable (+ Controversial)
*Digital Asset.***



“I did this...”
Statements

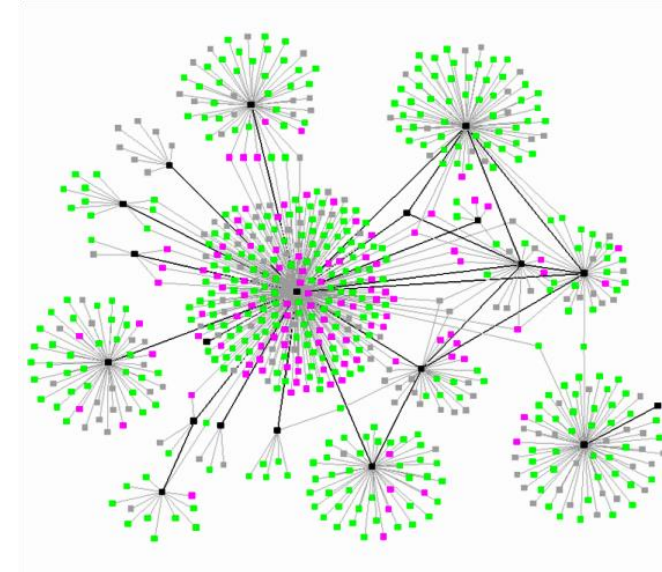
**How do we approach regulatory?
How do we avoid the creepy line?
How do we make sense of it?**

Building a Connected Data Foundation for 2030



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". Below the menu is a search bar with the text "Type a question for help". A toolbar with various icons is visible. The main area shows a table with 8 columns labeled "Field1" through "Field8" and approximately 20 empty rows. A small asterisk is visible in the bottom-left corner of the table area.

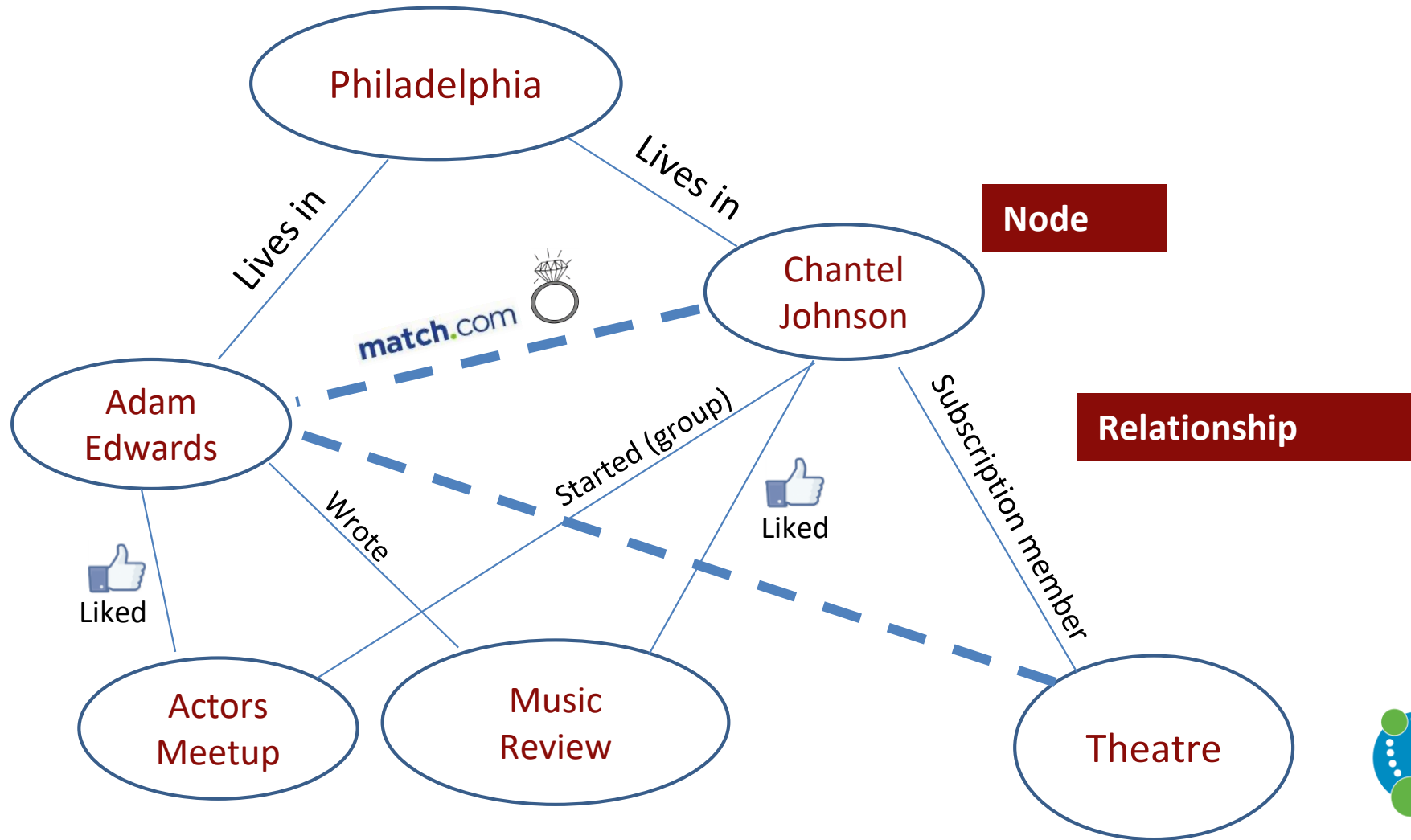
Tables = Past



Graph Thinking = Future

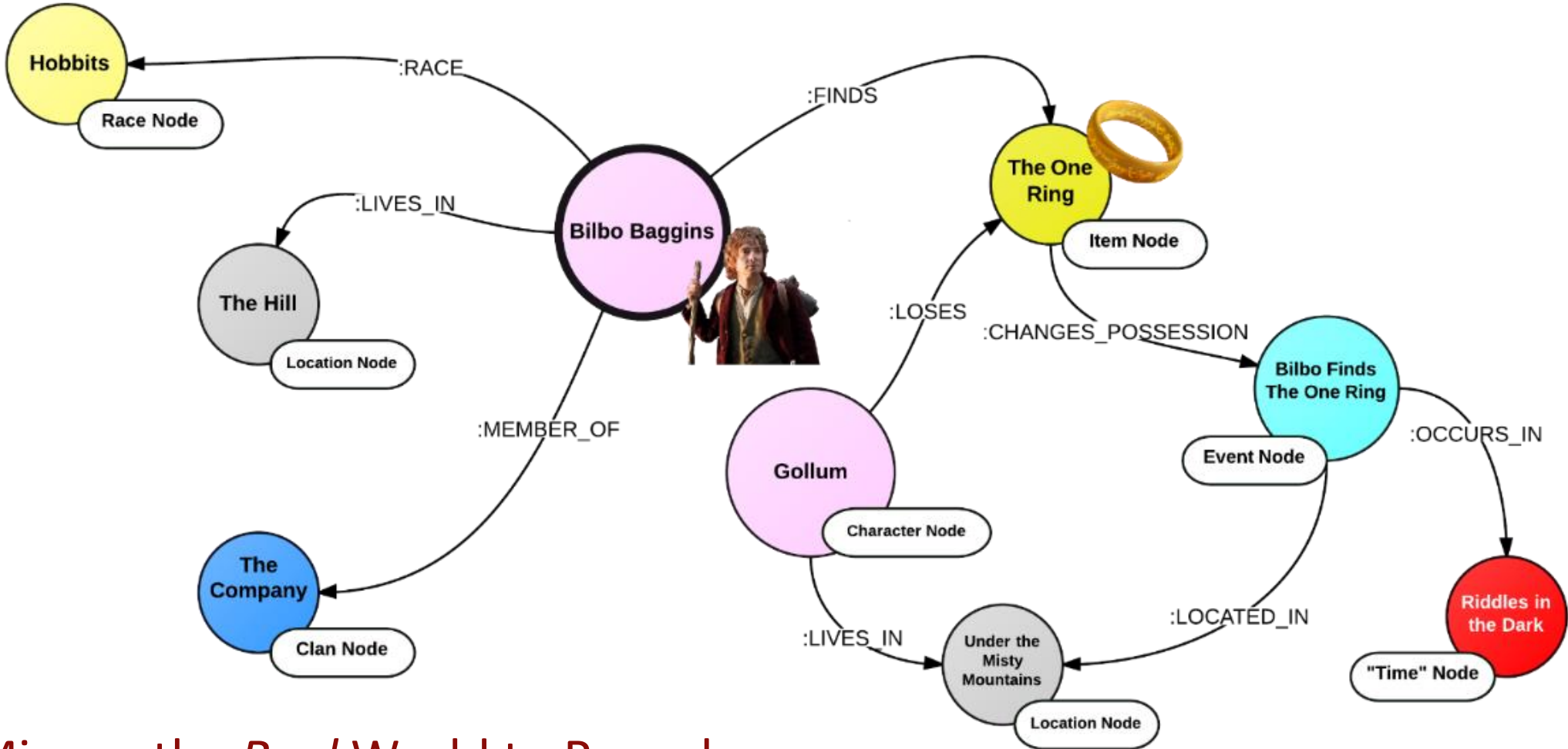


Graph Analytics Drive Understanding in Relationships & Recommendations



Understanding Relationships, Connections & Pathways

How might we use graph analytics to transform the member journey?



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

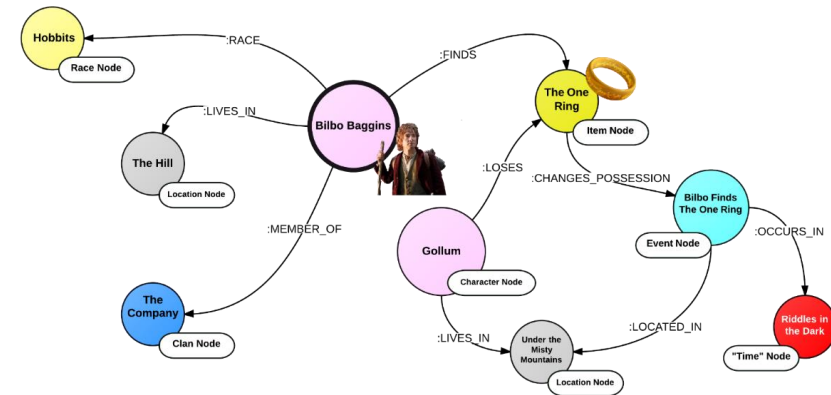


Assumption:

Experience Data & Graph Analytics Transform Member Experience



2010s
Dynamics of
Social Graphs



2020s-2030s
Dynamics of
Experience Graphs

**... but what about
Trust & Privacy Concerns**

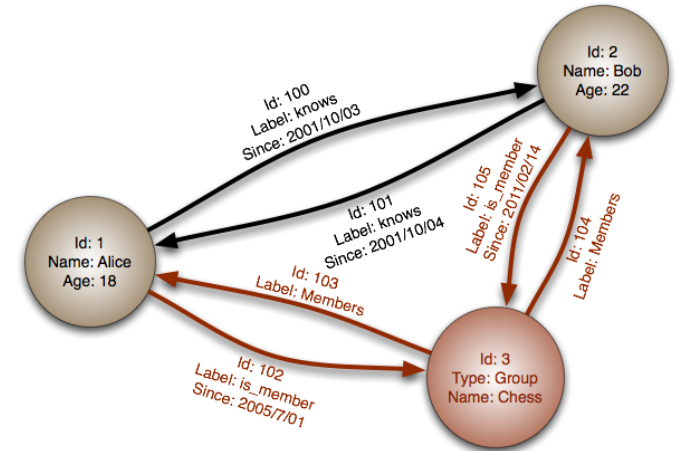


**Blockchain for
Identity Services &
Decentralized Control of Data**

People, Partnerships & Policies for Data-driven Innovation

By 2030, what type of new questions might we be able to ask about our member communities?

... what new services might we provide?



Learning Curve Starts Now!

Push xAPI / LRS
Beyond L&D

Watershed^{LRS}

xapiapps

WaxLRS
by SaLTBOX

Yet Analytics

Graph Analytics

neo4j

Stardog

Solr

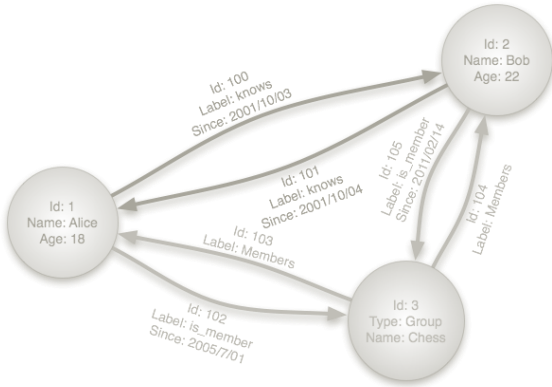
Get Involved in
Working Groups

Advanced Distributed Learning

MedBiquitous

TORRANCELEARNING

What is our Bridge Strategy to 2030?



Data-Driven Innovation
Graph Thinking + Outcomes World



Health & Wellness



How might we help members and key stakeholders understand the transformation ahead of *Deep Digital Health Literacy* and the shift to *Population Health* strategies?

The Healthcare & Wellness Transition



Physician-Patient Care
Fees for Activity

**Population Health /
Social Determinants**
Fees for Outcomes

Moving Beyond Data from Wearables



Dr Lee Hood

Million Data Points Per Person

Dense, Dynamic Personal Data Clouds

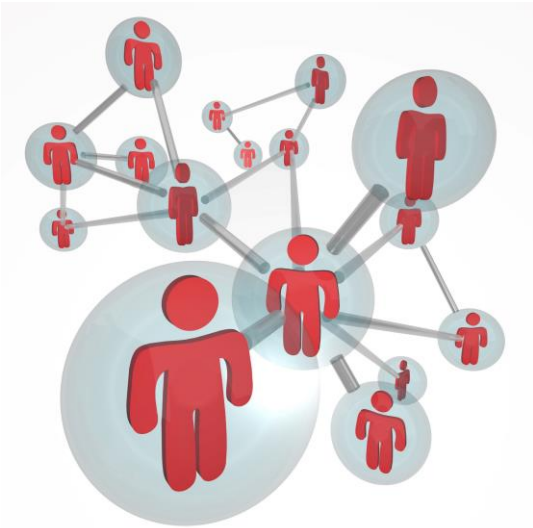
A smiling infant is shown from the chest up, sitting on a white surface. Surrounding the infant are several white cloud shapes, each containing a label and associated data. The clouds are arranged in a circular pattern around the infant. At the bottom of the image, there is a large orange arrow pointing to the right, containing the text 'These data clouds are the essence of Precision Medicine'. In the bottom right corner, there is a logo for the Institute for Systems Biology.

- iPS CELLS**
0100101011010101101
0110101010101011010
1010101101010101010
- GENOME**
GCGTAGTC
ATGCCGTAG
GGCATGCT
ATGCCATG
ATAGCTGC
- TRANSCRIPTOME**
CUUAGUGC
UAUGCGUA
GCUAGGCG
CAUGCUUC
GAGUGAUA
- TRANSACTIONAL**
0100101011010101101
0110101010101011010
1010101101010101010
- PHENOME**
Na 143 K 3.7
BP 110/70
HCT 32
BUN 12.9
Pulse 110
PLT 150
WBC 92
- METABOLOME**
0100101011010101101
0110101010101011010
1010101101010101010
- SINGLE CELL**
0100101011010101101
0110101010101011010
1010101101010101010
- PROTEOME**
arg-his-pro-val-
gly-leu-ser-thr-
ala-trp-tyr-val-
met-phe-arg-
- EPIGENOME**
0100101011010101101
0110101010101011010
1010101101010101010
- SOCIAL MEDIA**
11010100010
10101011010
10101001000
10110100111
10110101010

These data clouds are the essence of Precision Medicine

Institute for Systems Biology

Emergence of Wellness as a Service



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.

21 May 2018

Amazon develops 'health and wellness team within Alexa division'

One Last Thought...

Autonomous Era = Platforms as Place-based Services



e-palette



End



Learning More

Step # 1

Create a Healthy Sense of Urgency & Culture Aligned Around Anticipation

On the Plateau: Incrementalism

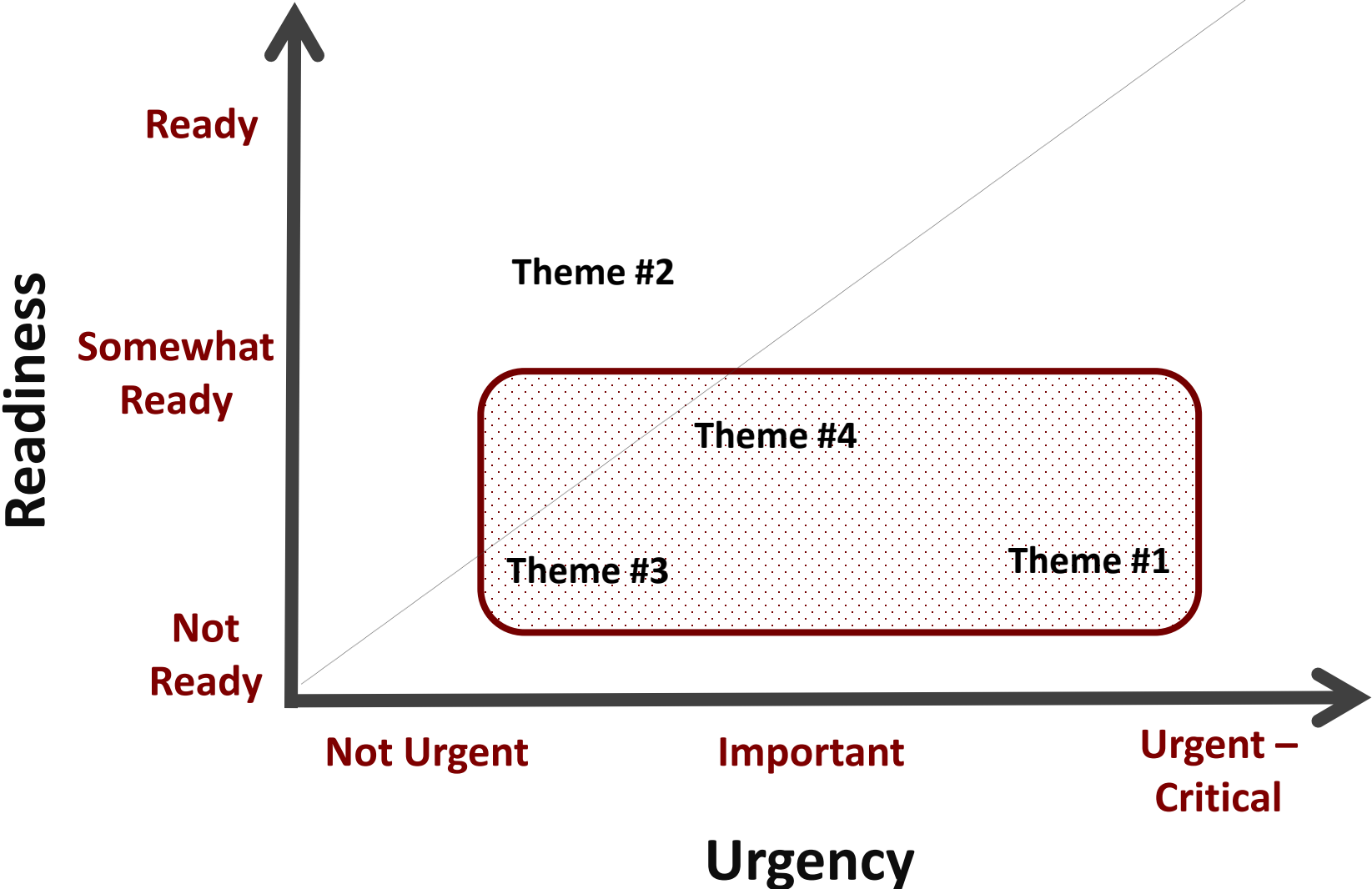
- Incumbent mindset
- Incremental Improvement
- Fear, Uncertainty, Doubt & Denial

Small Steps on Big Bets

- Entrepreneurial mindset
- *Prototyping*
Transformative Change
- *Failing Forward*

Step #2:

Take a Pulse Check on Emerging Trends vs Organizational Appetite



Step #4

In Five Years... Provocative Explorations of New Conditions & Capabilities

In five years... what capability that does not exist today but will be our most innovative lever of change?

*In five years... which popular consumer brand today could make one of our efforts irrelevant?
(Or become our most important partner!)*



Step #5

Host a FailFare!

**Be Able to
Tell Stories
of Your Failures**

FAIL *fa*  *re*


Thank you!

Garry Golden

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PDF & Resources: garrygolden.com/May22



Skill Sets + Mindsets for the Future

**Imagine Our Growth
as a T-Shaped Culture**



“I” Shaped



“T” Shaped

T-shaped Story

Broad set of Skill Sets & Mindsets

Depth of Subject Expertise

Encouraging Breadth of Skills that...

- ❑ Appeal to organizations hiring *learners*
- ❑ Embraces curiosity amidst uncertainty
- ❑ Shows desire to integrate solutions

- Service/Experience Design
- Data Science
- Design Thinking
- Visual Communication
- Ethnography
- New Digital Literacies
(*e.g. Working with A.I.*)
- Leadership
- Values / Ethics
- VR + AR Storytelling
- Entrepreneurship
- Behavioral Economics
- Sociology / Demographics
- Foresight