Foresight Analysis

The Art & Science of Looking at the Future





SESSION FLOW



Warm ups

8:00 am



Era- Change Foresight 101

9:15 am



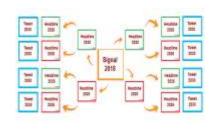
Drivers of Change

10:15 am



Scanning for Signals

1:00 pm



Taking Mental Leaps

2:15 pm



Next Steps

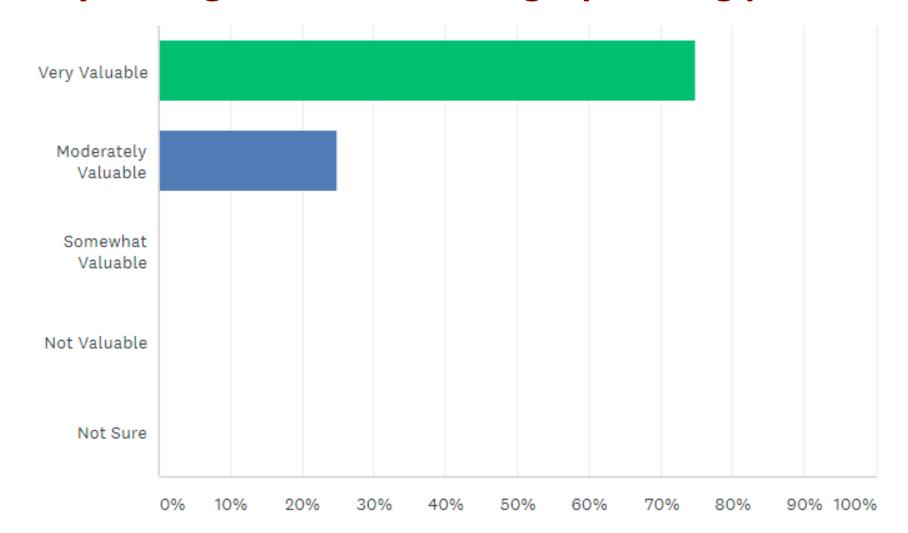
3:45 pm

Describe the first (or memorable) time you were asked to think about the future Why? How? Outcome?





How valuable do you feel strategic foresight can be for your organization's strategic planning process?





PERCEIVED BENEFITS & OUTCOMES

The Front-end of Innovation & Strategy

Organizational Benefits of Thinking about the Future?

Foresight Benefits / Outcomes

- ☐ Uncover & Challenge Core Assumptions
 ☐ Uncertainty-oriented
 ☐ Decision-making & Risk Management
 ☐ Focus on Multiple Outcomes, Time Horizons
- ☐ Guiding Organizational Transformation
- ☐ Market Transition-based Innovation
- ☐ Organizational Readiness / Leadership
- ☐ Create a Knowledge Base Creation / Diffusion
- ☐ Issue Identification / Monitoring
- ☐ Gap Analysis: Portfolio and Capacity
- ☐ Increased Value of Social Capital
- ☐ Informed/Engaged Civic Conversations

MORE OR LESS CHANGE AHEAD



Last ten years

2009 - 2019

Next ten years

2020-2030





THE SLOW PACE OF FAST CHANGE

THE WALL STREET JOURNAL.

Why Software is Eating the World...

By MARC ANDREESSEN August 20, 2011

2007













2017















THREE POINT OF VIEWS ON CHANGE

Our ability to have ...

- Hindsight
- ☐ Insight
- ☐ Foresight...

IN YOUR OWN WORDS...

Defining Foresight

How would you describe foresight to a colleague or customer?

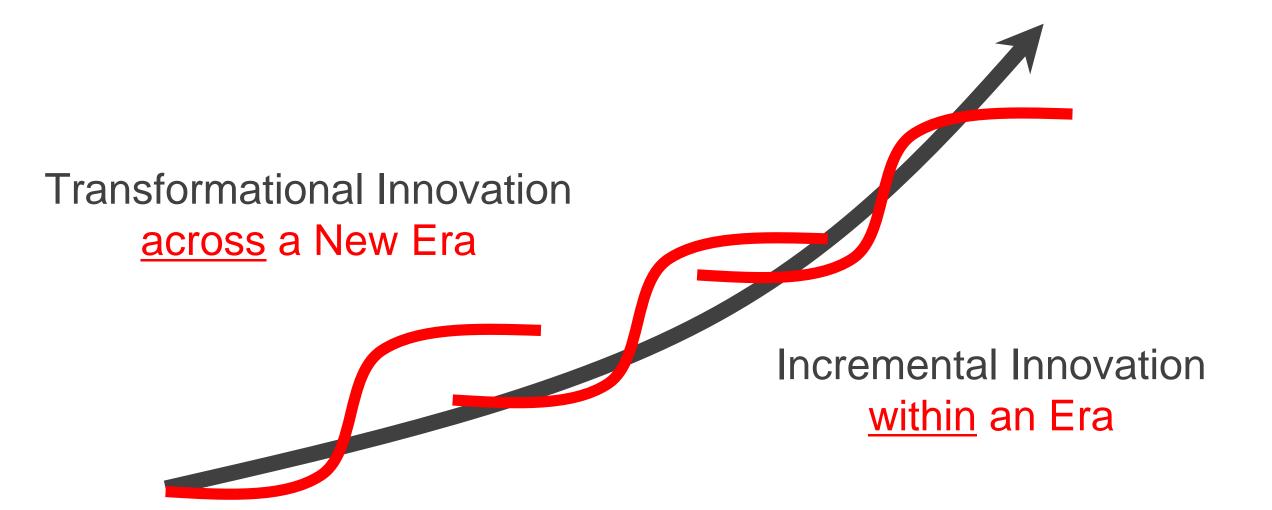
What do you do? Outputs? Outcomes?

Strategic Foresight (Foresight Analysis) is the ability to...

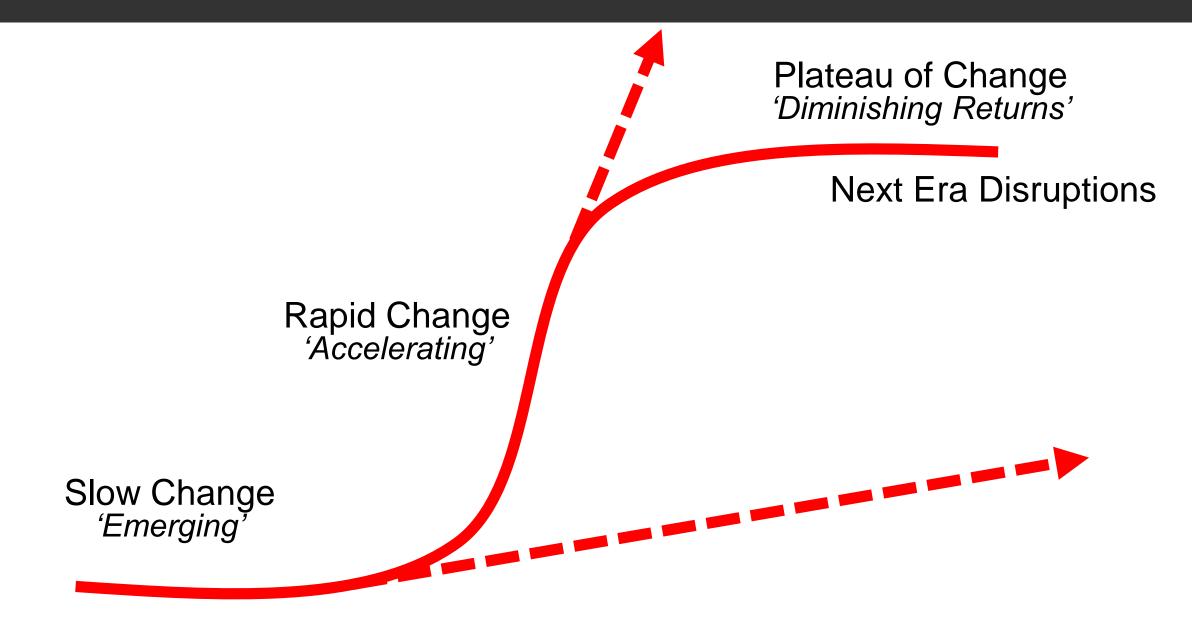
DEVELOPING SHARED LANGUAGE

Foresight... the ability to anticipate and lead change

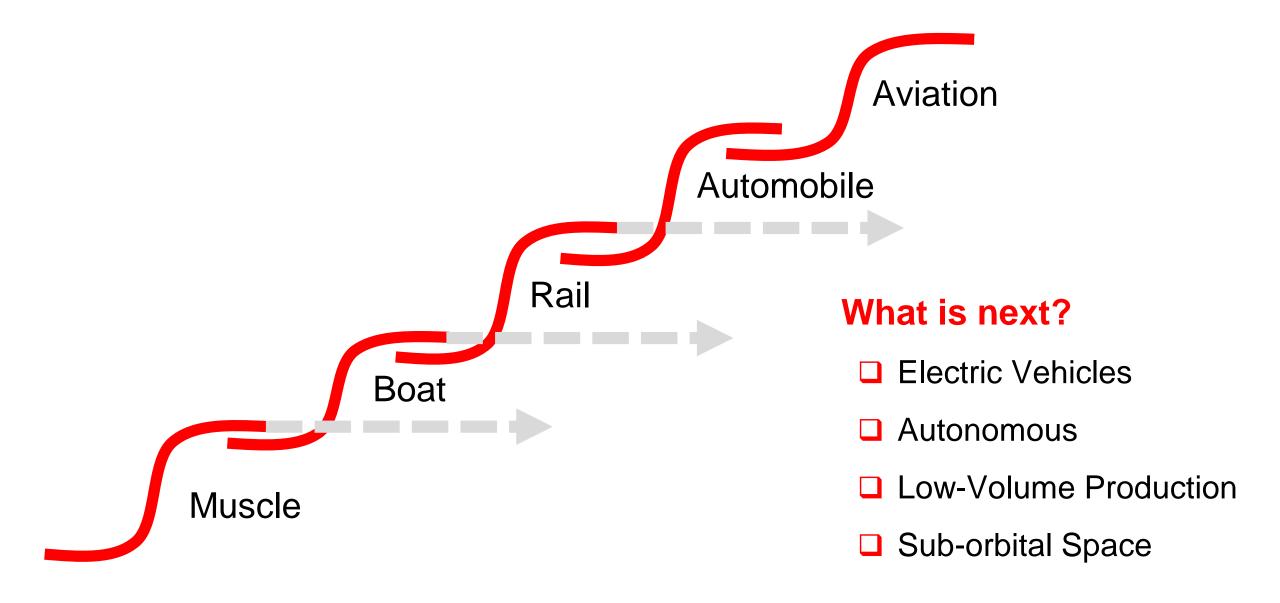
ANTICIPATING TRANSITIONS



S-CURVE ERA TRANSITIONS



ERAS OF MOBILITY



FORESIGHT: MONITORING SIGNALS OF CHANGE

Z 0 O X













IMPLICATIONS: ERA OF AUTONOMOUS

- ☐ Infrastructure & Supply Chains 'Electric' = Motor (Hydrogen FCs = EVs)
- □ Portable Places
- ☐ Empowered Cities & Campuses
- □ Societies Leap-frogging
- ☐ Sensing Functionality of Fleets (Primary Situational Awareness)





SURUS Platform

Silent Utility Rover Universal Superstructure

MILITARY & CIVILIAN APPLICATIONS

Persistent State of Micro UAVs

Paratroopers from the 3rd Brigade Combat Team, 82nd Airborne Division, are now using the tiny, helicopter-like Black Hornet Personal Reconnaissance System (PRS), giving them near-real-time footage





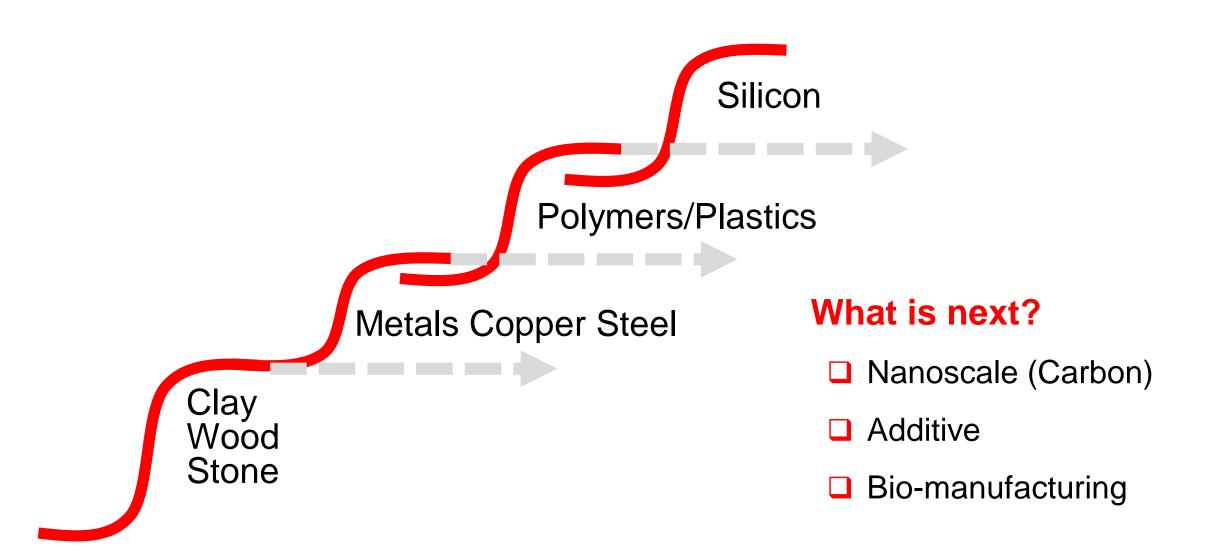
Radical Societal Scenario: Ubiquitous Computer Vision Micro UAV (PRS) for every person, equipment and environment



Pvt. Kesley Darnell, 3rd Brigade Combat Team, 82nd Airborne Division, lets go of the air vehicle as it takes off during the systems fielding at Fort Bragg, N.C., May 2, 2019.

PATRICK FERRARIS/COURTESY U.S. ARMY

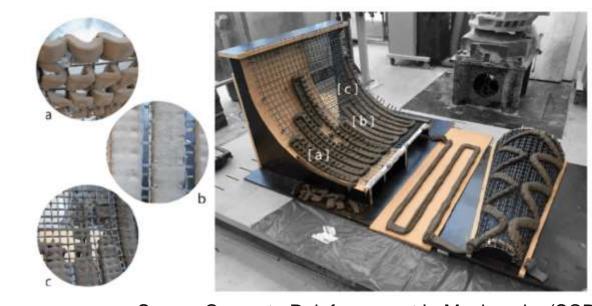
ERAS OF MATERIALS ENGINEERING



ERA OF ADDITIVE MANUFACTURING

Implications for:

- Compression of Supply Chains
- ☐ Talent & Equipment
- ☐ Uptime & Service Contracts
- ☐ Structure Design & Longevity
- □ Raw Materials & Waste
- □ IP / Design Files



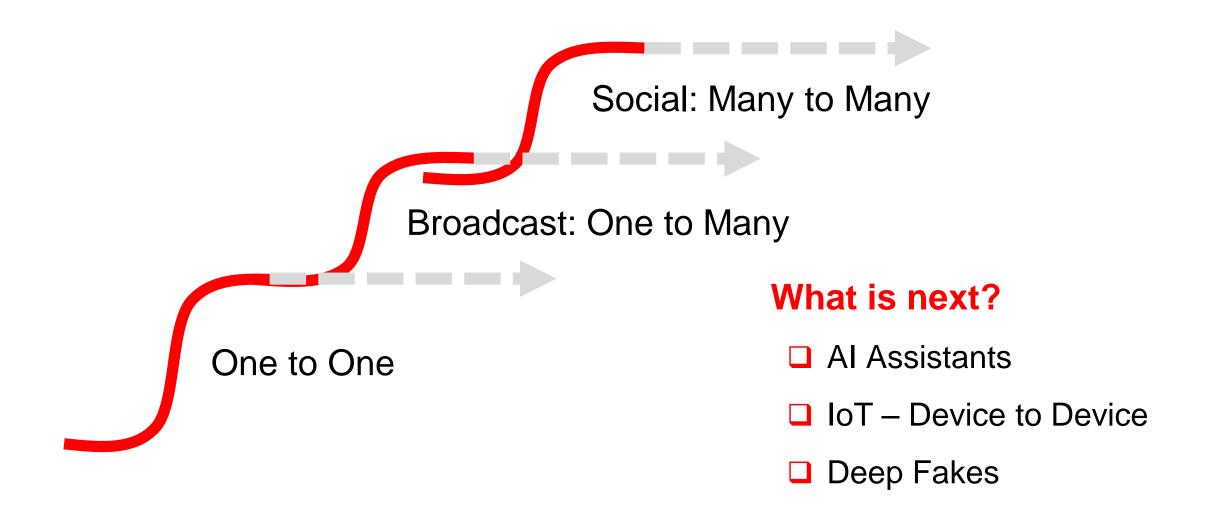
Sparse Concrete Reinforcement In Meshworks (SCRIM)





Two different 3D-printed musifies conforming to a knee, and sewn onto a glove

ERAS OF MEDIA & COMMUNICATION



ERAS OF DIGITAL INTERACTION + INTERFACES



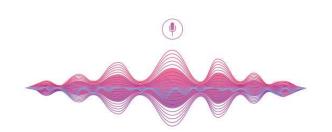
PC - Websites

Clicking



Mobile Apps

Touch - Swiping



Al Assistants (Avatars) [Conversation & Personality]



PLATFORM DECISION: OURS OR YOURS?







Your Stories,

Future of Assistants (Avatars):

Radical Societal Scenario: Age of Al Assistants

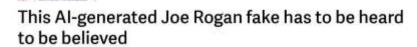
By 2030, people are actively managing their own 'Avatars'

Personal Artificial Intelligence (PAI)

People manage Personalities (as Profiles)

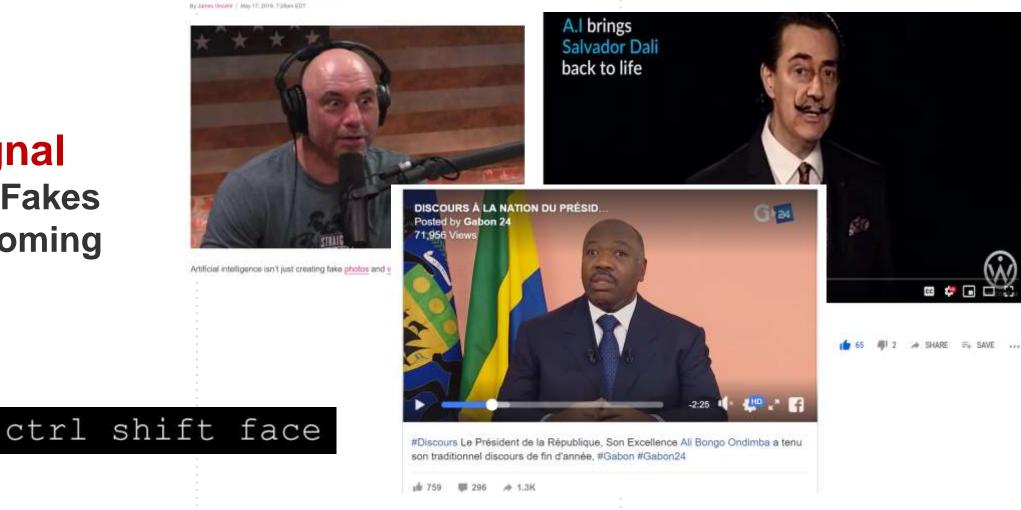
WE ARE NOT PREPARED: ERA OF DEEPFAKES

Signal **Deep Fakes Are Coming**



The most realistic Al voice clane we've heard

DES ADDRESS OFFICERS



GENERATIVE DESIGN TOOLS



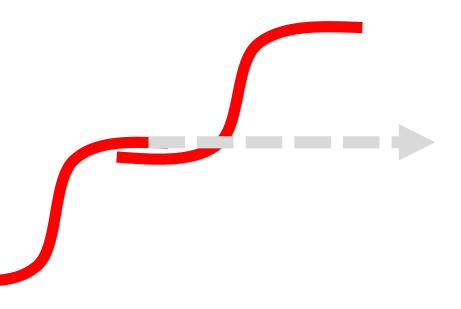






SOCIETY NAVIGATING ERA TRANSITIONS

Role of Foresight



Healthcare / Wellness

Population Health; Outcomes-based Care; Genomics

Agriculture / Farming / Food

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

Retail

Online; Hybrid Brick+Mortar; Localization

Education / Learning

Life stage to Lifelong; AI / Augmented

Media / Communication

Authentication/Verification; AI; IoT; Agents/Assistants

Entertainment

Avatar Celebrities & Identities; Mixed Reality; Wellness

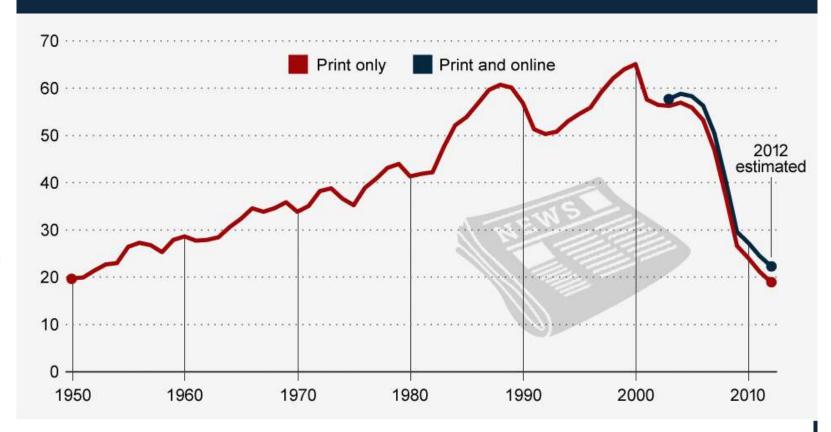
THE SLOW PACE OF FAST CHANGE

Disruptive Change can be

Gradual, then Sudden

50 Years of Growth Wiped Out in a Decade

Newspaper advertising revenue in the United States (in billion U.S. dollars; adjusted for inflation)



RESOURCE GUIDE: 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 <i>jobs to be done</i> .			
Market Dynamics - Describe types of competitors. - Describe types of partners. - Describe types of acquisitions. - Regulatory landscape: Constraints or protective policies? Product & Service Cycle - What do you sell (provide)? - How do you go to market? - How fast or slow do client 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?			

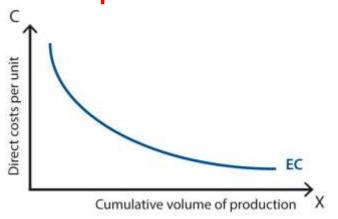
APPLYING FORESIGHT WITH CLIENTS

- ☐ Work with colleagues and/or customers in generating PoV on era-based transitions
- ☐ Surface three (3) assumptions that might be discarded across the *S-curve* era transition
- ☐ Identify three (3) *hunting ground* opportunities for future growth or social impact

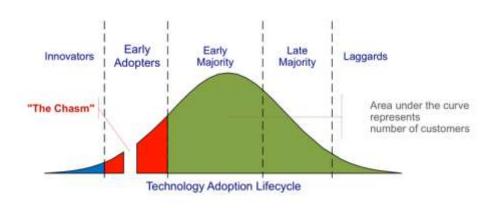
	Current Era:	Emerging Era:	i i
Vision & Mission - Who you are; Who you serve & how. Problems (JTBD) & Solutions - Customer jobs to be done.			
Market Dynamics - Describe types of competitors. - Describe types of partners. - Describe types of acquisitions. - Regulatory landscape: Constraints or protective policies?			
Product & Service Cycle - What do you sell (provide)? - How do you go to market? - How fast or slow do client 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?			

RELATED FRAMEWORKS

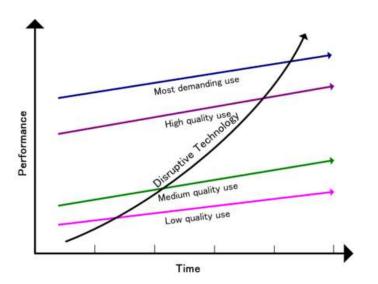




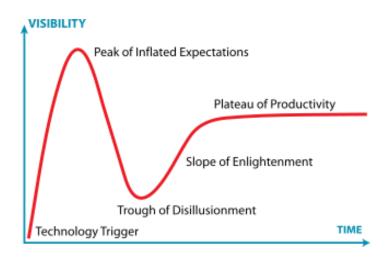
Crossing the Chasm



Low-end Disruption



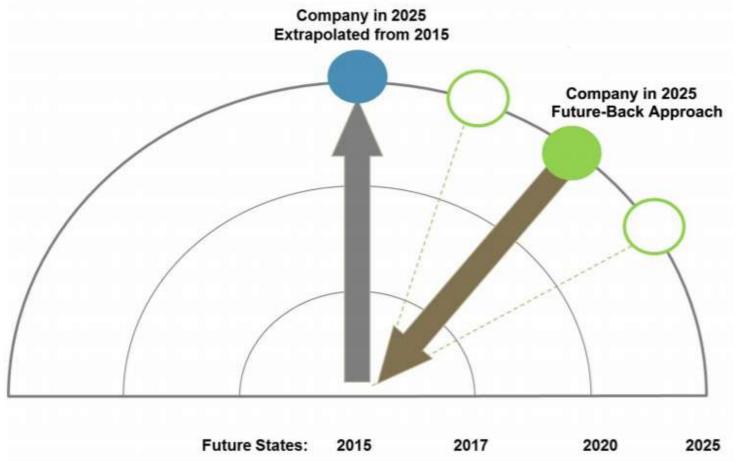
Hype Cycle



PRESENT-FUTURE VS FUTURE-BACK







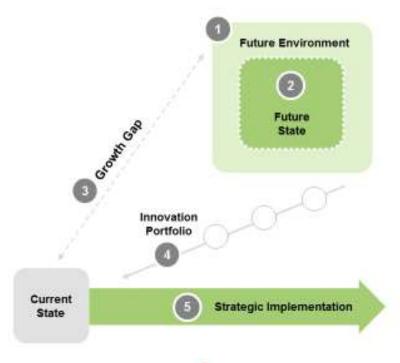
IMAGINING A FUTURE-BACK STRATEGY

Future Back strategy enables transformation and links strategy to innovation

Our Task & Path

- □ Define Future States
- ☐ LeadStrategic Dialogues
- ☐ Align LeadershipClose Gaps
- ☐ Lead Customers



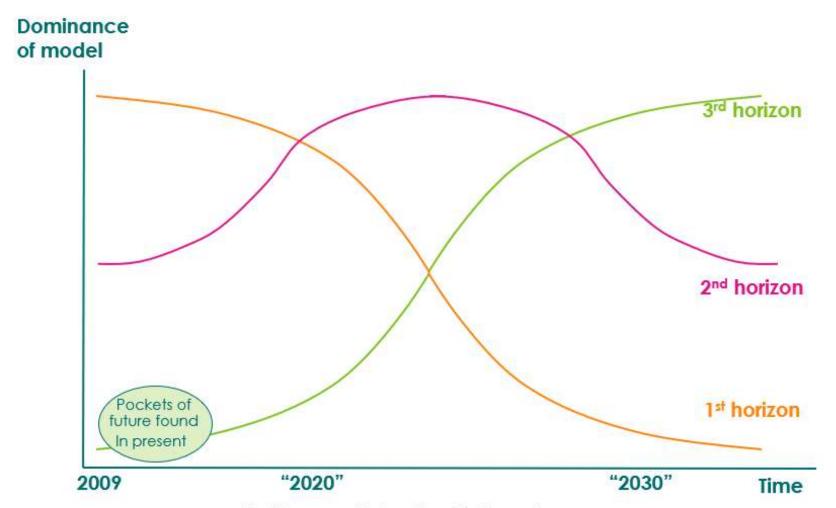




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FORESIGHT = SECOND & THIRD HORIZON

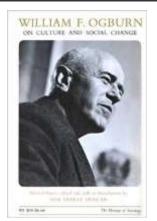
"Three Horizons" Model of Change (Bill Sharpe)



QUESTIONS ON ERA-BASED THINKING?



HISTORY & EVOLUTION OF FORESIGHT

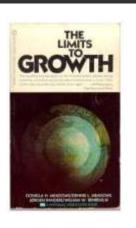


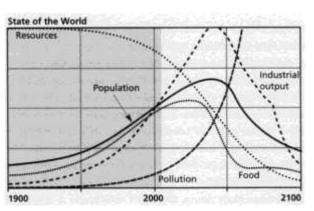


William Ogburn (1930s)
Social Change
(Society + Technology)



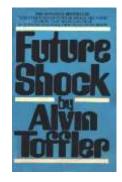
Herman Kahn ('50/60s)
RAND / Hudson Institute
Scenario-based Decisions

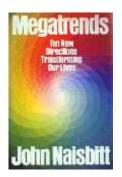




Club of Rome / Limits to Growth (70s)

Systems-based Simulations



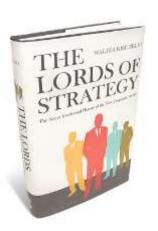




MONITOR

McKinsey&Company

('80-Present) Rise of Strategy Industry



Era of Integration,
Inclusivity &
Intervention

FORESIGHT: KEY ACTIVITIES

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



FORESIGHT: MECHANISMS OF CHANGE

Trends (Continuities)



Plausible Future

Forecasts

Events (Discontinuities)



Possible Futures

Scenarios

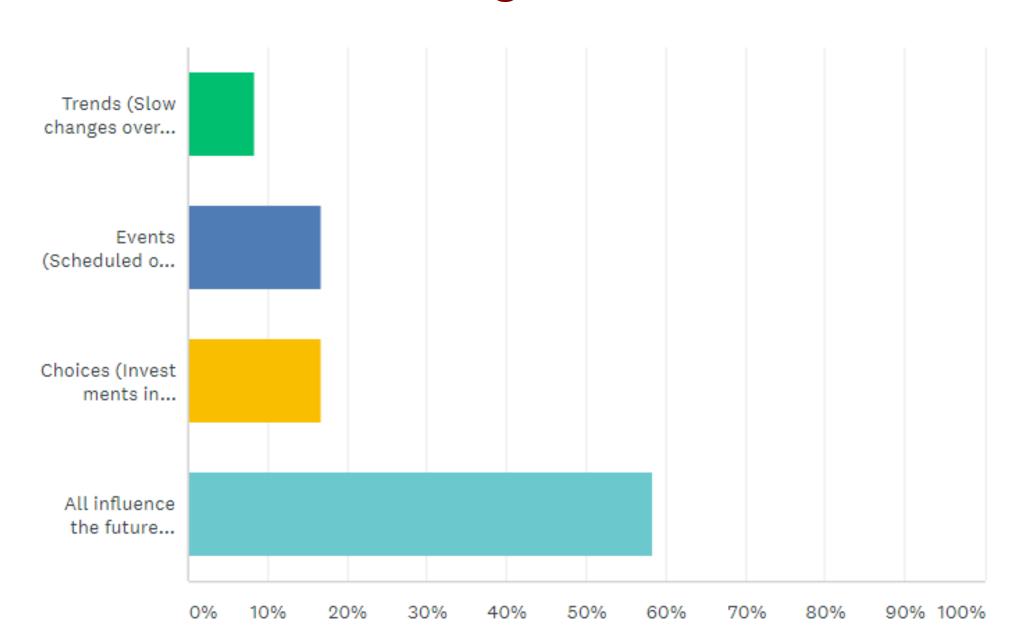
Choices (Discontinuities)



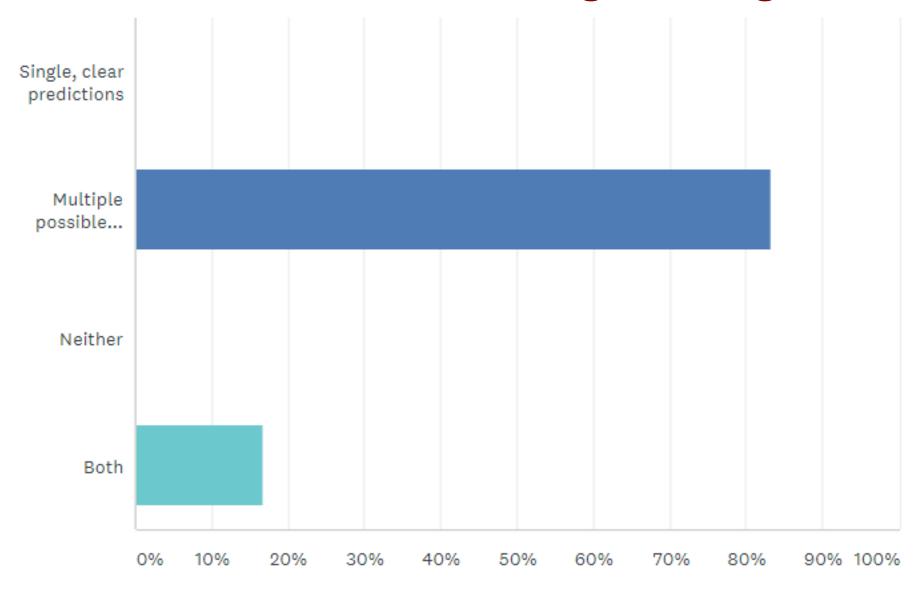
Preferred Future

Visions

Which influences the long-term future the most?

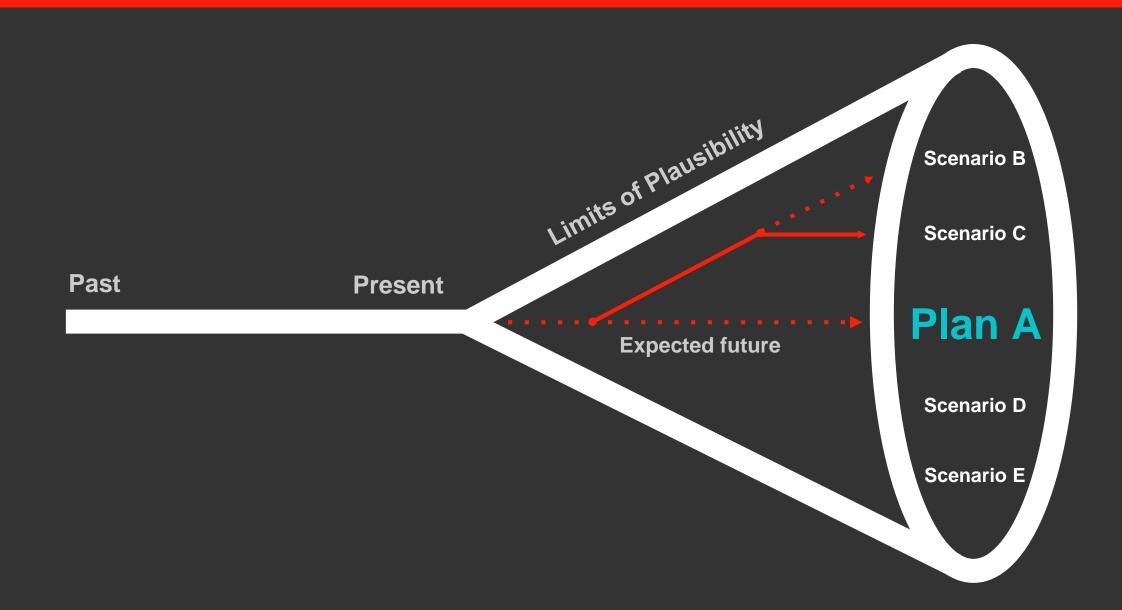


Which is better for understanding the long-term future?





CONE OF PLAUSIBILTY: SCENARIO BASED PLANNING



FOUR FUTURES THINKING















Continued Growth

Disciplined Constrained

Transformed

Decline Collapse

WE WILL WRITE OUR FOUR FUTURES







Disciplined Constrained

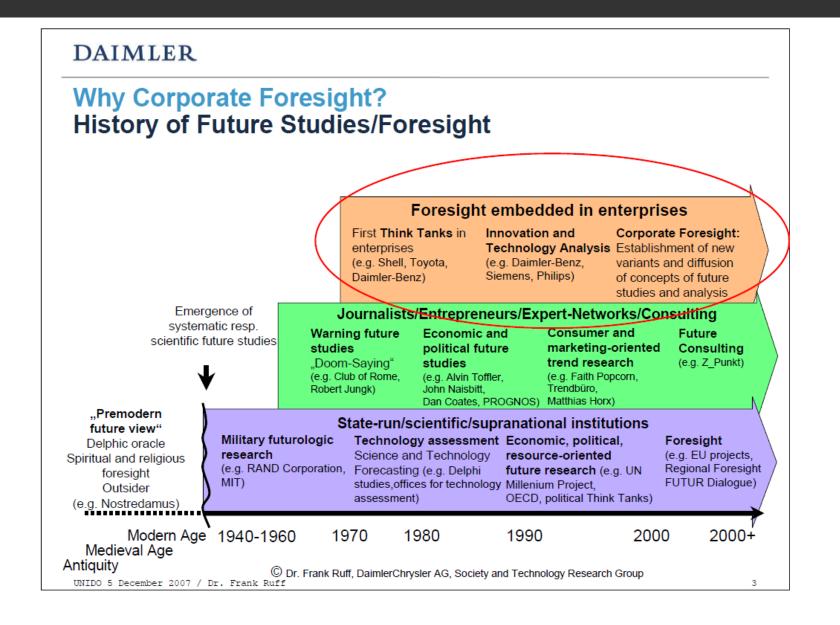


Transformed



Decline Collapse

BRINGING FORESIGHT IN-HOUSE



ORGS WITH FORESIGHT PRACTICES













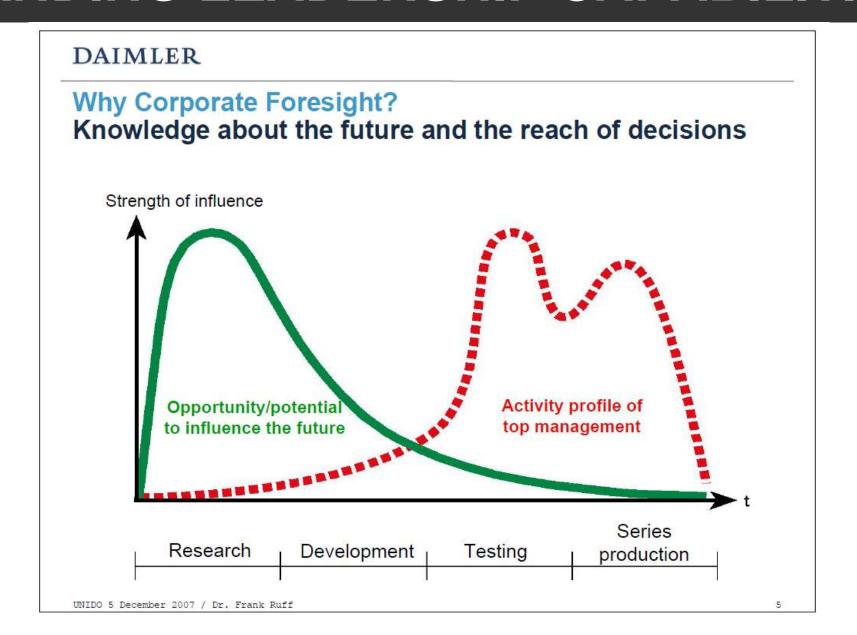




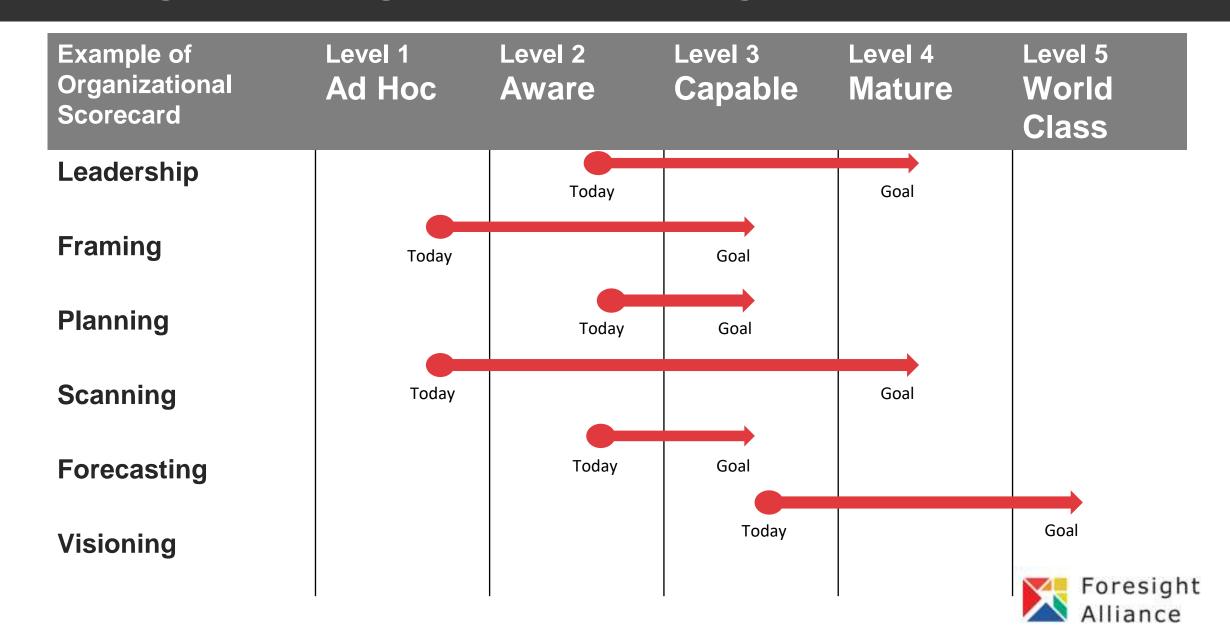




EXPANDING LEADERSHIP CAPABILITIES



MATURITY MODEL TERRY GRIM

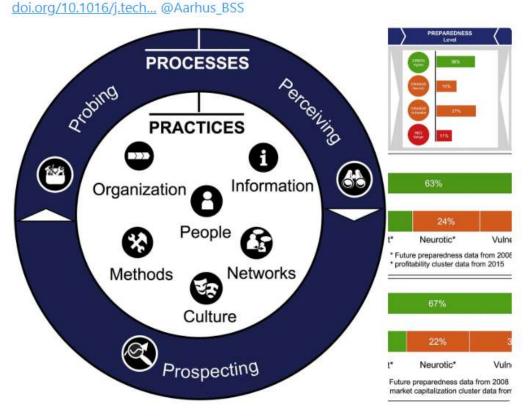


ASSESSING RETURN/VALUE



René Rohrbeck @ReneRohrbeck · Mar 25

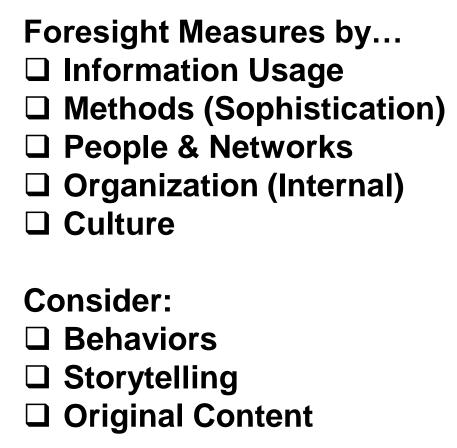
Our study on the impact #CorporateForesight on firm performance is now also published in the print version and available online as a free download

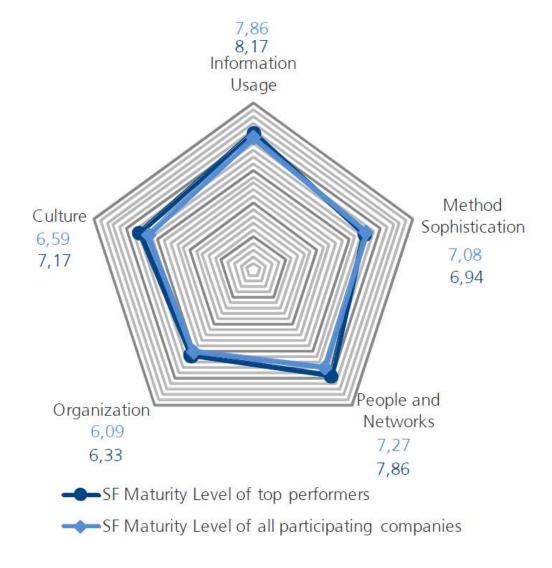


We developed a model for assessing the future preparedness (FP) of a firm

- We match FP data from 2008 and performance in 2015
- □ Future-prepared firms outperformed the average by a 33% higher profitability
- ☐ Firms with deficiencies face a performance discount of 37% to 108%

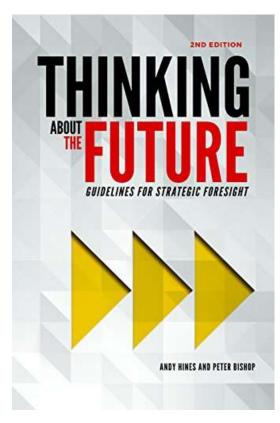
CREATING A FORESIGHT FRAMEWORK



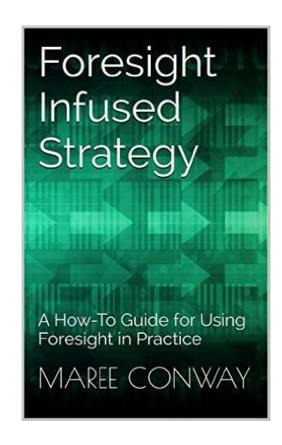


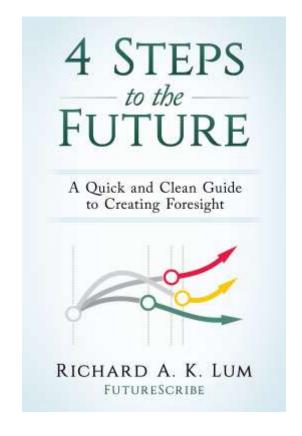
European Corporate Foresight Group

WHAT BOOK SHOULD I READ?



Strategic foresight is the ability to create and sustain a variety of high-quality forward views and to apply the emerging insights in organizationally useful ways; for example, to detect adverse conditions, guide policy, shape strategy; to explore new markets, products, and services.¹





QUESTIONS ON FORESIGHT?



CHALLENGE OF TALKING ABOUT THE FUTURE

Addressing Foundations



Purpose, Happiness vs Helplessness



Self-Work on Equity & Justice



Feeling 'Futuristic'



Techno-Solutions



Empowered Self

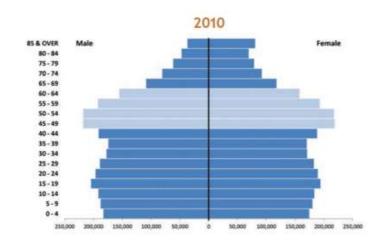
Globalization



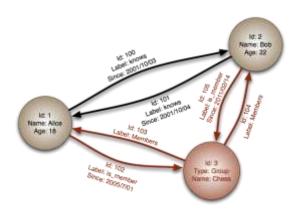
Growth



DRIVERS OF CHANGE

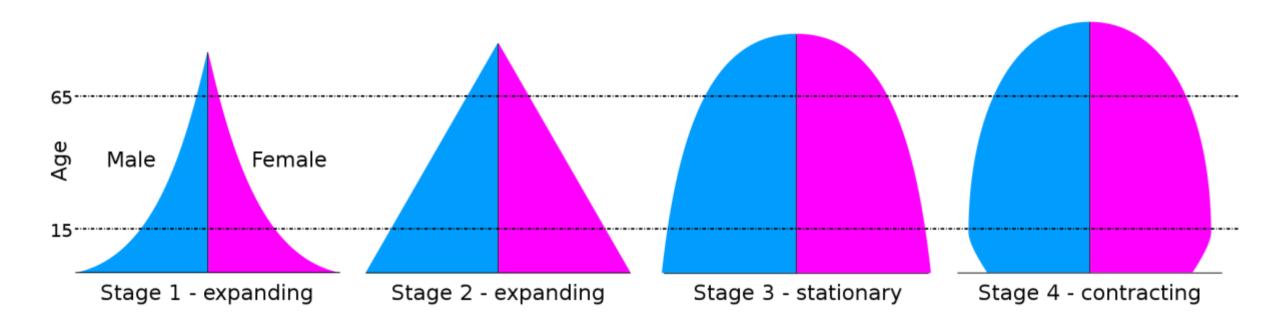


Demographic Destinies



From Social Graph to Experience Graph

DEMOGRAPHICS AS DESTINY (?)

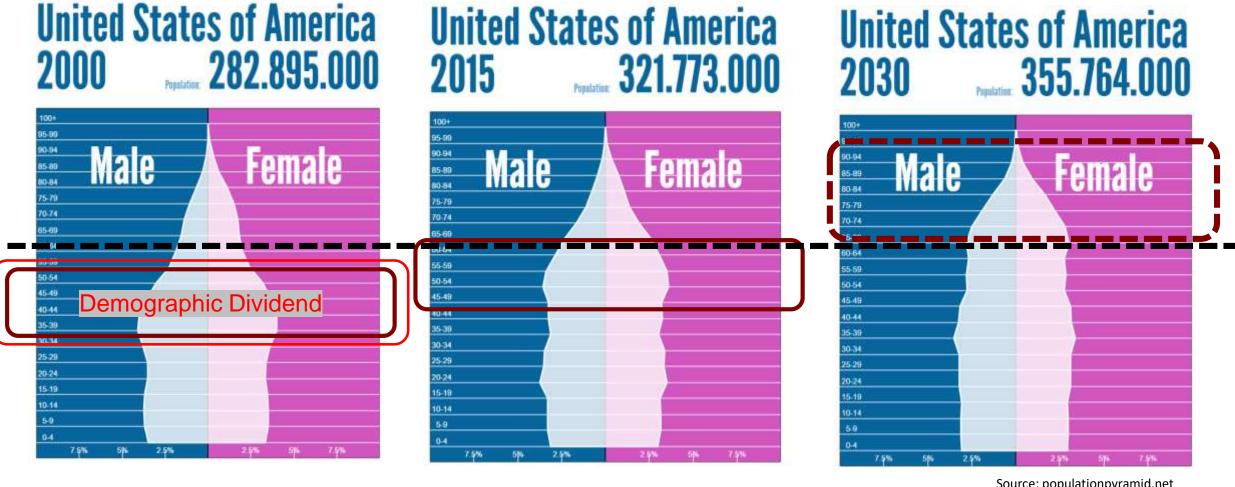


Sector Implications for: Rural vs Urban Industry Make-up

Labor Markets Infrastructure Spending

Education and Labor Electorate Sentiment

POLICY & SOCIALS NORMS IN TRANSITION



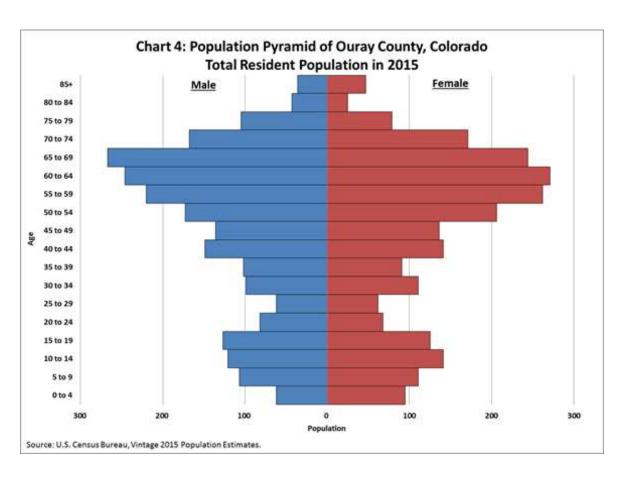
Source: populationpyramid.net

RURAL VS METRO IMPLICATIONS

Metropolitan Pyramids

Chart 3: Population Pyramid for Salt Lake City Metropolitan Area, Utah **Total Resident Population in 2015** Female Male 80 to 84 75 to 79 70 to 74 65 to 69 60 to 64 55 to 59 50 to 54 45 to 49 40 to 44 35 to 39 30 to 34 25 to 29 20 to 24 15 to 19 10 to 14 5 to 9 0 to 4 20,000 60,000 60,000 40,000 0 20,000 40,000 Population Source: U.S. Census Bureau, Vintage 2015 Population Estimates.

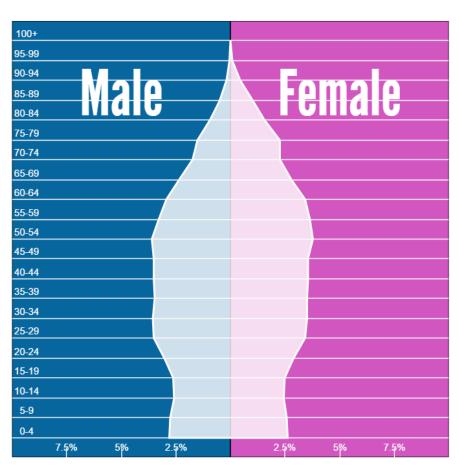
Rural & Small Town Pyramids



EU CHALLENGE OF AGING

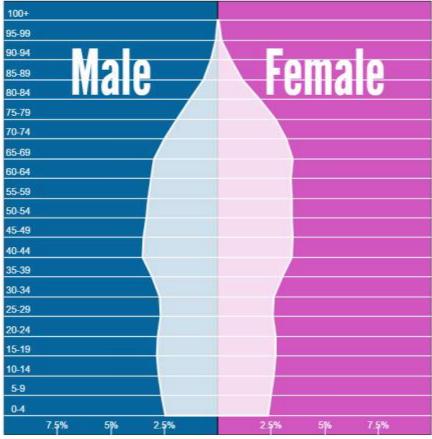
EUROPE 2015

738.442.000 Population:



EUROPE 2030

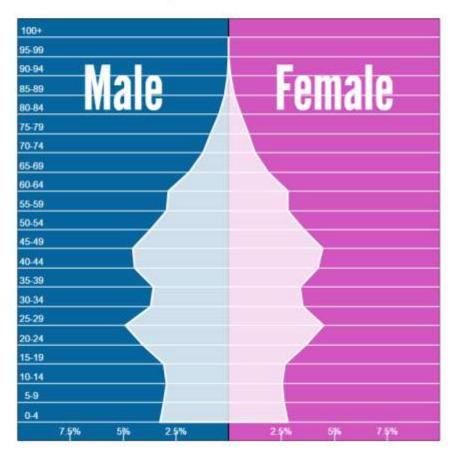
733.929.000



CHINA GETS OLD, NOT YET RICH

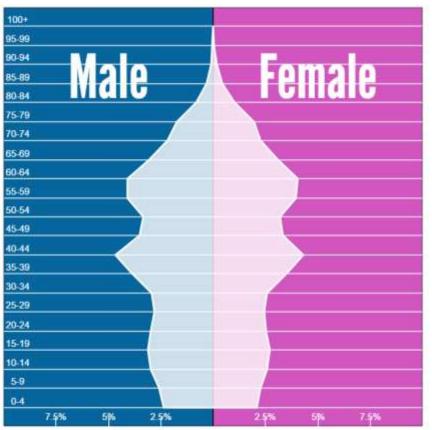
China 2015

Population: 1.376.048.000



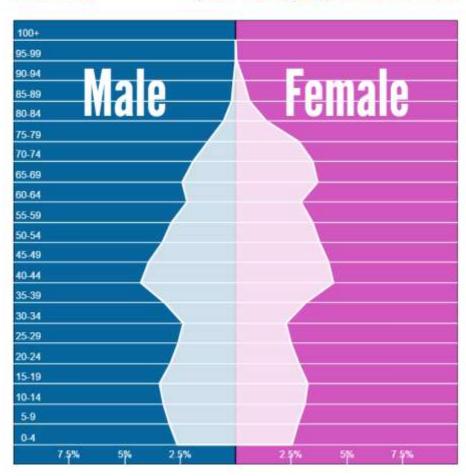
China 2030

Population: 1.415.545.000



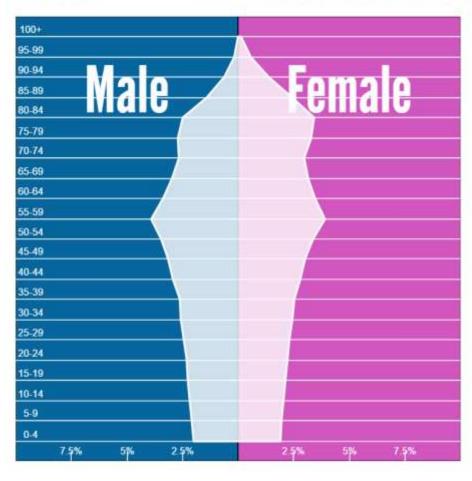
AGING ELECTORATES IN REGIONAL POWERS

Russian Federation 2030 138.652.000

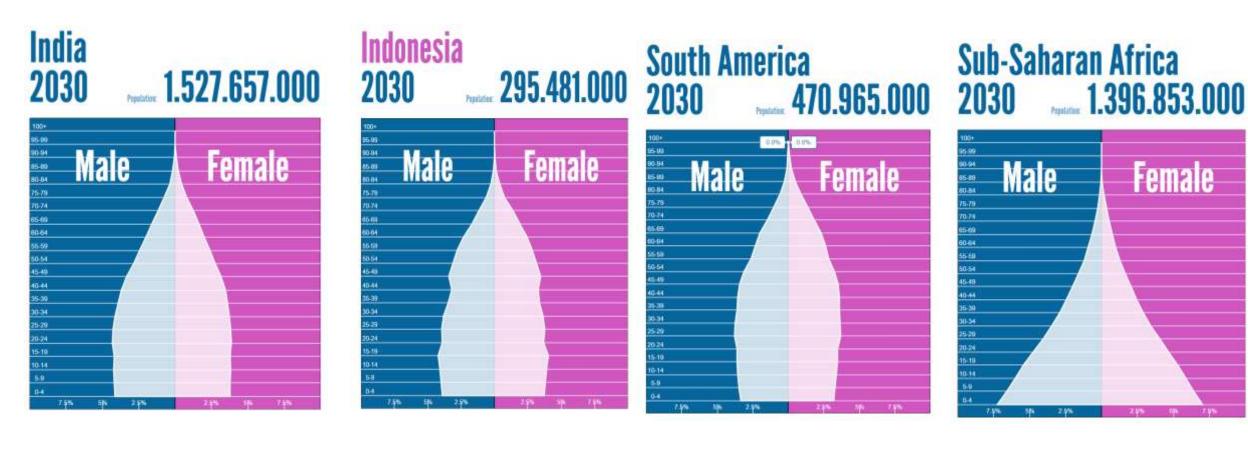




120.127.000



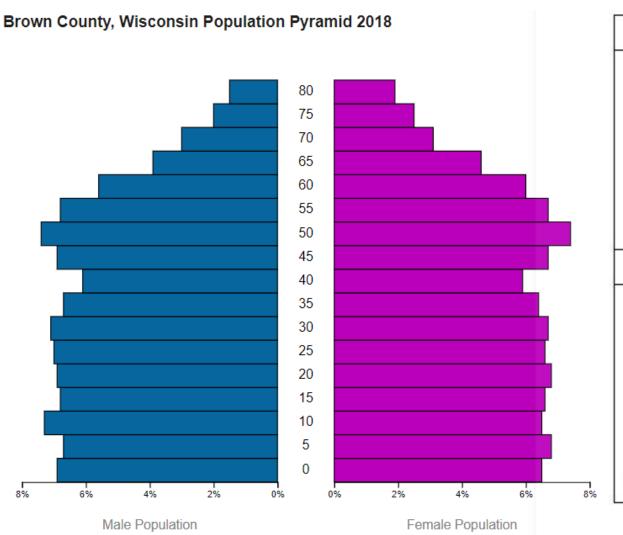
INVESTING IN FUTURE DIVIDENDS

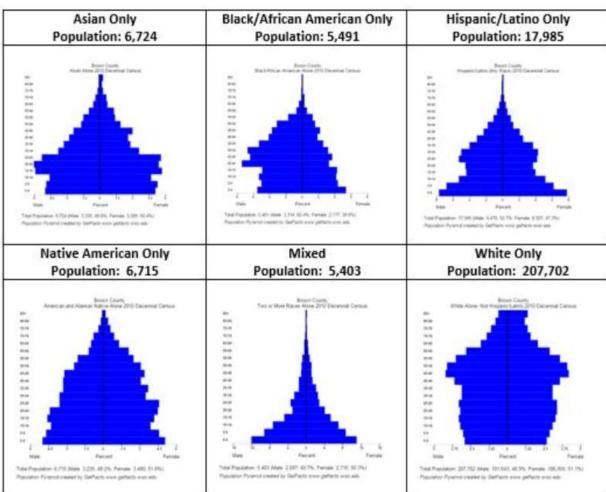


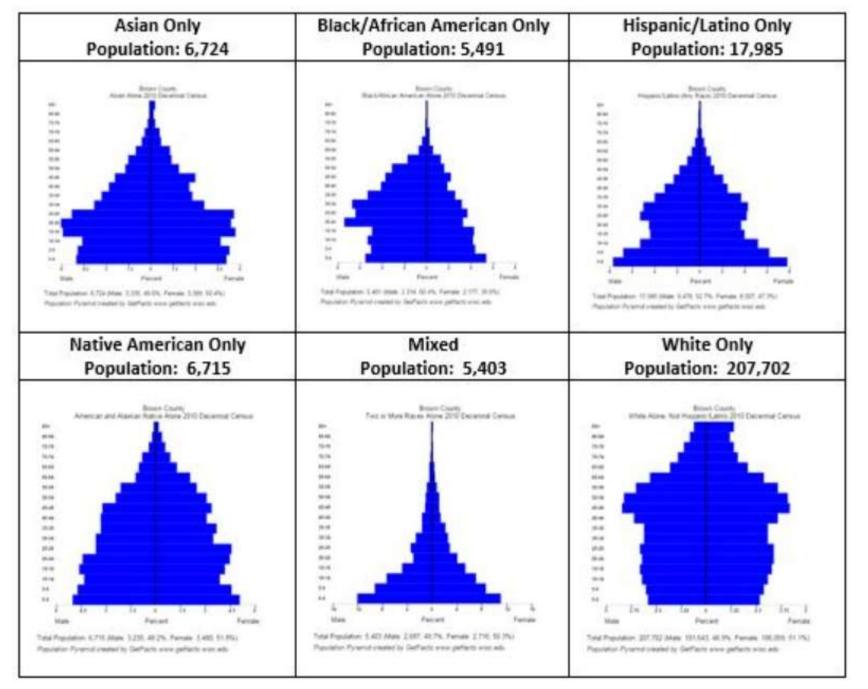
DEMOGRAPHIC DESTINIES?



OUR DEMOGRAPHIC DESTINITES?

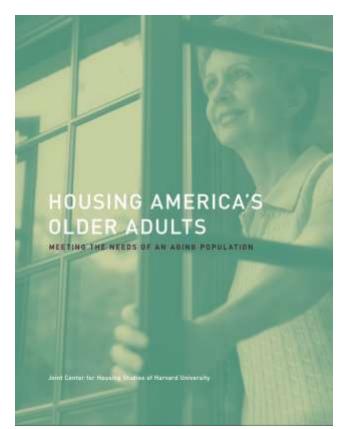






FINANCING FOR AGING IN PLACE

Enabling Loans for Aging in Place + Aging in Community





LEVERAGING KEY ASSETS



How does Irene work for older adults?

We let you sell your home, but retain the right to live in it, or rent it out, for the rest of your life.





Stay in your home or rent it out



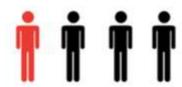
Get the funds you need, debt-free



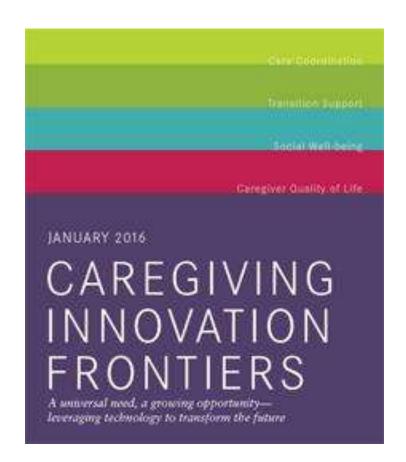
Never worry about house expenses again

CAREGIVER SOLUTIONS

AARP Report Finds
Caregiving Market Will
Grow 13% To Become
\$279 Billion Disruptive
Opportunity 2016-2020

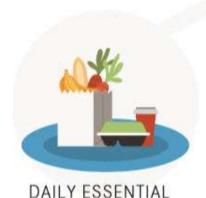


One-in-four of the nearly 40 million family caregivers in America is a millennial.



45 million unpaid caregivers by 2020

COORDINATING FINANCIAL EXPERIENCES



Meals, home and personal care, home repair, delivery, transportation services

ACTIVITIES PAGE 10



HEALTH AND SAFETY AWARENESS PAGE 18

Health vital alerts, diet and nutrition, medication management, personal safety monitoring, telehealth



CAREGIVER QUALITY OF LIFE PAGE 50

Respite and backup care, social support, health and wellness, financial/job security



CARE COORDINATION PAGE 26

Care planning, care professional engagement, records and benefits management, recovery support



SOCIAL WELL-BEING PAGE 42

Digital inclusion, life enrichment and empowerment, community networking, life companions



TRANSITION SUPPORT PAGE 34

Home retrofit services, long-term care insurance planning, long-term care provider referral, legal assistance, hospice/funeral planning

0

Caregiving Innovation Frontiers

UNDERSTANDING NEEDS

2018 C.A.R.E Study

Financial and Lifestyle Costs of Caregiving

Northwestern Mutual is the marketing name for The Northwestern Mutual Life Insurance Company (NM), Milwaukee, WI and its subsidiaries.



C.A.R.E. STUDY

└ Costs:

Financial considerations of long-term care

☐ Accountabilities:

Obligations of caregiving

Realities:

Actual experience of aging or caregivin vs. anticipation

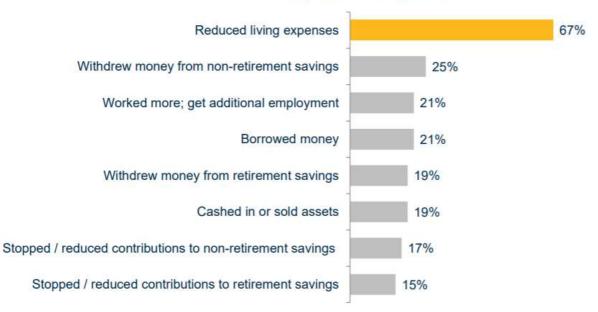
Emotions:

Mindset of adult dependent and caregiver

Navigating caregiving costs has required financial sacrifices

Two-thirds of caregivers who have incurred costs had to reduce living expenses as a result.





1 in 3 current caregivers spend more than 20% of their monthly budget on providing care, with a sizeable portion going towards medical supplies.

FINTECH: CAREGIVER EXPERIENCES





Financial Health Checkup Credit Report and Action List

FINTECH: END OF LIFE PLANNING



Home

Enterprise Solutions V

About v

Knowledge Base

Log In

Sign Up

Easier end-of-life planning for everyone

Cake helps you discover, store, and share your end-of-life preferences with everyone who needs to know.

Cake guides you through end-of-life decisions, at your pace.



Healthcare

Do you have advance care preferences?



Legal & Financial

Are all of your assets in order?



Funeral and Memorial

How do you want your life to be celebrated?

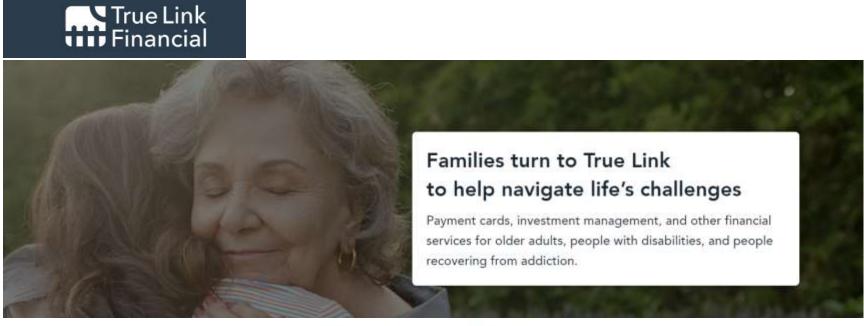


Legacy

What do you want to be remembered for?

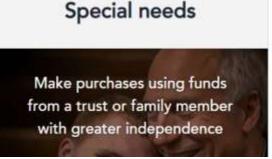


CARD & PAYMENT SOLUTIONS











CARD & PAYMENT SOLUTIONS

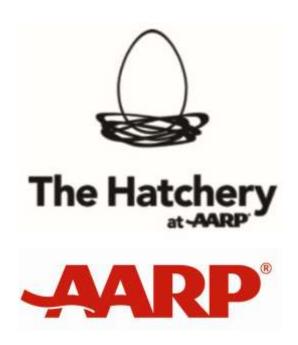
Manage block settings Grocery stores ALLOW Bars and liquor stores BLOCK **Pharmacies** ALLOW Manage cash ATM withdrawals ALLOW True Cash withdrawals over \$40 BLOCK Manage specific merchants 5678 Walmart ALLOW 4000 E 09/21 DEBIT ANDREA DAVIS

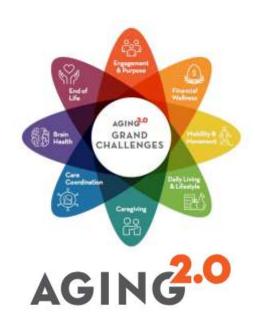
The True Link Prepaid Visa® Card

INNOVATION MINDSET FOR AGING POPULATIONS & CAREGIVERS

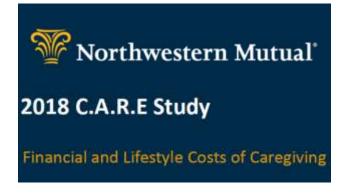
Innovation to Drive Business:	Innovation to Bring Value:
☐ Extending Working Years	Reduction of Financial Stress
☐ Retirement	☐ Social Isolation
☐ Asset Protection	□ Dignity & Purpose
☐ Workplace Benefits	☐ Fairness / Discrimination
□ Security / Fraud Protection	Cognitive Support Needs
☐ Housing	☐ Expanding Notions of Community
☐ <i>Unbanked</i> (Uninsured)	☐ Language (Senior; Older Adult)
	☐ Caregiver Burdens (20% month)

LEARNING MORE









Follow Signals via Garry's Social Bookmarks ('Tags')

- https://www.diigo.com/user/garrygolden/aging
- https://www.diigo.com/user/garrygolden/demographics
- https://www.diigo.com/user/garrygolden/millennials

DEMOGRAPHICS

How might demographic transitions have an impact on your organization?



DATA-DRIVEN INNOVATIONS

What might be the most valuable types of data in our future?

How might data, advanced analytics and Al transform your responsibilities?



MATURITY MODELS & VALUE CHAINS

Roadmap for Business Intelligence

☐ Descriptive Analytics

Reporting Tools; KPI Dashboards

☐ Predictive Analytics

Forecasting; Decision Support

☐ Prescriptive Analytics
Guiding Outcomes

& Value Offering **Competitive Advantage**

Prescriptive Analytics What should happen...

Predictive Analytics

What might happen...

Descriptive Analytics

What happened...

Complexity of Data & Member Relationship Management

FUTURE OF DATA-DRIVEN CHANGE

In the News



IN THE NEWS

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







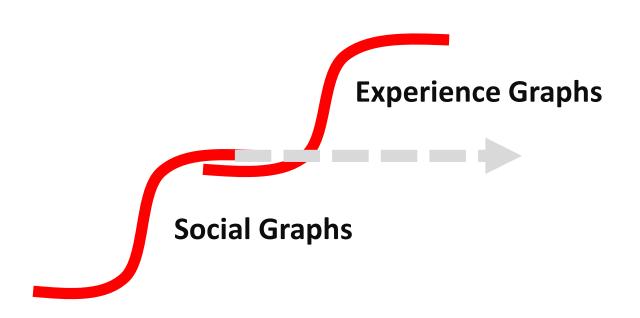
Context of the Creepy Line



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

Al-Driven Innovations

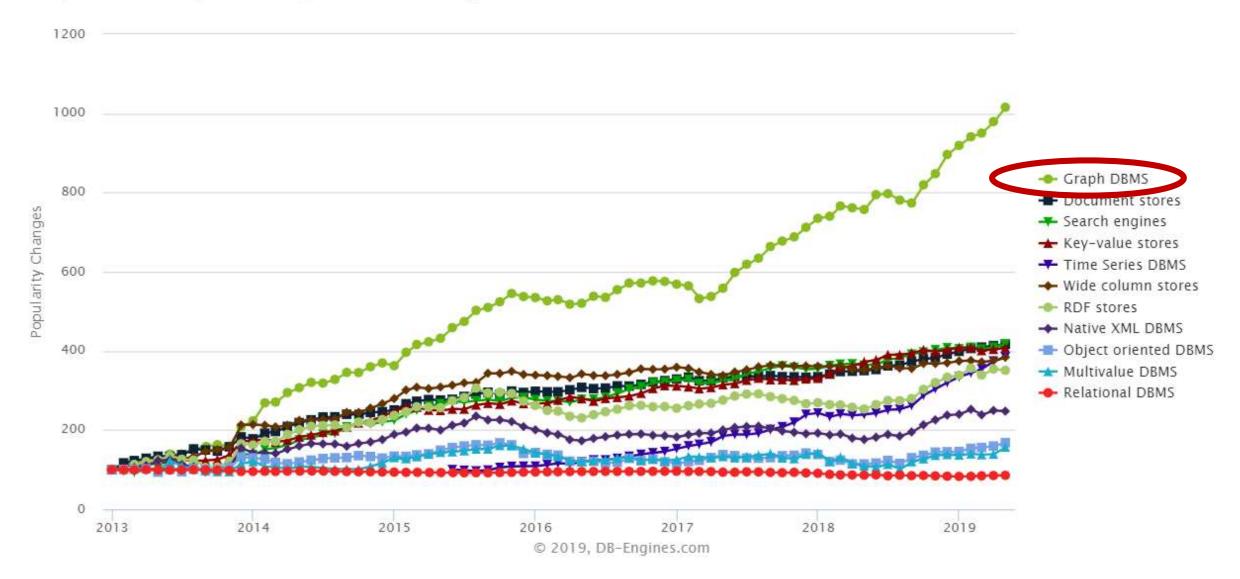
SOCIETY TRANFORMED, AGAIN?



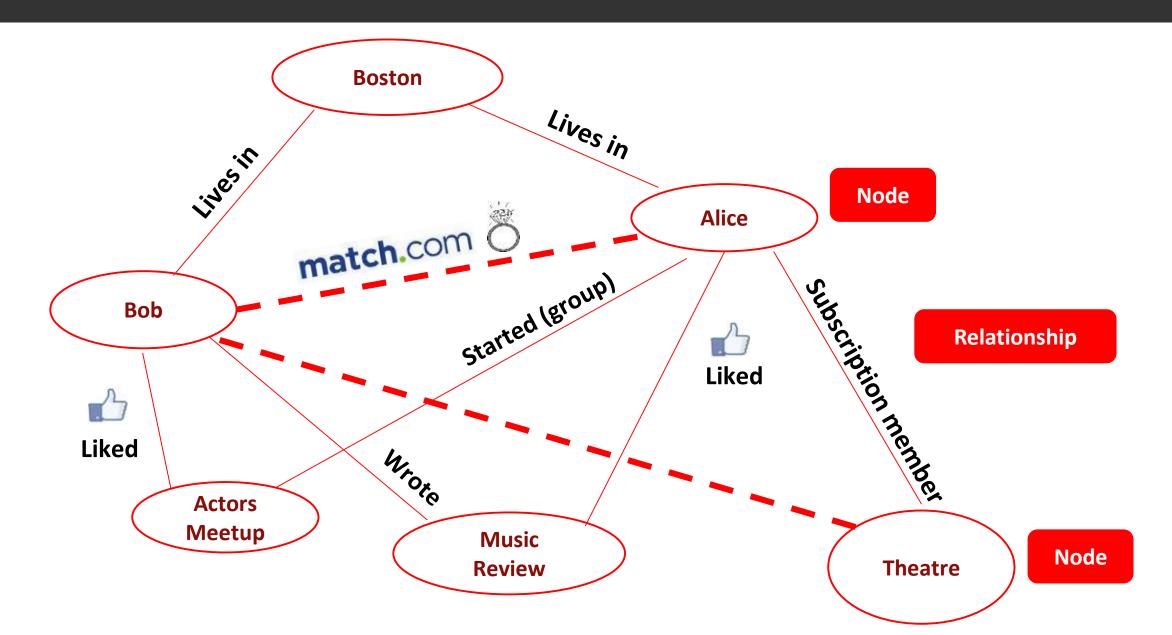
Scenario 2020s

TOOLMAKERS: GRAPHS & CONNECTED DATA

Complete trend, starting with January 2013



RISE OF GRAPH DATA STRATEGIES



ERA OF SOCIAL GRAPH



CEO Mark Zuckerberg: "Social Graph" in 2007 referring to the network of connections and relationships documented by Facebook members

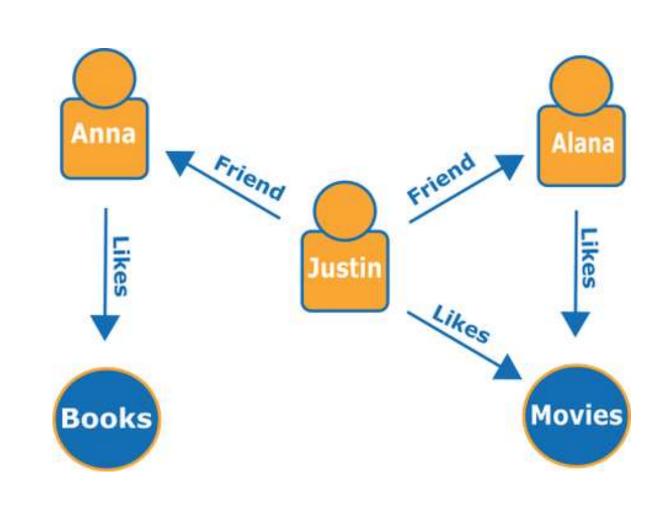












WEB = DISTRIBUTION PLATFORM

Social Norms for the Anonymous-Access Web

1993



"On the Internet, nobody knows you're a dog."

WEB = SOCIAL PLATFORM

"On Facebook, 273 people know I'm a dog. The rest can only see my limited profile."

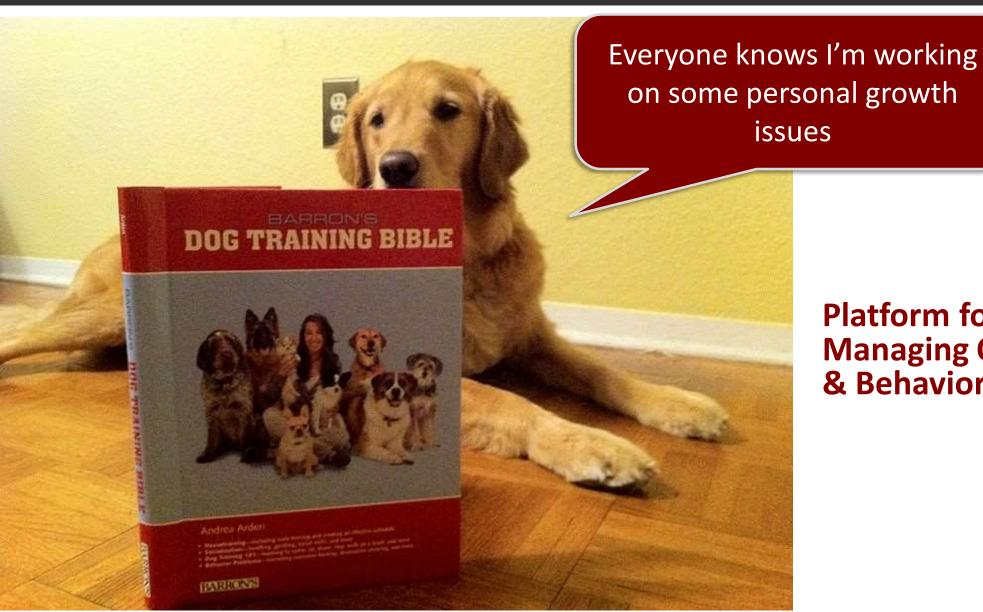
Social Norms & the Social Web

2008





WEB = GUIDING OUTCOMES



Platform for Managing Outcomes & Behavior Change

DATA IN AN OUTCOMES-DRIVEN WORLD



Social Data



Health Data



Device + Infrastructure



"I did this..."

Learning & Doing Experience Data

ORGANIZATIONS NEED THE DOING DATA



Course



"I did this..."

Activity Capture



Assumption for 2020s:

Experience Data emerges inside schools, workplace & everyday life

EXPERIENCE DATA SHOWS OUR JOURNEY



☐ Sarah <i>read</i> 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 <i>searched</i> for Ethereum Meetups in NYC
☐ Sarah <i>attended</i> the Crypto Compliance conference in NYC
☐ Sarah created a List of 'Ethereum Developers' (People) on Twitter
☐ Sarah <i>interviewed</i> the Head of Blockchain Solutions at JPMorgan
☐ Sarah <i>mentored</i> with Joe Lubin co-Founder of Consensys
☐ Sarah <i>completed</i> a course on Ethereum's Solidity programming language
☐ Sarah <i>demonstrated</i> her pilot Ethereum application at a NYC Meetup
☐ Sarah <i>taught</i> a Coursera MOOC on Ethereum for KYC / AML
lue Sarah was hired as Developer of Blockchain Compliance Solutions at Fidelity

ENTERPRISE L&D: EARLY ADOPTERS



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

April 2018:

1 million statements

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

Summer 2019:

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

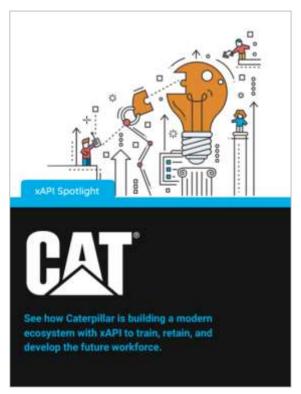
We will have a global learning analytics community of around 100 people whose role (full/part) is to look at learning data and help transform our learning

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

WILL IT LEAP BEYOND L&D?







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?

WHAT ABOUT DEVICE EXPERIENCES?



Computer Vision in the Field







BY 2025, EXPERIENCE DATA = PRIZED DIGITAL ASSET

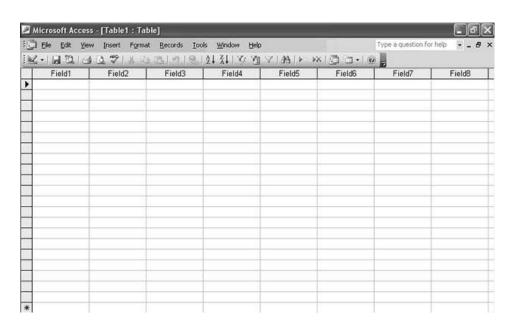


Social Data

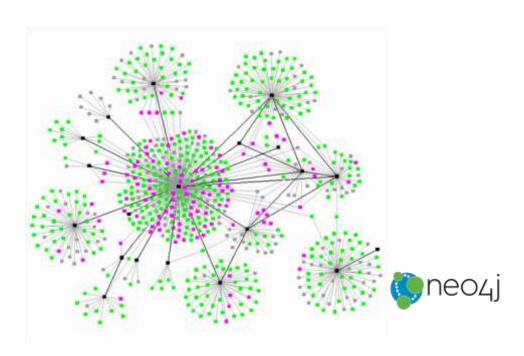


Experience Data

HOW MIGHT WE MAKE SENSE OF IT?

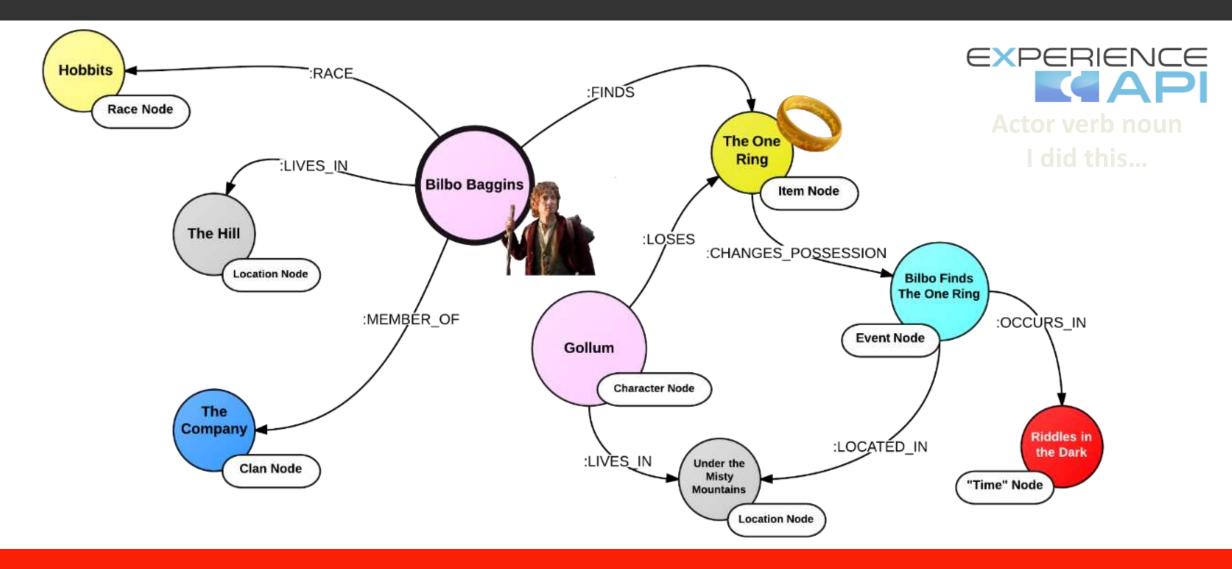


Tables = Past



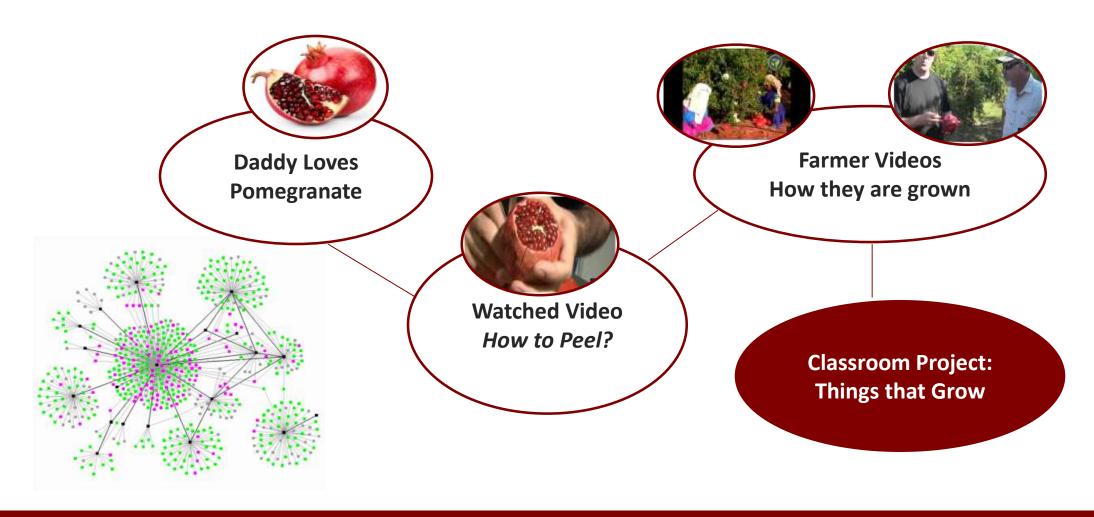
Graph Thinking = Future

EXPERIENCE GRAPHS: UNDERSTANDING THE JOURNEY



Mirrors Real World Profiles, Pathways & Outcomes

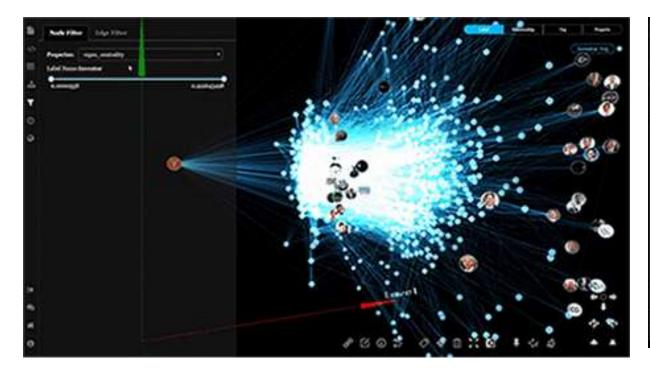
Noah is Connecting Things on his Experience Graph



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

EARLY SIGNALS OF PERFORMANCE EVALUATION

Evaluating Investor Performance Using Neo4j, GraphXR and ML



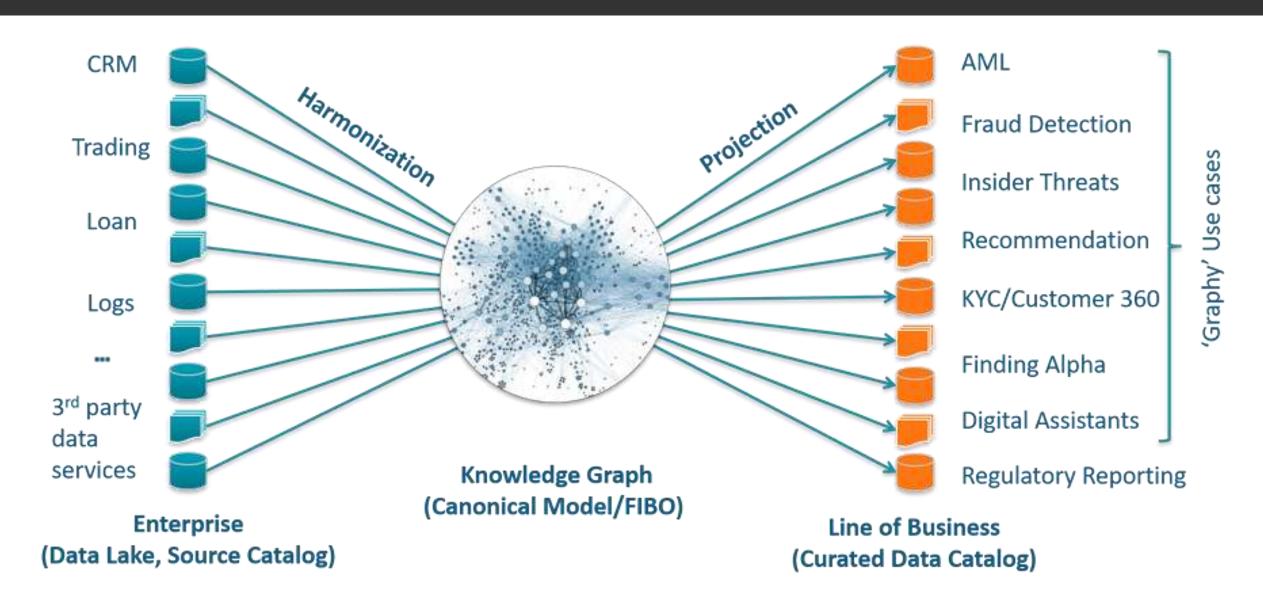


CONNECTED DATA AROUND REGIONAL ECONOMIES

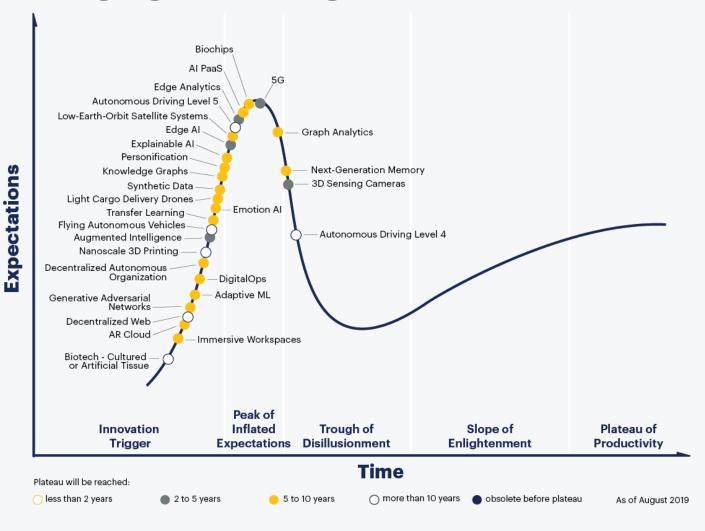


Members – Companies – Jobs – Skills – Schools – Knowledge

VENDORS: ENTERPRISE KNOWLEDGE GRAPHS

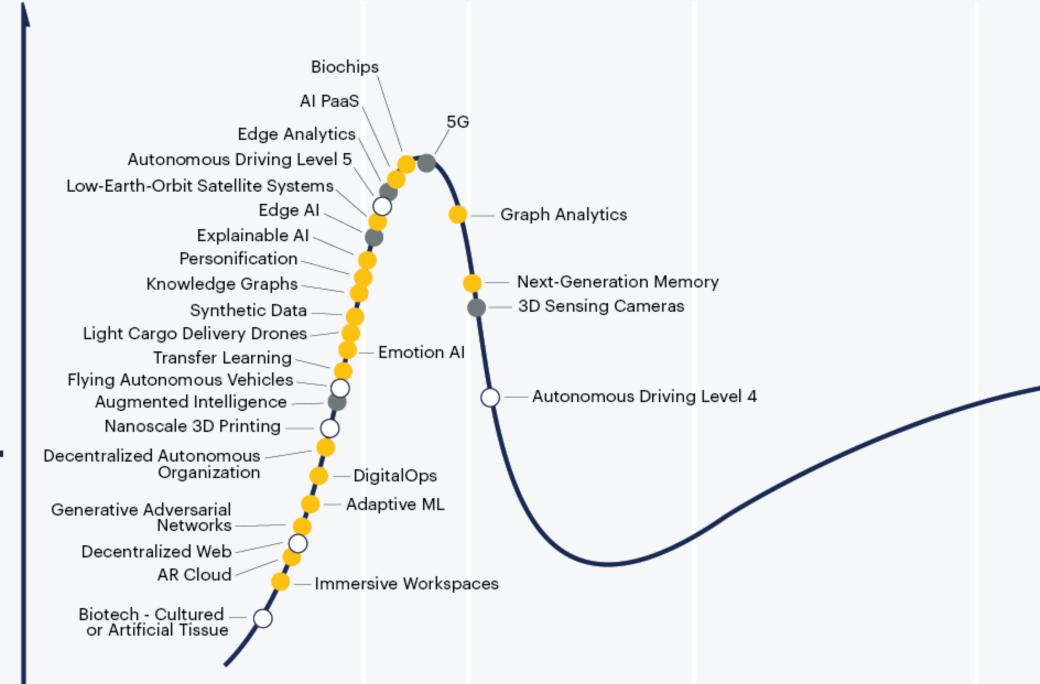


Gartner Hype Cycle for Emerging Technologies, 2019



gartner.com/SmarterWithGartner

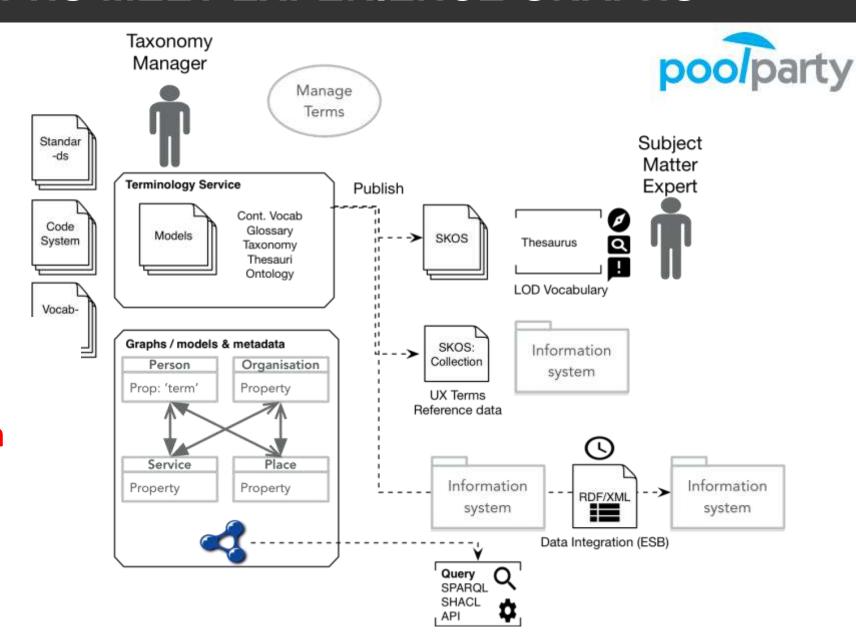




KNOWLEDGE GRAPHS MEET EXPERIENCE GRAPHS



Build a Layer: Experience Graph Meets Knowledge Graph



MAINSTREAMING OF EXPERIENCE DATA

Signal
Legacy Industries
Integrating
Experience Data



John Hancock 'reinventing' life insurance to get people healthier, living longer: CEO

PUBLISHED WED. SEP 19 2018 + 3:54 PM EDT

CEO Marianne Harrison says John Hancock is "reinventing" the traditional life insurance model by only offering data-driven, interactive policies.

The idea is to track fitness and health data through wearable devices and smartphones and reward policyholders for the steps they take.

The company offers incentives to encourage people to live healthier, longer lives.



CREEPY VS COMPELLING LINE

Signal
Dystopian Variations
of Experience Data



VICE News @ @vicenews · 20m

Here's how it works, you start with 1,000 points. If you do something bad, you get points docked. If you do something good, and you happen to be spotted, you get points added.



China "Social Credit System" Has Caused More Than Just Public Shami...

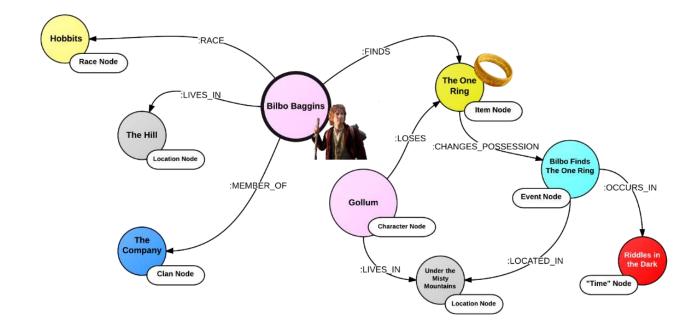
GRAPH ANALYTICS USE CASES

- Knowledge GraphsOrganizational Capabilities;Protocols & Procedures
- □ Risk Management Graphs
 Integration of Data Silos;
 Threat Detection/Assessment;
 Security Controls

- Automation & AlPreparing Operational Datafor Machine Readable Age
- □ Al Driving Performance Support
 Context-based Training,
 Moving to Model of
 Performance Support

IMPLICATIONS FOR ENTERPRISES

- ☐ Experience Data (Spectrum)
 Ownership, Control vs Access
- □ Datasets for AI (ML/DL)Own; Sell Access to...
- □ Critiques Too Creepy?; Over-engineered?



SCENARIO: ERA OF EXPERIENCE GRAPHS

How might a world reshaped by experience data transform the nature of work and your approach to management and leadership?



LEARNING MORE







ExperienceAPI Analytics

Learning Record Stores (LRS) is Database for 'xAPI' statements











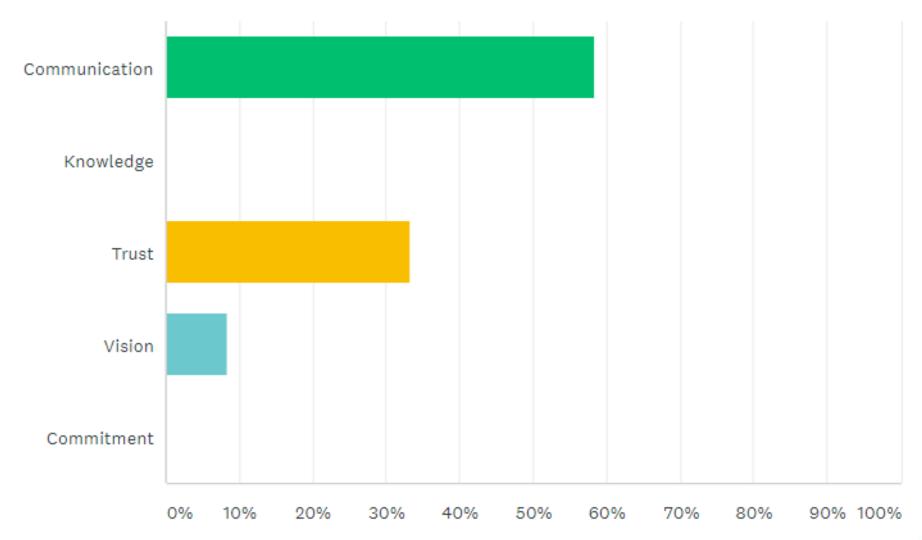


Graph Analytics

What is the biggest risk we should take over the next five years to align our organizations to this emerging world?



Which is the most frequently overlooked characteristic of successful change?





BRINGING FORESIGHT TO CLIENTS

Value of Process

(Tools, Techniques, Behaviors)

Value of Content

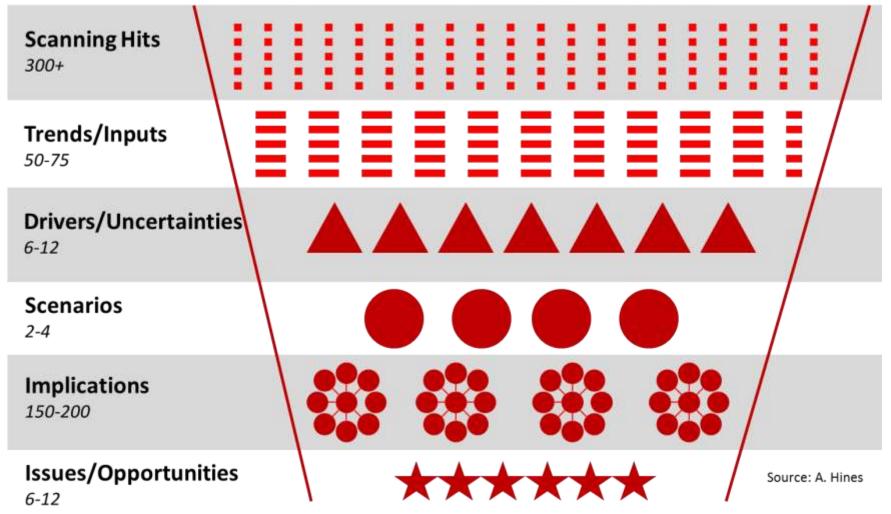
(Domain expertise; Knowledge)



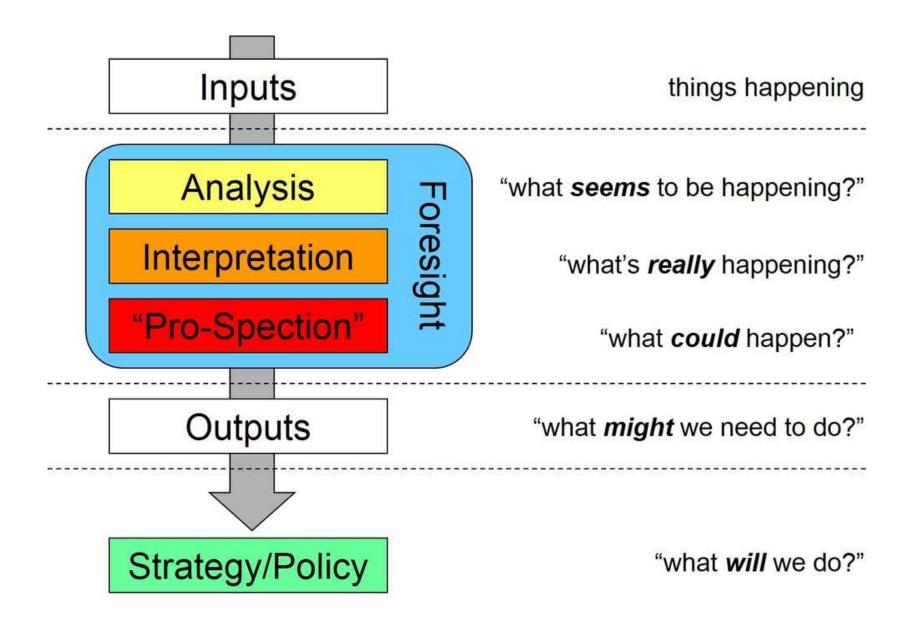
The Foundation is Scanning for Signals of Change

THE VALUE OF SIGNALS AS INPUTS

Framework Foresight Funnel







Generic Foresight Process Framework

(Joseph Voros, <u>A Generic Foresight Process Framework</u>, 2003)

THE PRACTICE OF TAKING MENTAL LEAPS

Investigate

Identifying& Monitoring Change



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

Imagine

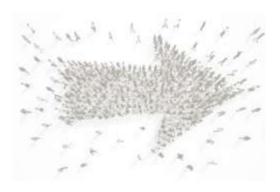
Exploring Implications



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

Inspire

Communicating the Need for Change



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

SCANNING FOR SIGNALS

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

BUSINESS NEWS SEPTEMBER 19, 2018

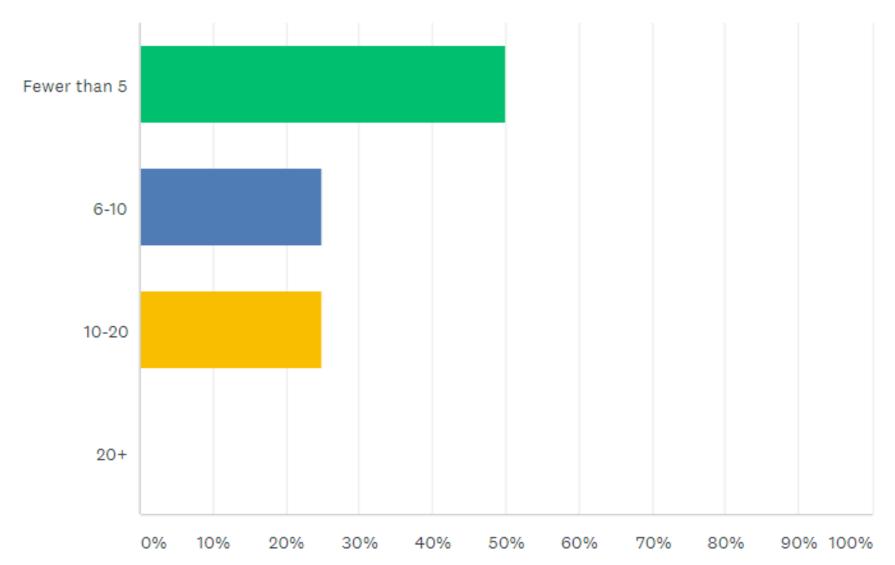
Suzanne Barlyn





(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.

On average, how many interesting stories about change (the future) do you find per week.





SCANNING WIDELY ACROSS THEMES



Scanning for Signals
Across S.T.E.E.P.
Categories of Change



JUDGING SIGNALS OF CHANGE

Scanning: Criteria and Considerations

Signals may be judged on the following elements:

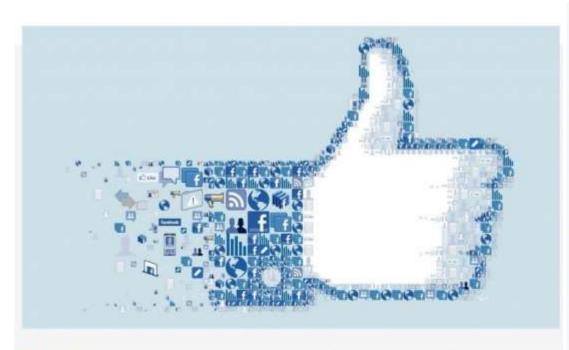
- □ Source Credibility
- Newness/Uniqueness
- Degree of Uncertainty
- □ Degree of Impact
- ☐ Momentum (e.g. slowing down, speeding up)

APPLYING SIGNALS OF CHANGE

When applied to scenario thinking or customer research a *signal* may do one of three things:

- □Confirm assumptions of one scenario outcome
- □ Diminish the likelihood of a particular scenario
- **Create** a new scenario to consider

SIGNALS: BACKLASH AGAINST TECH



A hot potato: Social media sites have long faced criticism for the negative effects they can have on children. In the UK, proposed guidelines have been put forward by the government to improve child safety on these platforms, including the removal of the Like button.

The Information Commissioner's Office has compiled the draft code, which says "nudge"



Early Facebook backer urges Toronto to abandon 'smart city' project with ... Critic Roger McNamee says the company's 'goal is to replace democracy with algorithmic decision making'

& business.financialpost.com



SIGNAL: AI AGENTS AS ECONOMIC ACTORS



Fetch.AI @Fetch_AI · 59m

Another real-world demo showing how @Fetch_Al's #IntelligentBlockchain will make your life better.

Lead research scientist @marcin abram explains how our #AutonomousAgents detect the availability of #parking spaces A A A











C) 28



Google, Trevor Project will use Al to combat LGBTQ youth suicide

The Trevor Project won a \$1.5 million Google AI Impact grant, which will allow the nonprofit to use artificial intelligence in its suicide prevention services.

May 8, 2019, 6:05 PM EDT

By Tim Fitzsimons

The technology giant awarded The Trevor Project with a \$1.5 million Google AI Impact grant, which will let the nonprofit incorporate Google's artificial intelligence tools into its suicide prevention

What role might Al play in our region's social services? Does it cross a 'creepy line' of surveillance or help protect people?

via phone, text, and chat," the Google Impact website states. "Using natural language processing and sentiment analysis, counselors will be able to determine a LGBTQ youth's suicide risk level, and better tailor services for individuals seeking help."

A Museum Hires a Full-time Therapist

Is a museum visit just what the doctor ordered? In Montreal, medical professionals can prescribe you a museum visit. There's also a full-time art therapist on staff.



Hrag Vartanian March 22, 2019



In Canada, an incredible new program allows doctors to prescribe museum visits to their patients. Hyperallergic's Zachary Small visited the Montreal Museum of Fine Arts to talk with Stephen Legari, the first full-time art therapist on staff at a North American museum (he sees 1,200 patients a year), about his work in the city's encyclopedic museum and what role art can plan in healing.

It's a fascinating story that might also point to new possibilities for art museums eager to play important roles in their local communities by teaching people to learn from and engage with art.

This Startup Wants To Connect Patients With Doctors of Color



From doctors who don't believe Black women's pain to higher rates of maternal mortality to the infamous Tuskegee experiment, anti-Blackness within the medical industry is well-documented. This history can make it difficult for Black people to receive — or even want to seek — healthcare.

Seeing Black doctors is one way many patients feel both comfortable and heard, but finding them can be incredibly difficult. Kimberly Wilson founded HUED to make that process easier.

HUED is a healthcare technology startup that Wilson describes as the "for us, by us" version of ZocDoc. Through Hued's website or mobile app, patients can find and book appointments with Black and Latinx healthcare providers. Whether you're looking for a doula, therapist, or doctor, Hued plans to be people's one-stop shop.

HUED matches patient's needs based on insurance provider, region, and specialty. In addition, patients can also access reviews about specific providers before booking an appointment.

AFROTECH



How might BACC help make connections across the region?





Robot farming startup Iron Ox has started selling its produce in California

Though only a trio of greens are being sold at a single store in San Carlos, California

By James Vincent | May 2, 2019, 11:00am EDT





How might BACC help rethink food supply chains?





Iron Ox's produce on display at Bianchini's in the Bay Area. | Photo: Iron Ox

Iron Ox uses robots to assist in the process of growing produce. | Photo: Iron Ox

BeefChain Receives First USDA Certification For A Blockchain Company BeefChain, a company meshing the world

BeefChain, a company meshing the world of blockchain with the beef supply chain, received certification from the United States Department of Agriculture (USDA) as a Process Verified Program, confirmed by the certificate BeefChain provided to me, shown below. BeefChain is the first

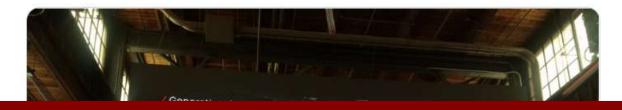
How might BACC help bring agri-industry into era of blockchain?

event's importance in an interview with me. "We're the first blockchain company in the world to be certified by the USDA," he said. "The important aspect about that is that's included in our quality manual for how we're actually tracing documentation and tracing cattle." BeefChain currently uses





"With the development of metal additive manufacturing, we believe the market will be worth \$90 billion in 10 years." @ricfulop @DesktopMetal #DigitalFactory19 #3dprinting



How might we broaden conversations on future of talent/investment in an age of additive manufacturing?





Buffalo and Lafayette lead the way in form-based codes

The cities represent the versatility of recent codes that replace conventional zoning.

ROBERT STEUTEVILLE JUN. 18, 2019

The winners show the versatility of form-based codes (FBCs) and the impact they are having on diverse American communities, from major cities to small towns. The three codes were adopted from 2015 to 2018. The Green Code covers all of Buffalo, New York, a traditional city with a population of 256,000. Lafayette's code covers downtown, the traditional heart of the Louisiana city of 127,000. Canton is a town in northwestern Connecticut with a population of 8,800, and the code addresses development along a suburban commercial corridor linking established village centers.

FBCs are being adopted to retain unique community character and encourage predictable, walkable development that supports life's daily needs. Distinct from conventional codes that separate uses, FBCs promote investment that connects communities through mixed-use neighborhoods. "Identifying, encouraging, and celebrating a sense of place has been a guiding force of my philanthropy for nearly three decades," notes Richard H. Driehaus, whose charitable trust funds the awards. "By going back to a time-honored notion of coding to make a community livable by integrating form and purpose, these winners have both beautified and enlivened their cities."

4 grocers that are turning stores into destinations

E-commerce sales may be growing, but the store is still the core asset for many retailers. Here's how a few are making their locations into more than just a weekly shop.



Credit: Photo by Erik Brolin on Uniphish

ShopRite's Wellness Center

In its Morristown, New Jersey store, ShopRite wanted to create a community hub and lifestyle center where shoppers could regularly gather, said Fischer. What resulted was the Village Food Garden Wellness Center, which opened in 2013. The wellness center includes free registered dietitian services, a full service pharmacy, a learning space for children and a fitness studio.

The fitness studio costs \$25 a month, significantly lower than most gym memberships, and features classes like Zumba, yoga, barre and circuit training, along with invitations to special events and discounts at ShopRite's juice bar and for its catering service.

Gelson's Markets Sip 'N Shop

Gelson's in-store wine bars have become a regular draw for customers. Starting two years ago, the Southern California grocer gave these shoppers another reason to stop by with Sip 'N Shop, a service that lets customers relax at the bar while a store associate does all the shopping.



Bloomberg

Robots Edge Closer to Unloading Trucks in Amazon-Era Milestone

New Siemens, Honeywell devices work at least as fast as people. 'The job is miserable inside that trailer.'

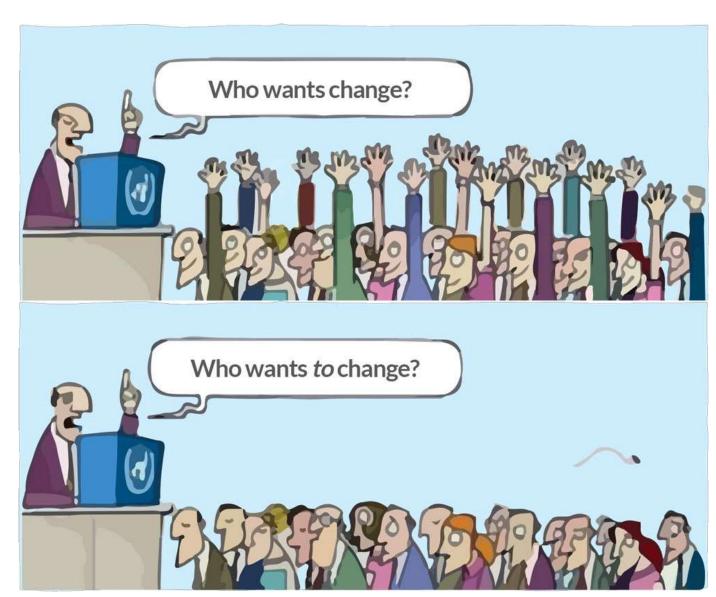
By Thomas Black May 3, 2019, 5:00 AM EDT

Avoiding Excessive Outsourcing

Change Behavior Shift Mindset

Vs

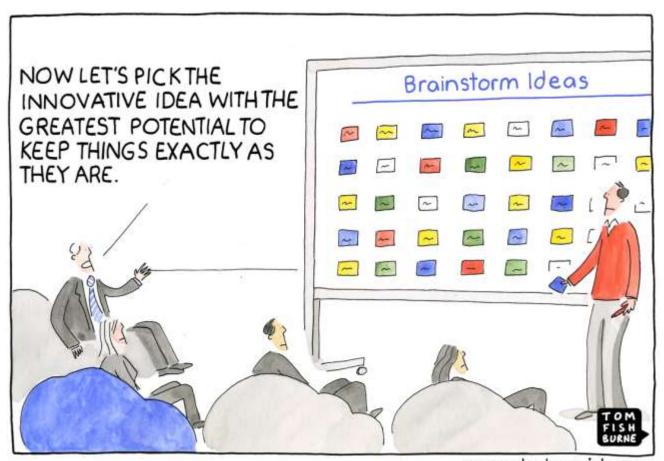
Scanning to Check the Box



The Big Picture: Potential Pitfalls

Seeing Signals and wanting to:

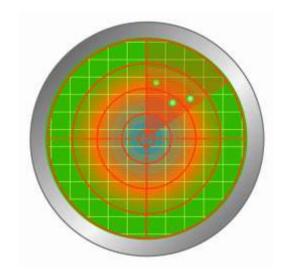
- ☐ Pick the winner
- ☐ Figure out the answer
- ☐ Act right now
- ☐ Hit Home Run
- ☐ Skip over what we don't understand

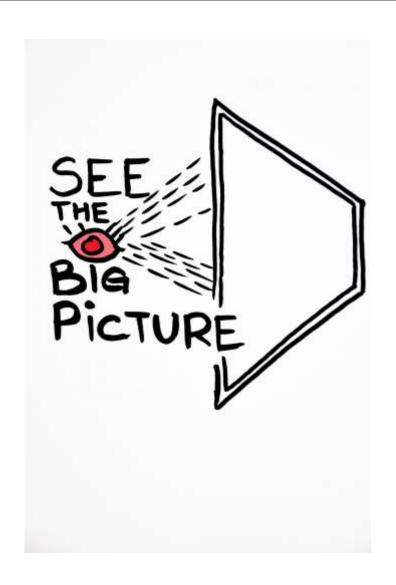


@ marketoonist.com

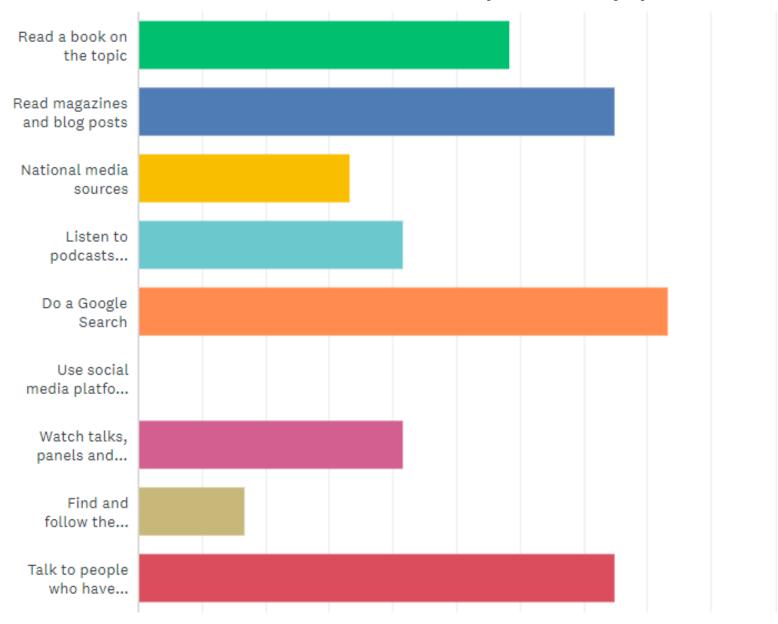
FOUNDATION FOR BEHAVIOR CHANGE

Developing a Practice of Horizon Scanning





When I want to learn about a new topic – my preference is to



EXPANDING SIGNAL SOURCES







Step One: Understand the Language of Communities

#longevity

Wen Dombrowski MD MBA Retweeted



Beth Parkhill @LongevityPlanet · Apr 6

And 23 percent of boomers will eventually be without family caregivers #longevity #aging #AgingIntoTheFuture Will a combination of #AI and robots be the solution?



Andrzej Klimczuk @AndrzejKlimczuk · Apr 6

More And More #Millennials Are #Caregivers For Older #Family Members: NPR npr.org/2019/03/16/702...

#AgingintotheFuture



Learning the Language and Code of Thematic Conversations

Social Determinants of Health













Ahmed Ali @MrAhmednurAli · 39m John Oliver exposes the sinister side of the mobile home Industryhttp://ow.ly/roGg30omKxu **#sdoh**







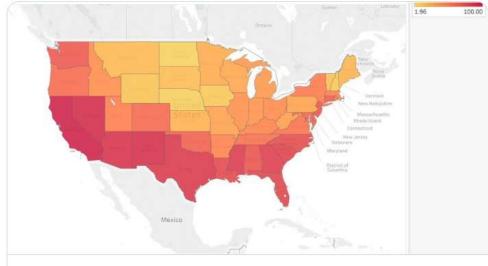




David Nace MD @DavidNaceMD · 20h

I recently co-authored a research on understanding **#SDOH** by calculating the social vulnerability indices (SVI) score at zip level, and using SVI to get patient level insights. Here's the report:

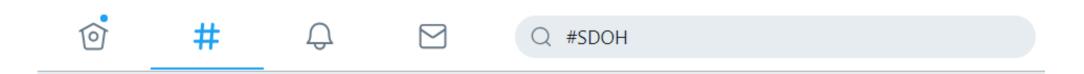
bit.ly/2U4icsd #SDOHTalk @innovaccer



From Myth to Reality - Revolutionizing Healthcare with Augmented Intelligence and Social Determin...

𝒞 innovaccer.com

Learning the Language and Code of Thematic Conversations





Task: Understand the Language of Your Domain

TWITTER & LANGUAGE OF CHANGE

Hash Tags Help Build Your 'Follow' Network + Sources



Aligning Taxonomy with Hash Tags

Task Goal for Your Domain:

☐ Identify 10-20 *hash tags* for consideration

Starter Hash Tag List:

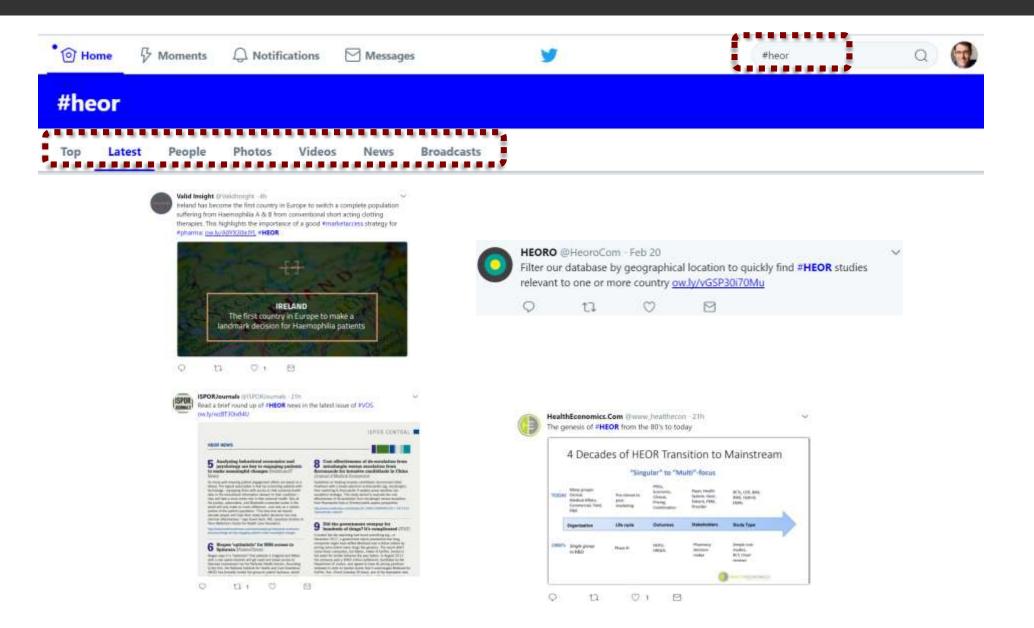
- #futureofwork
- __ #AI
- □ #techlash
- #algobias
- #automation

Dynamics Hash Tags - Upside: Orbital Object for People, Ideas and Communities;

Best used around 'events' (Conferences; Chats)

Downside: Noise; Spam; Vendor dominated

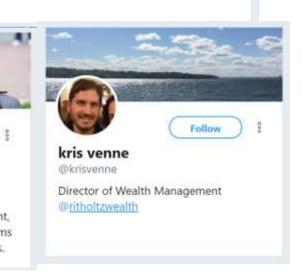
TWITTER: EFFECTIVE USE OF FILTERS



WHO ARE THEY FOLLOWING



Tweets Following **Followers** Likes 35.3K 8,930 2.095 15.6K Tweets & replies Media **Tweets** Follow Sydney Lupkin 📀 **Population Health** @JeffersonJCPH @slupkin Correspondent at Kaiser Health News. Jefferson College of Population Health Past: VICE News, MedPage Today, ABC prepares leaders to develop, implement, News // DM for Signal and evaluate health policies and systems that improve the health of populations.



Lists

Follow

TWITTER: CREATE LISTS



https://twitter.com/garrygolden/lists



Garry Golden @garrygolden

Father to dinosaur + lava obsessed boys. Futurist w/ real clients. Tweets: Energy, Transportation, Learning, Crypto, Demographics, Deep Time, Art

@ Brooklyn, NY

@ garrygolden.com

Joined April 2008

Subscribed to

Member of



44 Members

govt2.0

63 Members

health+wellness

103 Members



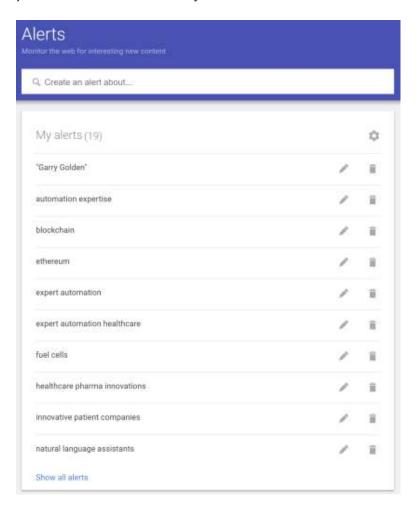




GOOGLE: DELIVER NEW SIGNALS

Google Alerts: Keywords

- 1) Go to: google.com/alerts
- 2) Enter Series of Keywords



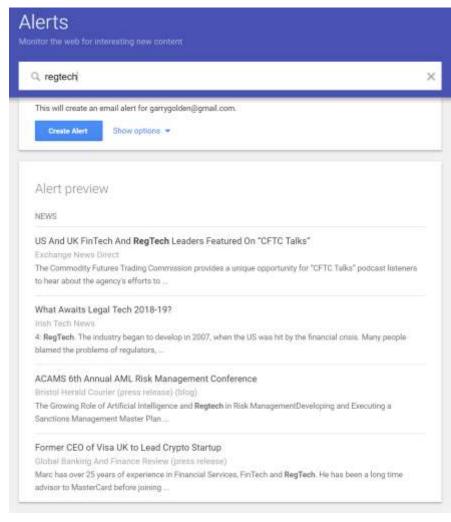
3) Choose Delivery Time vs. Digest to Manage Flows

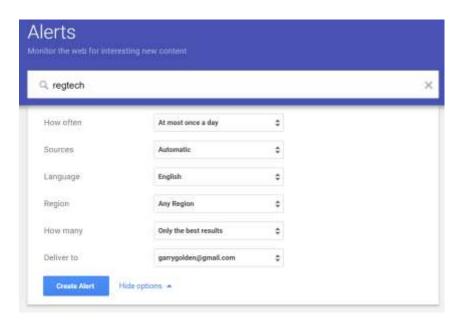
Delivery time Choose when to receive your alerts.		
Digest		
Receive all alerts in a single email.		
	CANCEL	SAVE



GOOGLE: LANGUAGE & FILTERS

Google Alerts: Keywords





- q regulatory innovation
- compliance innovation
- Tax Law Innovation

GOOGLE: TIPS TO GET STARTED



Q. Create an alert about		
My alerts (19)		10
"Garry Golden"	/	î
automation expertise	/	il
blockchain	/	1
ethereum	/	10
expert automation	/	B
expert automation healthcare	/	B
fuel cells	/	i
healthcare pharma innovations	/	В
Innovative patient companies	/	B
natural language assistants	/	9

- ☐ Start with Ten Keywords

 (Test variations;

 Delete Ineffective Keywords)
- ☐ Start with Digest Mode
- □ Create a Gmail Folder to Avoid Crowding Inbox
- ☐ Yes, Google is Watching

LINKEDIN: MORE USEFUL EVERY DAY





Samson Williams

Problem Solving Educator: Fintech | Blockchain | Crowdfunding | Humans

Where is the future of lawyering, in a #decentralized ecosystem? Some quick thoughts from Lewis Cohen, while at #Consensus2018. Checkout what he has to say about how #blockchain and entrepreneurship are shaping the future of law practice in Angela Angelovska-Wilson's new law firm www.DLXLaw.com (we all know whose really in charge).

Maureen L. Murat, Esq. DLX has a office in DC and NYC. You should connect with Angela if you haven't already.

Paras Kale Constantin Kogan Elena Merzhanova Sushil Singh CPA (Aust.) FRANCISCO BENEDITO Michiel Lips 林铭瀚



66 Likes - 12 Comments







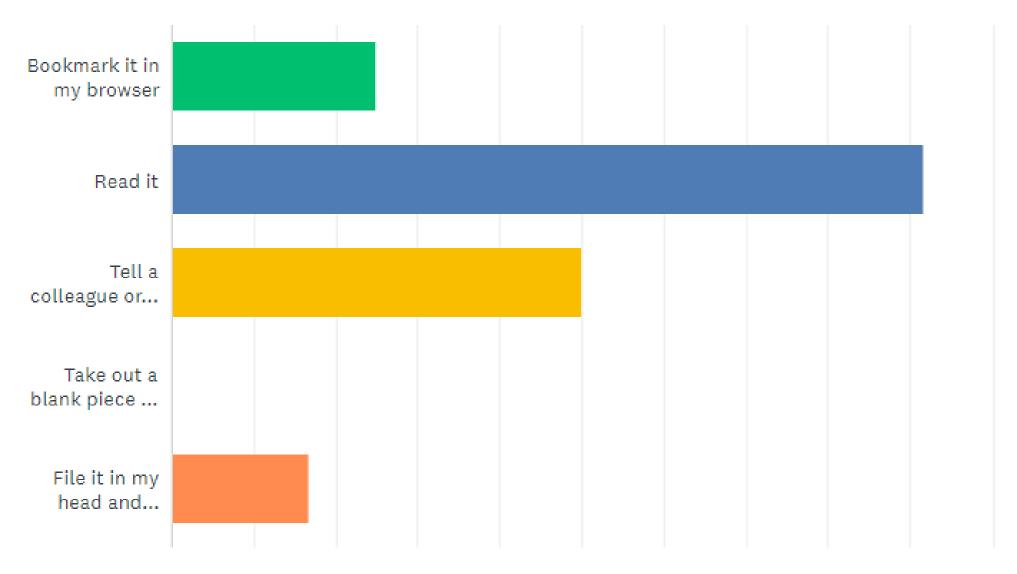


FOUNDATION FOR SOURCING



Questions on Signals Sourcing Strategies?

When I find an interesting story that challenges my view of the future, my first reaction is to...



FOUNDATION FOR ARCHIVING & SHARING

Tool: Organizing Your Signals

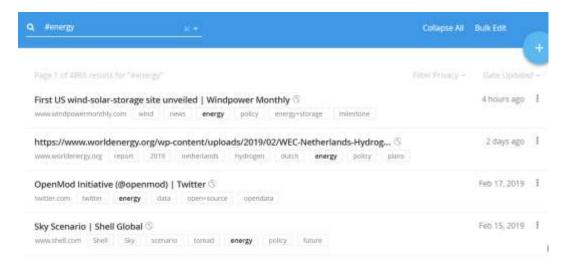


'Tagging'
'Social Bookmarks'

WHY TAGGING MATTERS...



Collect & Share Signals as Social Bookmarks

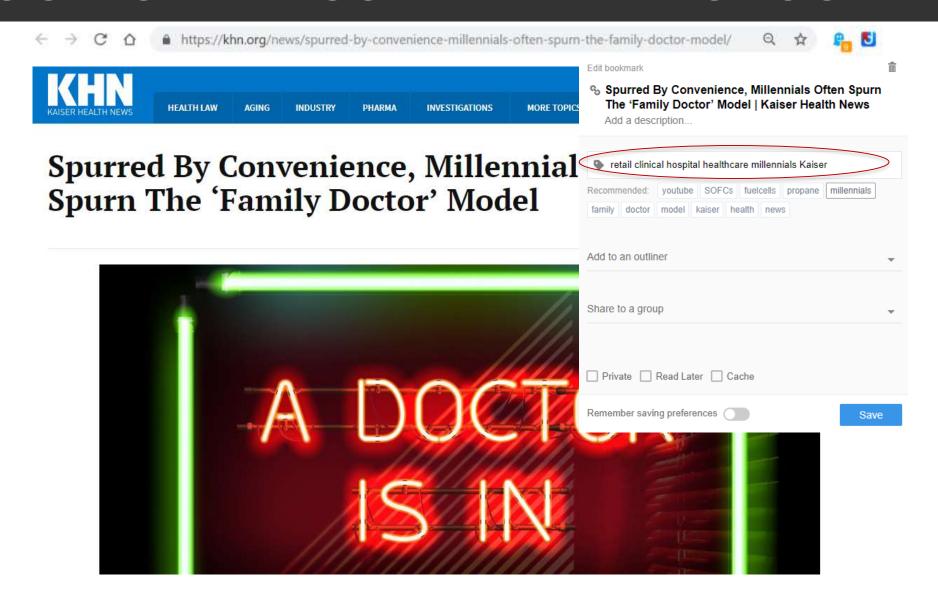


Social Bookmarking allows you to automate and archive your efforts so you can review them all together under common keywords – and share with colleagues.

Diigo helps you avoid having to remember where you read something—simply get into the habit of tagging relevant website, videos, and reports that you find along the way.

With practice the 'tagging' of a web browser based signal (news story, video, PDF, et al) should take five (5) seconds to filter and archive with three tags.

TAGGING IN LESS THAN FIVE SECONDS









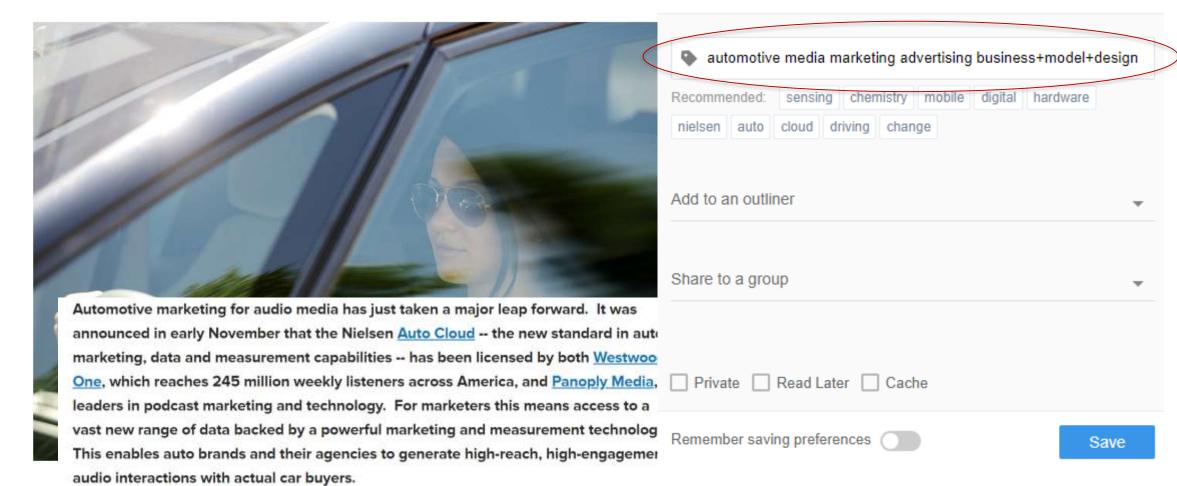


Nielsen Auto Cloud a Dream for E Change Among Marketers

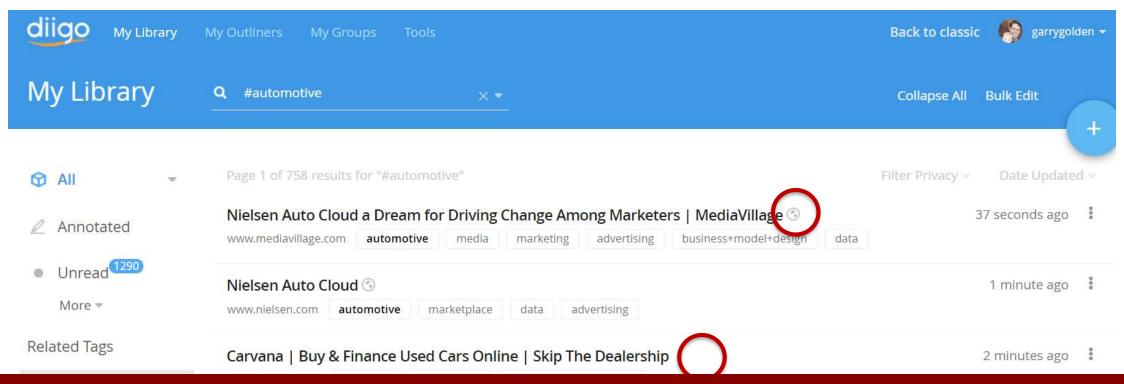
Edit bookmark

Nielsen Auto Cloud a Dream for Driving Change Among Marketers | MediaVillage

Add a description...



Collect & Share Signals as Social Bookmarks

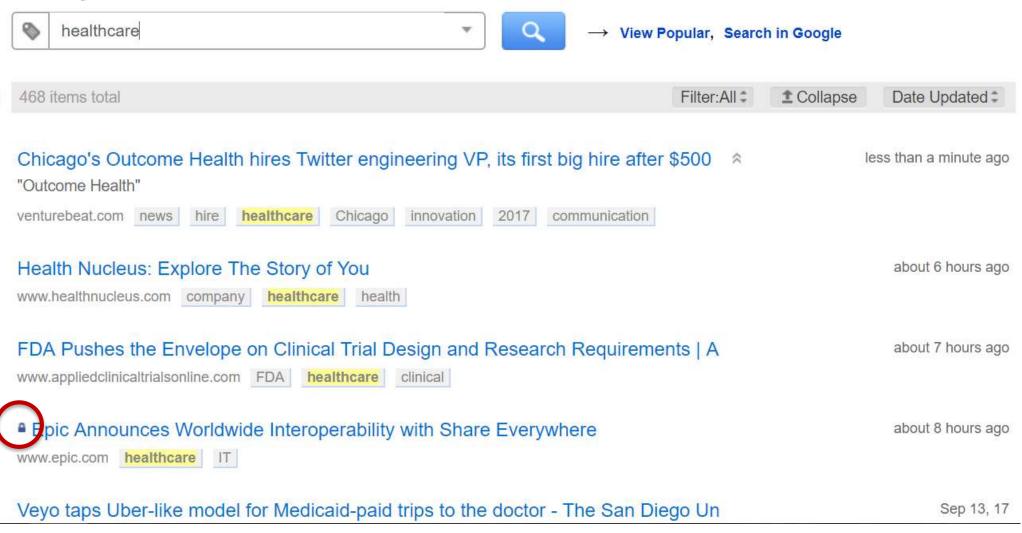


Task: Create Set of 'Tags' for Your Team & Domain



LIBRARY ARCHIVE OF SIGNALS

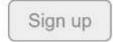
diigo



SETTING UP: PROFILE & BROWSER EXT

Set up a Free Profile at:





You may use your real name (e.g. Garry Golden) or fictional name to protect privacy. Ideally we are able to share profile names across the signals team.

Note your profile will appear as: https://www.diigo.com/user/garrygolden/

Install Plug-in / Extension



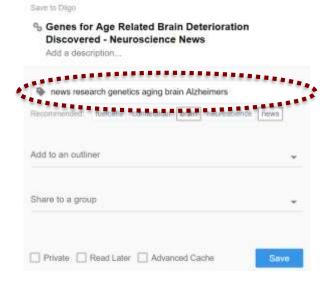
The Diigo website should recognize the web browser you are using during set up so it is easy to do. After the extension is installed you are ready to go.

When you wish to 'tag' or archive a webpage simply click on the small "D" icon on your browser.

Note: You can also create a 'hot key' such as Control+Z to automatically launch 'edit/enter' mode to enter keywords. Saves you a click!

Start Tagging Signals!





BEHAVIORS & DAILY PRACTICE

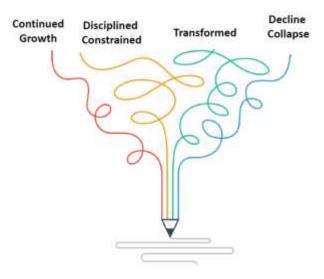


15 minuteMorning Coffee& Twitter Session

- ☐ Scan Quickly

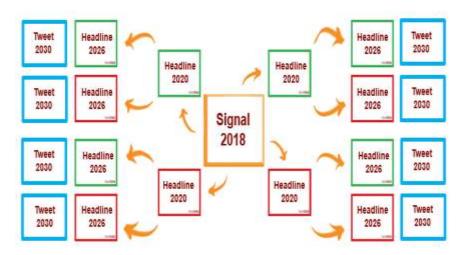
 Signals that Pass Sniff Test
- Personal & Professional themes to Keep it Fun & Relevant
- ☐ Scan to Challenge Assumptions
 Less on confirming signals and themes
 I already understand

Turning Signals into Stories

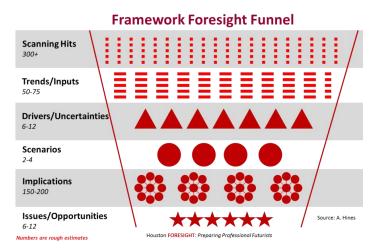


Four Futures





Futures Wheel

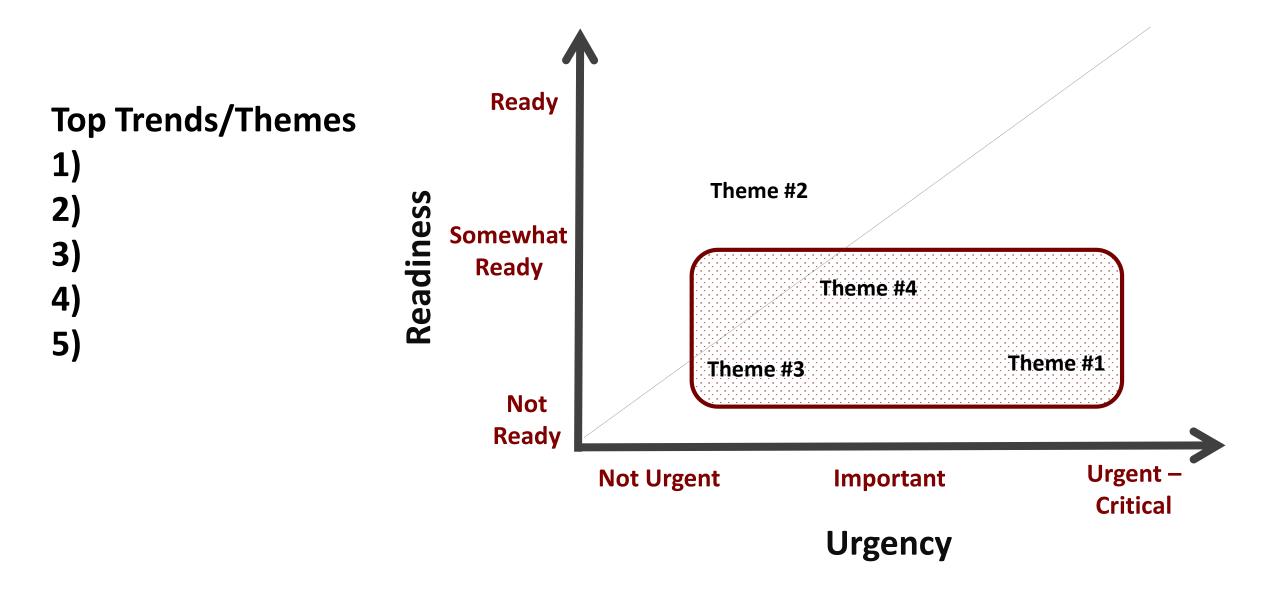


Framework Forecast

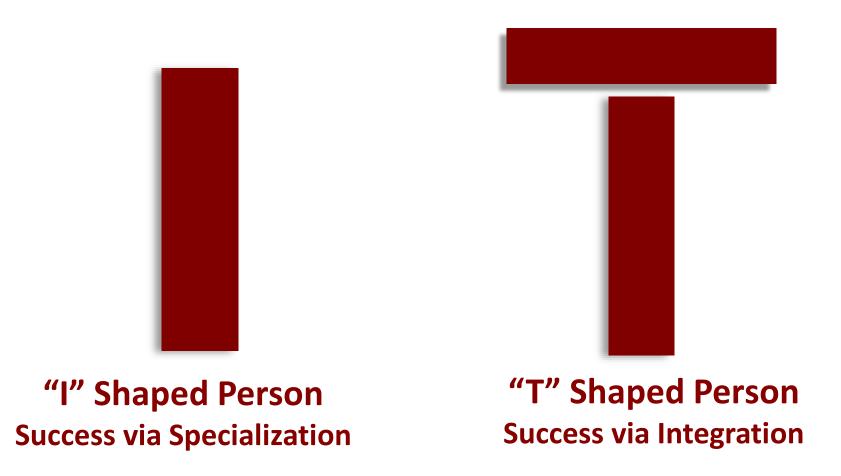
What is the biggest risk we should take over the next five years to align our organizations to this emerging world?



Take a Pulse Check on Emerging Trends vs Organizational Appetite



Launch Conversation on Who do we want to be ...?



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



Also Trained in?

Ethics
Behavior Science
Cyber Security
Aging
Systems Thinking
Experience Design
Service Design

Psychology
Data Science
Crypto / Blockchain
Restorative Practice

October 4th
Scanning for Signals

October 25th
Turning Signals
into Stories

November 22nd
Creating
Future Worlds

December 12th
Presentations

Resources

http://www.garrygolden.com/BACC2019 /

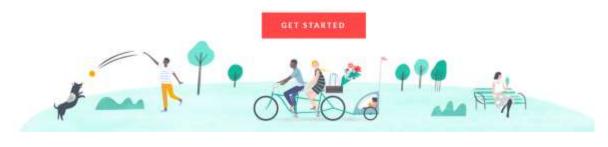
MILLENNIALS: COMMON ASSUMPTIONS

- ☐ Social Safety Net
- Nature of Work (Gigs vs Careers)
- ☐ The Experience (Fintech / Insurtech)



Life Insurance Just Got Easier.

Instant. Simple. Smart.







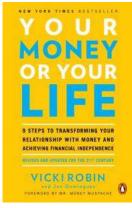
MILLENNIALS: UNCERTAINTIES

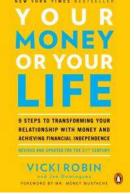
- ☐ Political Will to AddressWealth Gaps and Equity Issues
- □ Value Extraction of Personal Data
- ☐ Fintech vs Institutions
- ☐ Risk Appetite for Crypto Assets



DEMAND FOR FINANCIAL EDUCATION

A Growing Cult of Millennials Is Obsessed With Early Retirement. This 72-Year-Old Is Their Unlikely Inspiration







FIRE: FINANCIAL INDEPENDENCE, RETIRE EARLY

THE WALL STREET JOURNAL.

The New Retirement Plan: Save Almost Everything, Spend Virtually Nothing

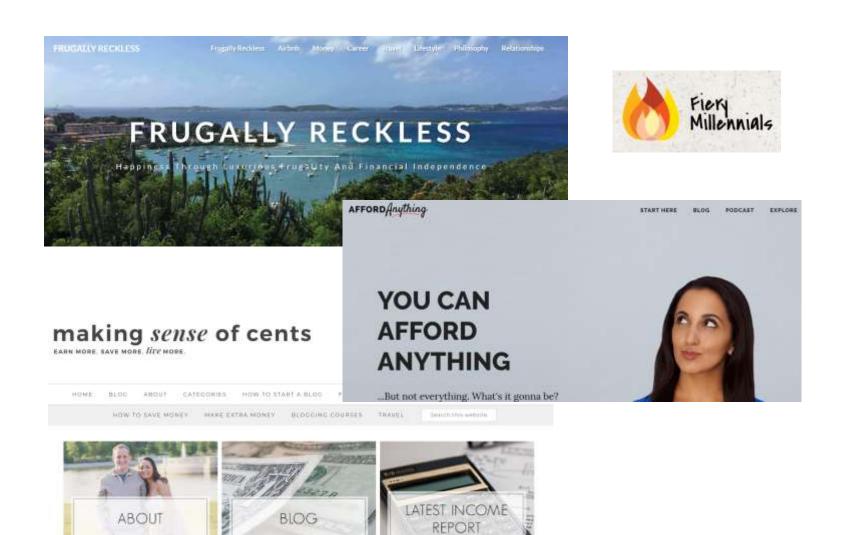
A group of younger workers, devotees of the FIRE movement, are seeking ways to duck mistakes made by prior generations

Sylvia Hall wants to retire at age 40. The 38-year-old Seattle lawyer is on a strict budget as she tries to hit her goal of amassing \$2 million in assets by 2020. That means saving about 70% of her after-tax income and setting firm spending limits in every part of her life.



By Anne Tergesen and Veronica Dagher Nov. 3, 2018 12:01 a.m. ET

FRAGMENTED FINANCIAL WELLNESS CONTENT



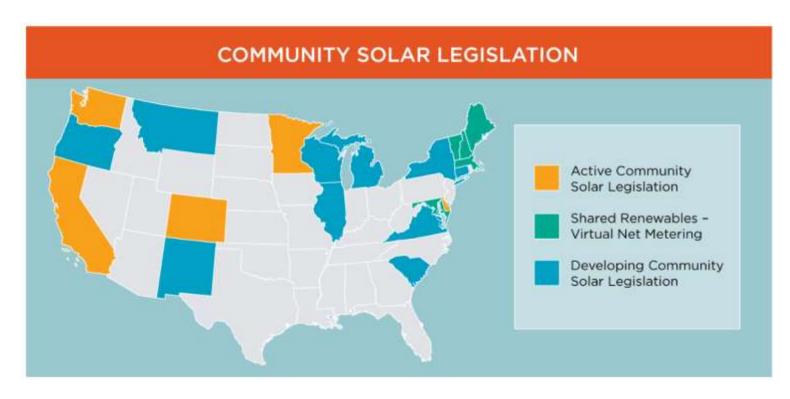


Source

HOMEOWNERS: LOANS FOR ENERGY ASSETS

Financing for:

- Residential Solar
- ☐ Community Solar
- ☐ Community Micro Grids (Batteries; Fuel Cells)
- Heat Pumps



Office of ENERGY EFFICIENCY & RENEWABLE ENERGY