Foresight Analysis

The Art & Science of
Looking at the Future

Bay Area Community Council   Facilitator

Foresight Webinar #1 Garry Golden

October 4, 2019

OCTOBER – DECEMBER

October 4th
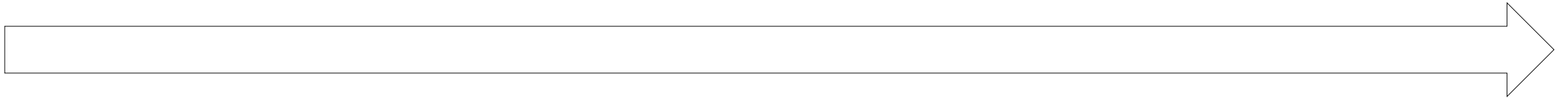Scanning for Signals
(Framework Forecasting)

October 25th
Turning Signals
into Stories

November 22nd
Creating
Future Worlds

December 12th
Presentations

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

NEXT FEW WEEKS

S.T.E.E.P. Themes = **Seeing Wide Lens**

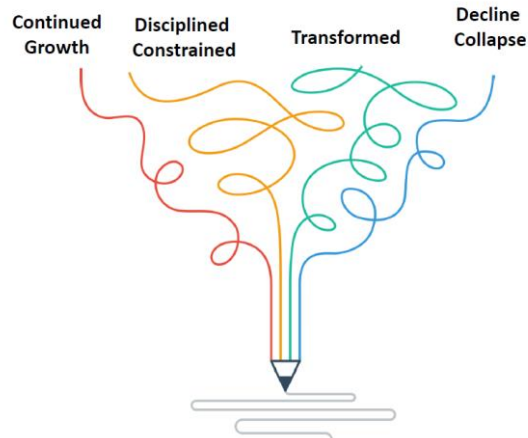**Google Alerts / Twitter / LinkedIn** = **Expanding Inputs**

diigo = **Organizing & Sharing**

By Oct 11th

Set up Scanning across STEEP Signals

Worksheet: Era-bases Analysis of Change

	Current Era:_____	Emerging Era:_____
Vision & Mission - Who you are; Who you serve & how. **Problems (JTBD) & Solutions** - Customer *jobs to be done.*		

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?		

By Oct 18th

Submit Era-based Change Document

Four Futures

Futures Wheel

Trend Card Poker

Framework Forecast

THREE POINT OF VIEWS ON CHANGE

Our ability to have …

- ❑ Hindsight
- ❑ Insight
- ❑ **Foresight… the ability to anticipate and lead change**

Transformational Innovation
across a New Era
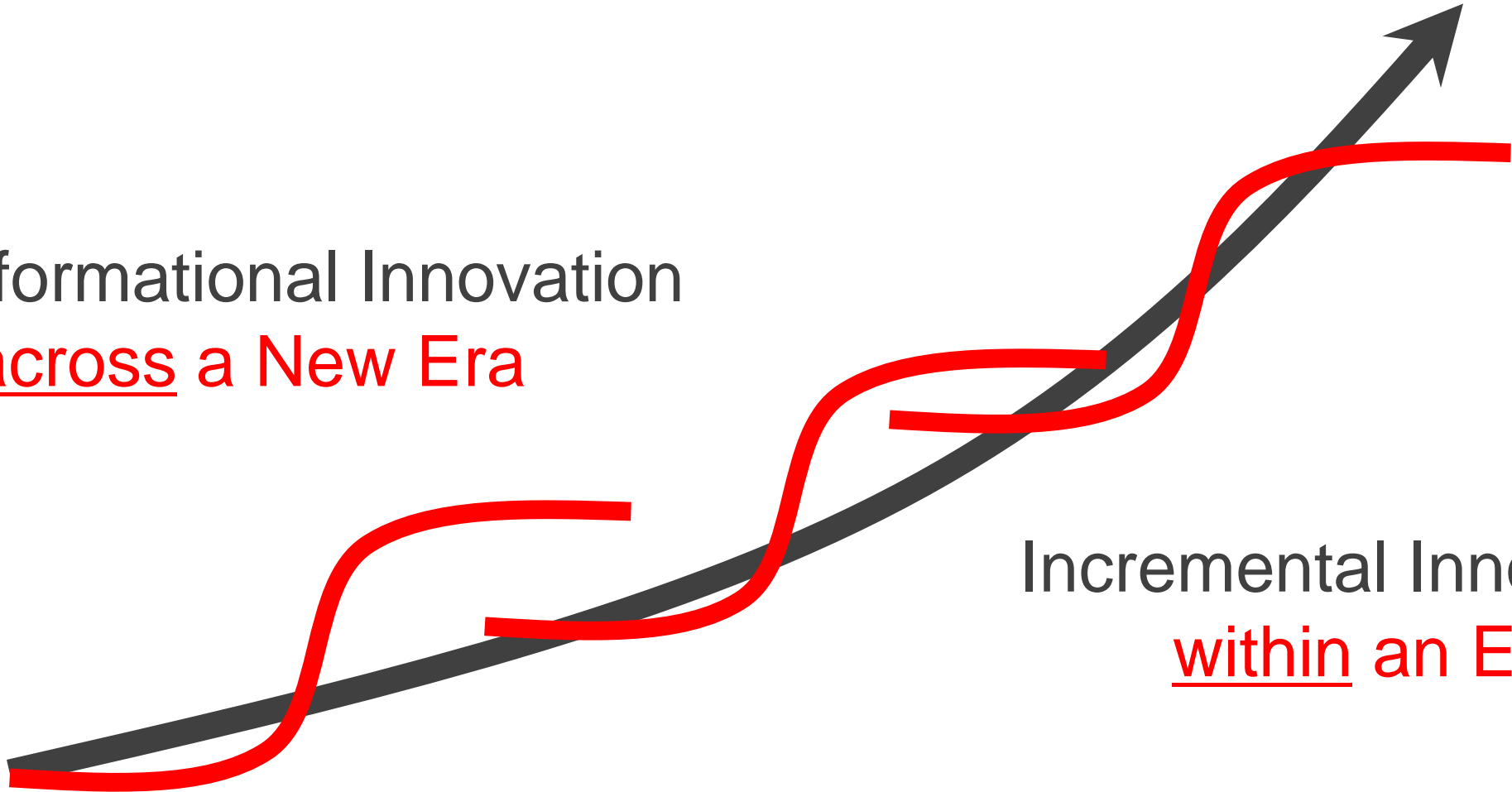
Incremental Innovation
within an Era

S-CURVE ERA TRANSITIONS

Plateau of Change
'Diminishing Returns'

Next Era Disruptions

Rapid Change
'Accelerating'

Slow Change
'Emerging'
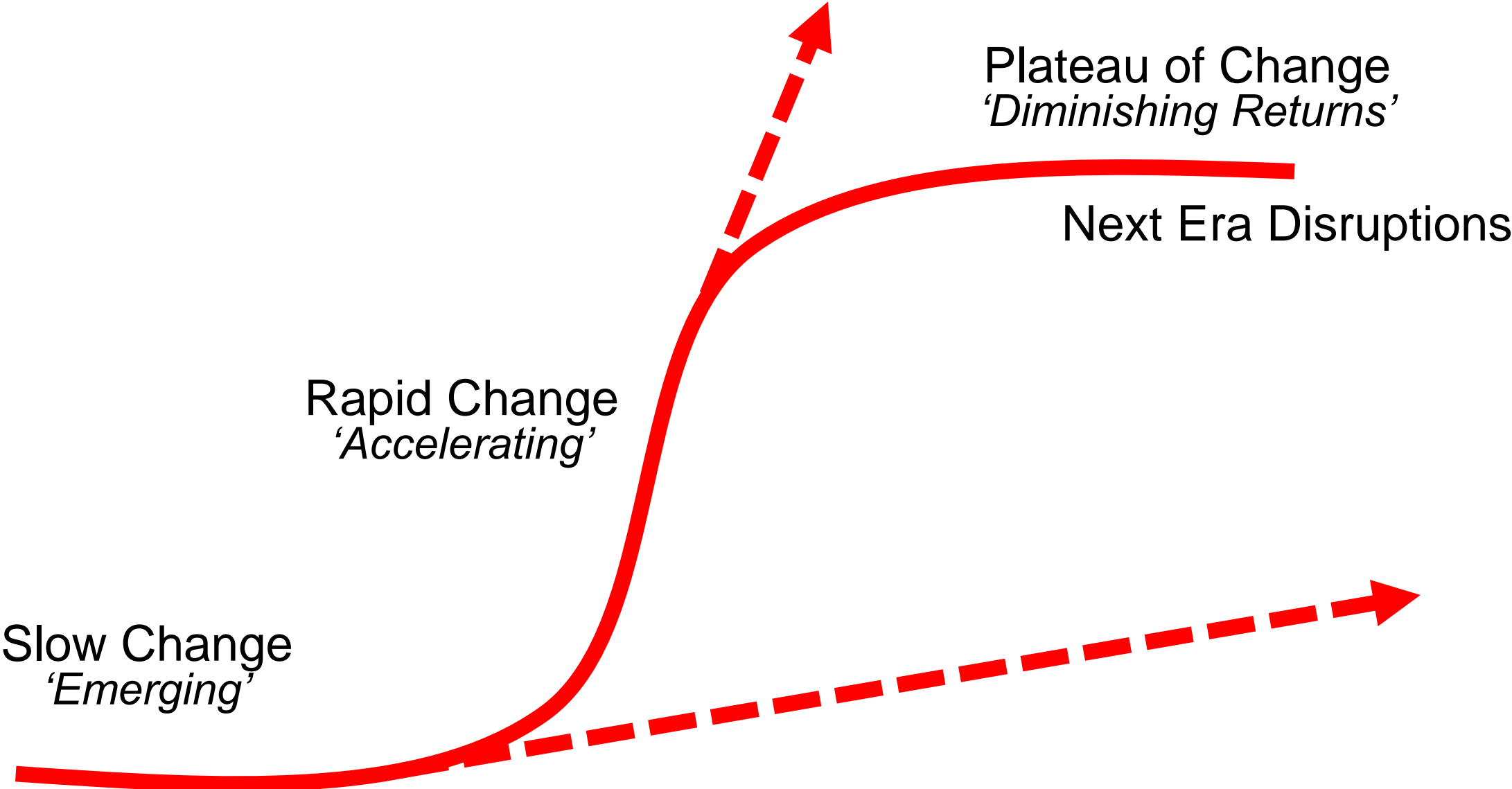
SOCIETY NAVIGATING ERA TRANSITIONS

Role of Foresight
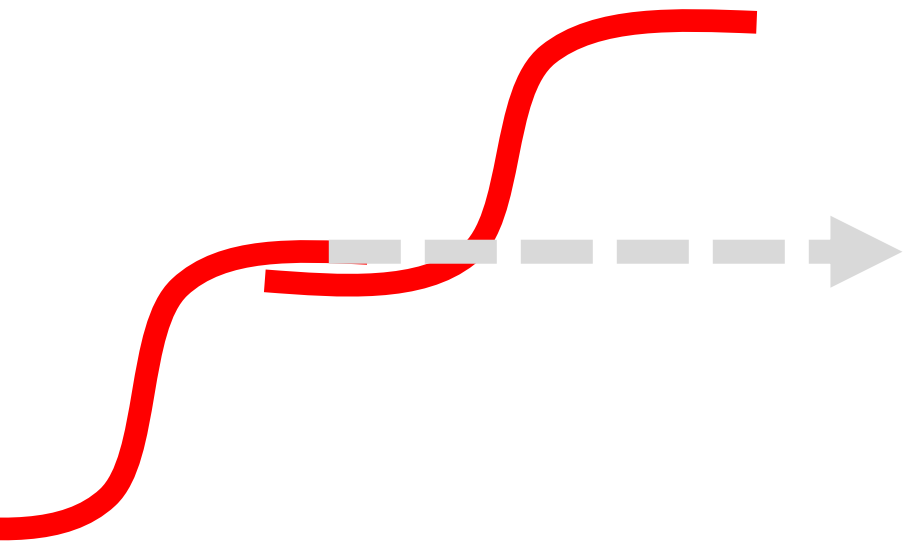
Healthcare / Wellness
Agriculture / Farming / Food
Retail
Education / Learning
Media / Communication
Manufacturing / Engineering
Government
Professional Services

FORESIGHT = SECOND & THIRD HORIZON

"Three Horizons" Model of Change (Bill Sharpe)

Dominance of model

3rd horizon

2nd horizon

1st horizon

Pockets of future found In present

2009   "2020"   "2030"   Time
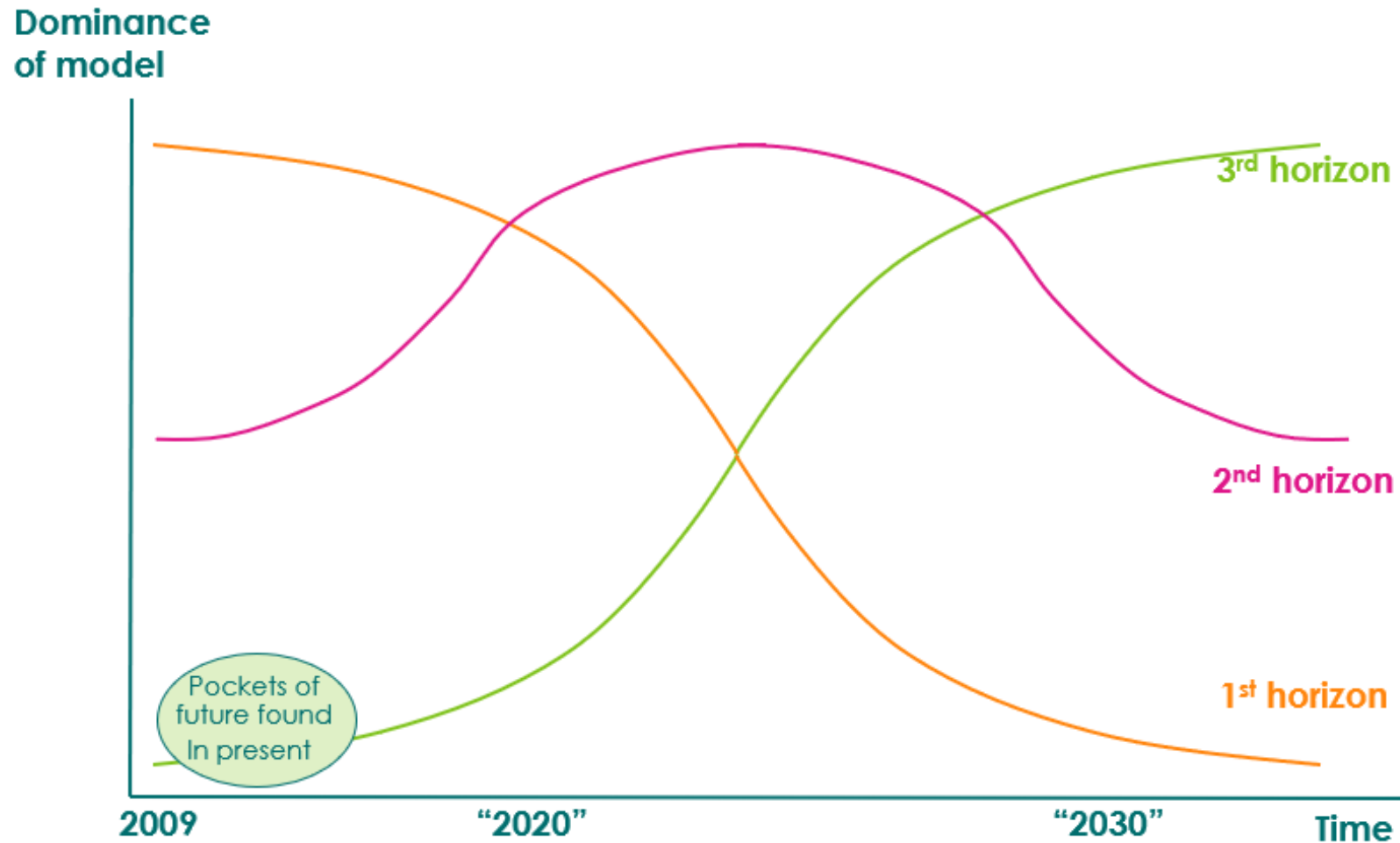
Graphic courtesy of Andrew Curry, The Futures Company

RESOURCE GUIDE: ERA-BASED ANALYSIS

**Submit to Garry
By October 18th**

Format is less relevant
 Complete as .PPT or .Doc

Worksheet: Era-bases Analysis of Change

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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

Social
Technological
Economic
Environmental
Political

WHAT
WHERE
WHEN

Wendy Schultz/Garry Golden

Change Behavior Shift Mindset

Vs

Scanning to *Check the Box*
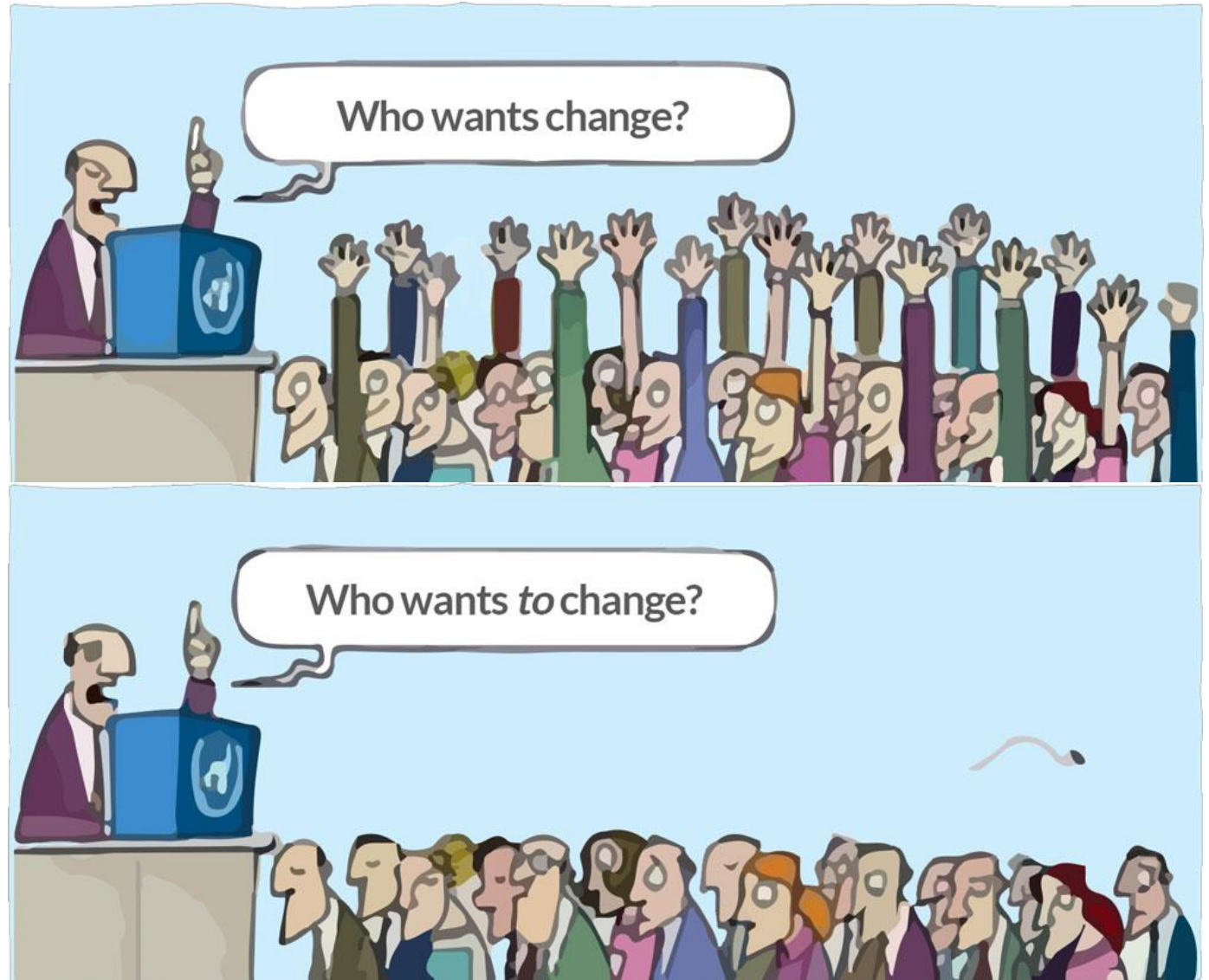
IMPORTANCE OF PRACTICE

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

Scanning Hits
300+

Trends/Inputs
50-75

Drivers/Uncertainties
6-12

Scenarios
2-4

Implications
150-200

Issues/Opportunities
6-12
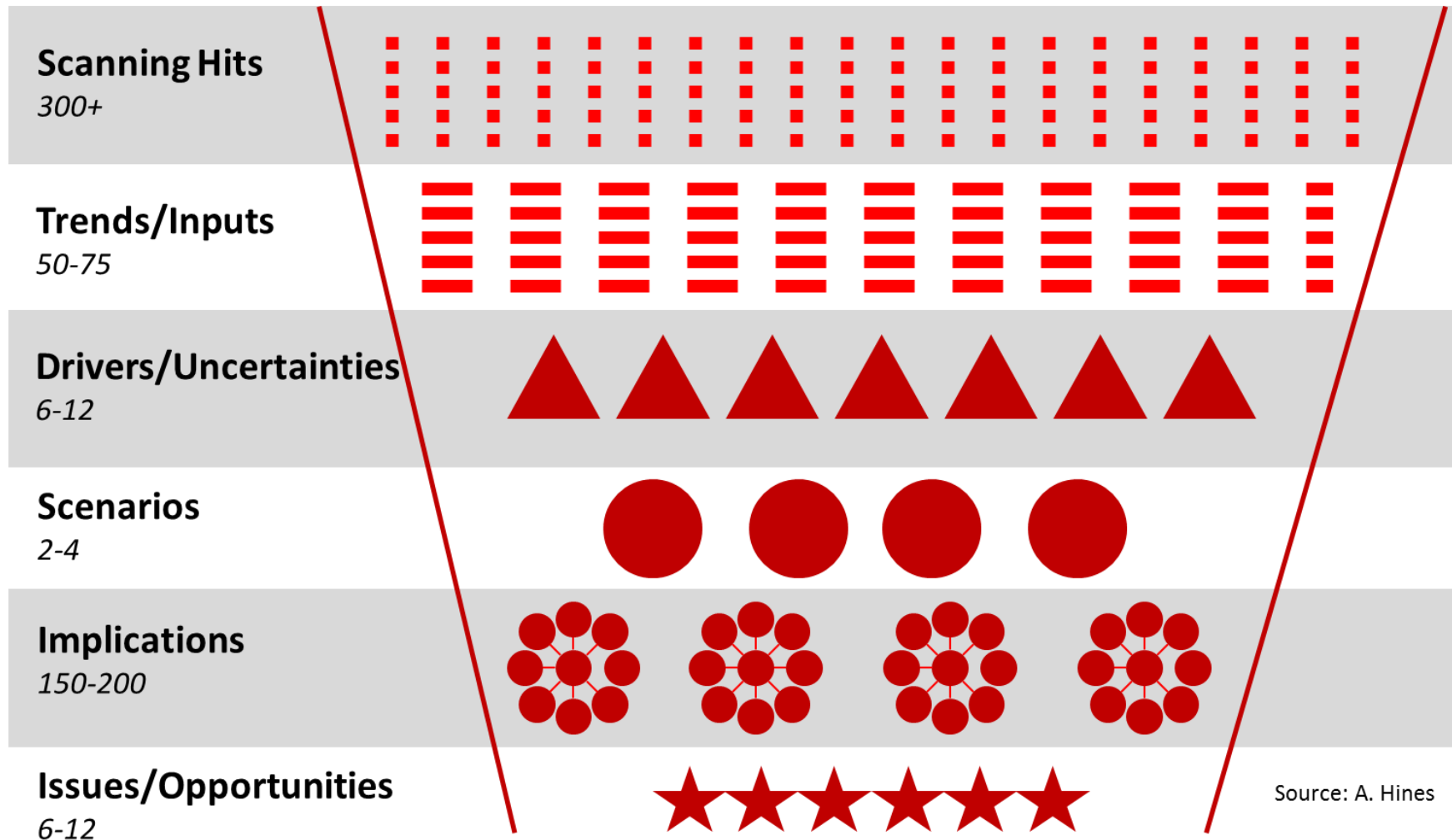
Numbers are rough estimates

Houston **FORESIGHT**: *Preparing Professional Futurists*

Source: A. Hines

ASSOCIATION OF PROFESSIONAL FUTURISTS

Hinesight
For foresight, use Hinesight

Signals to Share?

Org Conversations about the Future?

Why Build a Habit in Scanning for Signals?
Outcomes & Outputs

Step 1

Information + Inspiration

Step 2

**Building Knowledge
(Framework Forecast)**

SIGNAL: AI AGENTS AS ECONOMIC ACTORS

Fetch.AI @Fetch_AI · 59m

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

Lead research scientist @marcin_abram explains how our #AutonomousAgents detect the availability of #parking spaces 🚗🚗🚗

Stage
Find
Negotiate
Reserve

Preferences
Location: Baker Street
Price: <FET5
Distance <2km
Time

#1_FET3_0.5km_13:05
#2_FET1_1.3km_13:13
#3_

This is a small example of agents in action that can provide information about the availability of parking 0:43 / 1:37

But what is more interesting is to have agents that are going to build predictions. 0:57 / 1:37

💬 3   🔁 12   ♡ 28

SIGNAL: AI AGENTS AS ECONOMIC ACTORS

October 2, 2019

Fetch.ai partners with steelmakers to develop decentralized/AI metals exchange

**How might our products/services
be changed in a decentralized future?**

(Logistics? Properties? Reservations? Matls Sourcing?)

The decentralized platform will also unlock new funding models for supply chain participants by allowing them to collateralize their material and production capacity, which will enable the full realization of the value of the underlying commodity they are holding.

New research shows organizations need to better manage sizable contingent workforce to maximize value and avoid risk

New research from SAP Fieldglass and Oxford Economics shows significant reliance on contingent labor in today's modern workforce to get work done.

San Diego, CA - September 9, 2019

What % of regional workforce might be contingent in 2030-04?

compliance and more. Highlights from the report, *Contingent Workforce Insights 2019: Expertise in Full Force*, will be shared today at CWS Summit North America taking place at the Manchester Grand Hyatt San Diego in San Diego, California.

According to the research, the external workforce, including contingent workers and services providers, is key to helping organizations achieve a broad range of business goals from boosting

EDUCATION

Universities Should Be Preparing Students for the Gig Economy

by Diane Mulcahy

OCTOBER 03, 2019

How well do universities prepare students to work independently in the Gig Economy? Today's graduates are joining a workforce where the Gig Economy — including consultants, independent contractors, freelancers, side giggers, and on-demand workers — makes up an estimated 30-40% of the U.S. workforce. They're also facing an economy in which alternative work arrangements are growing faster than traditional full-time jobs, and are only projected to keep growing. The recent news that the majority of Google's workforce is made up of independent and temporary workers rather than full-time employees is just one example of the rapid transformation of the corporate workforce.

LinkedIn launches skills assessments, tests that let you beef up your credentials for job hunting

Ingrid Lunden

@ingridlunden / 9:00 am EDT • September 17, 2019

Comment

Virginia launches state's first digital professional licensing system

SEP 3, 2019 | STATESCOOP

More than 300,000 licensed professionals across Virginia will benefit from a new electronic licensing program that Gov. Ralph Northam kicked off on Tuesday, designed to be faster and more efficient than the paper-based program the commonwealth currently uses.

be updated in real time as their owners earn certifications and other qualifications. DPOR estimates that 313,182 workers split among 40 industries working in Virginia require some form of a license or certification to do their jobs.

Can we develop cross industry, state-wide solutions for labor workforce?

How might we look at new approaches to skills assessment and development?

Amazon is looking to install its Go technology in hundreds of retail stores by 2021

Daniel Keyes Oct 2, 2019, 9:28 AM

Amazon is discussing the opportunity with **airport retailer Cibo Express, Regal Cinemas, and concession stands at baseball stadiums.**

by the end of 2020.

How might our local retail and entertainment businesses be impacted by continued expansion of Amazon and Tech-branded solutions?
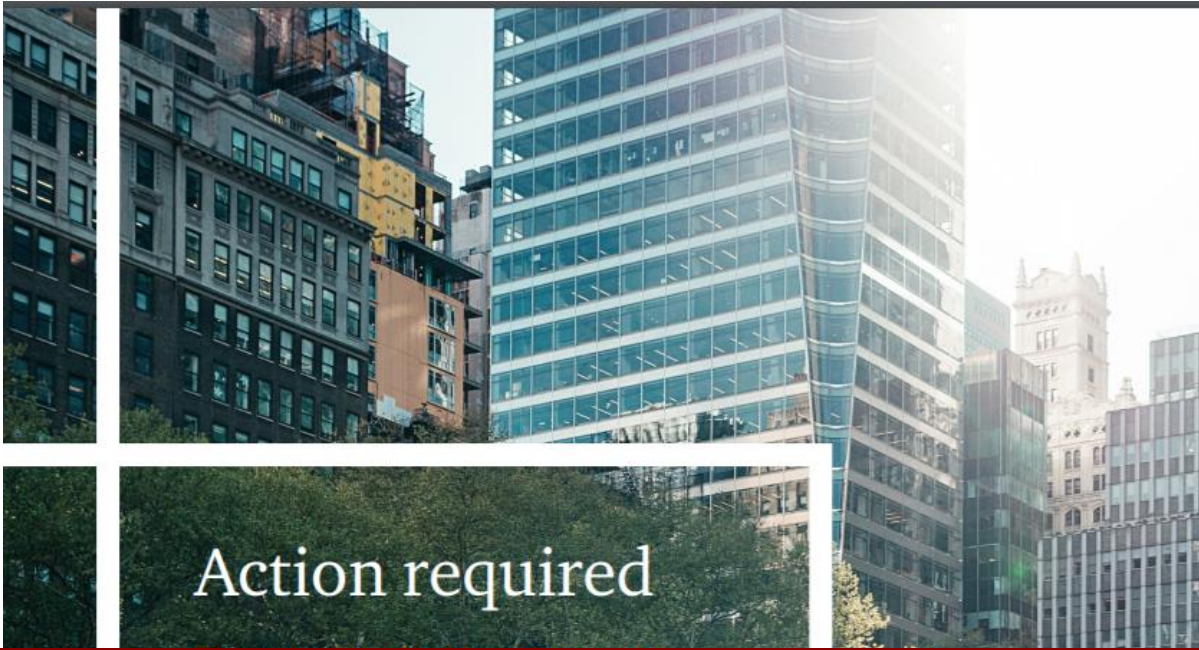
Exhibit 4: Social determinants of health components

Hunger

Access to care

Language literacy

Income and jobs

Isolation

Environment and safety

Source: Healthy People 2020, Social determinants of health overview

Action required

How might we elevate social determinants to transform health and wellness outcomes across our region?

https://www.pwc.com/gx/en/healthcare/pdf/pwc-social-determinants-of-health.pdf

First glimpse into new 'Walmart Health' format

by **Kim Souza** (ksouza@talkbusiness.net)   September 13, 2019 1:14 pm   9,334 views

**How might we prepare communities
for new care delivery models?**

Walmart's new "Walmart Health" format will provide basic healthcare services including dental. The names of partner providers were not disclosed by the retail giant.

September 30, 2019

Disinformation campaigns cheap and easy to launch: Recorded Future

How might we engage key regional stakeholders to prepare for disinformation campaigns within our communities?

https://www.recordedfuture.com/disinformation-service-campaigns/https://www.recordedfuture.com/disinformation-service-campaigns/

Uber test lets riders record audio via its app if they feel unsafe

Following a storm of bad press, the company is trying to improve passenger safety.

Georgina Torbet, @georginatorbet
09.30.19 in Transportation

10 Comments

Safety Toolkit

Safety Center
Learn more about safety at Uber and add Trusted Contacts.

respond within 24 hours.

Emergency assistance
Contact police and get location and trip information to share with authorities.

Record Audio @WONGMJANE Start
Record audio to send Uber if you're uncomfortable on your ride.

How might we anticipate new safety and security capabilities within our organizations and across our communities?

Nikola Valuation to Hit $4 Billion with CNH Investment, New Funding Deal

September 04, 2019 by John O'Dell

Nikola Motor Co. gained a crucial European partner and said its valuation would jump to $4 billion as it launched a new, $1 billion investment round.

The Phoenix-based company is pushing toward a 2022 launch of its hydrogen fuel-cell and battery-

Implications of electric-H2 transportation solutions integrated across our region?

$250 million.

VALUATION RISES

Nikola said the new round would boost its total valuation to $4 billion. CNH's investment of $100 million cash and $150 million of in-kind services will give it a 6.25 percent stake in the company.

Walgreens testing drone delivery service with Alphabet's Wing in Virginia town

by Heather Landi | Sep 20, 2019 9:39am

As the first pharmacy retailer to test drone delivery, Walgreens will use Wing's drones to deliver food and beverage products, over-the-counter medications and other health and

The companies will test the viability of health and wellness products and retail delivery through the air, offering home delivery minutes after customers place their orders via the Wing app.

Walgreens is the first pharmacy retailer to test drone delivery using Wing's drones to fulfill customer orders for food and beverage products and over-the-counter medications. (Wing)

How might we use new delivery systems to expand access in rural communities ?

TuSimple raises $120 million to expand its fleet of driverless delivery trucks

KYLE WIGGERS   @KYLE_L_WIGGERS   SEPTEMBER 17, 2019 3:00 AM

Riding high on a newly formed partnership with the United States Postal Service (USPS), self-driving truck startup TuSimple today announced that it's secured an
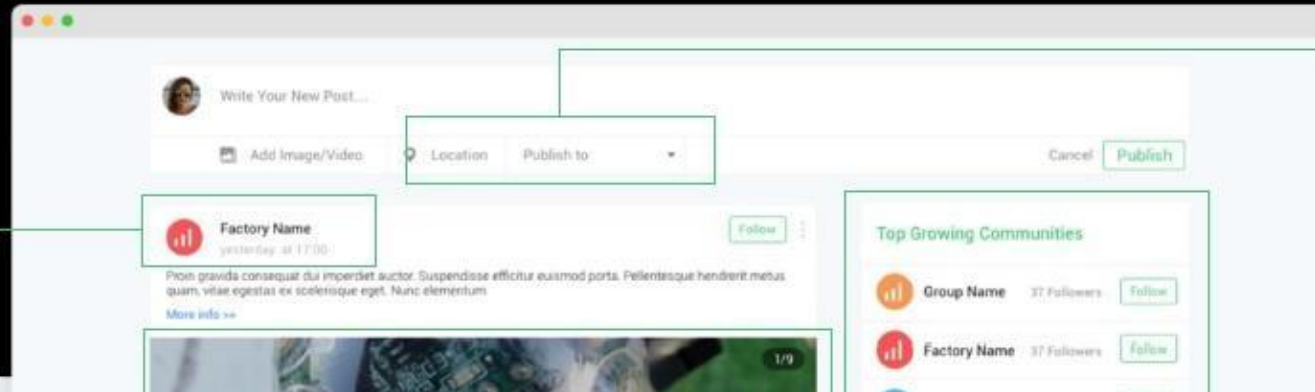
How might we position our region as a test bed for autonomous transportation networks?

committed $120 million in additional funding, bringing TuSimple's total raised to $298 million to date.

How might our industrial companies navigate timing dynamics of digital transformation?

TD Bank Deploys Internally Developed Explainability Tool

By *John McCormick*

Sept. 23, 2019 5:30 am ET | WSJ PRO

Toronto-Dominion Bank Group is using a software tool built in-house that explains how its artificial-intelligence systems make decisions.

NEWS FROM PRO AI

NEC to Deploy Body-Recognition System Next Year

Are we ready to explain advanced solutions?

INRIX: Shared Bikes and Scooters Could Replace Nearly 50 Percent of Downtown Vehicle Trips

New INRIX Research ranks the top U.S., U.K. and German cities where micromobility has the most potential

Could micro-mobility transform access to places and communities?
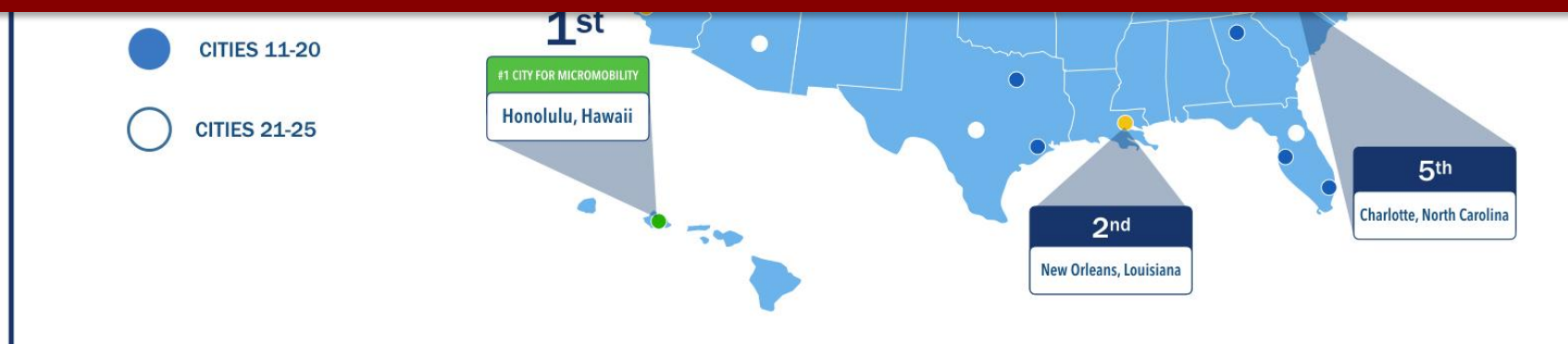
iCap Equity Unlocks Liquidity for over $100M in Real Estate Debt Funds using Blockchain-Enabled Harbor Platform

iCap Equity launches private secondary marketplace for four existing funds with 1,100+ investors

Can we leverage alternative funding/financing mechanisms for real estate projects ?

investors and 17 placement agents can compliantly buy and sell iCap securities with one another.

"iCap provides high-yield investment opportunities for investors, but those investments typically come with a 3 to 5 year lock-up period because they are based in real estate," said Chris Christensen, iCap Equity CEO. "Now, with Harbor, we are able to provide the same strong returns, but also an option for investors to more easily liquidate if desired. It provides the best of both worlds, and is a game-changer for not only real estate-based investments, but the entire alternative investment industry."

Population of Baltimore County expected to be 25% senior citizens by next year, officials say

By CODY BOTELER

BALTIMORE SUN MEDIA | SEP 16, 2019 | 5:00 AM

**Which communities are
leading the conversation on aging populations?**

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**
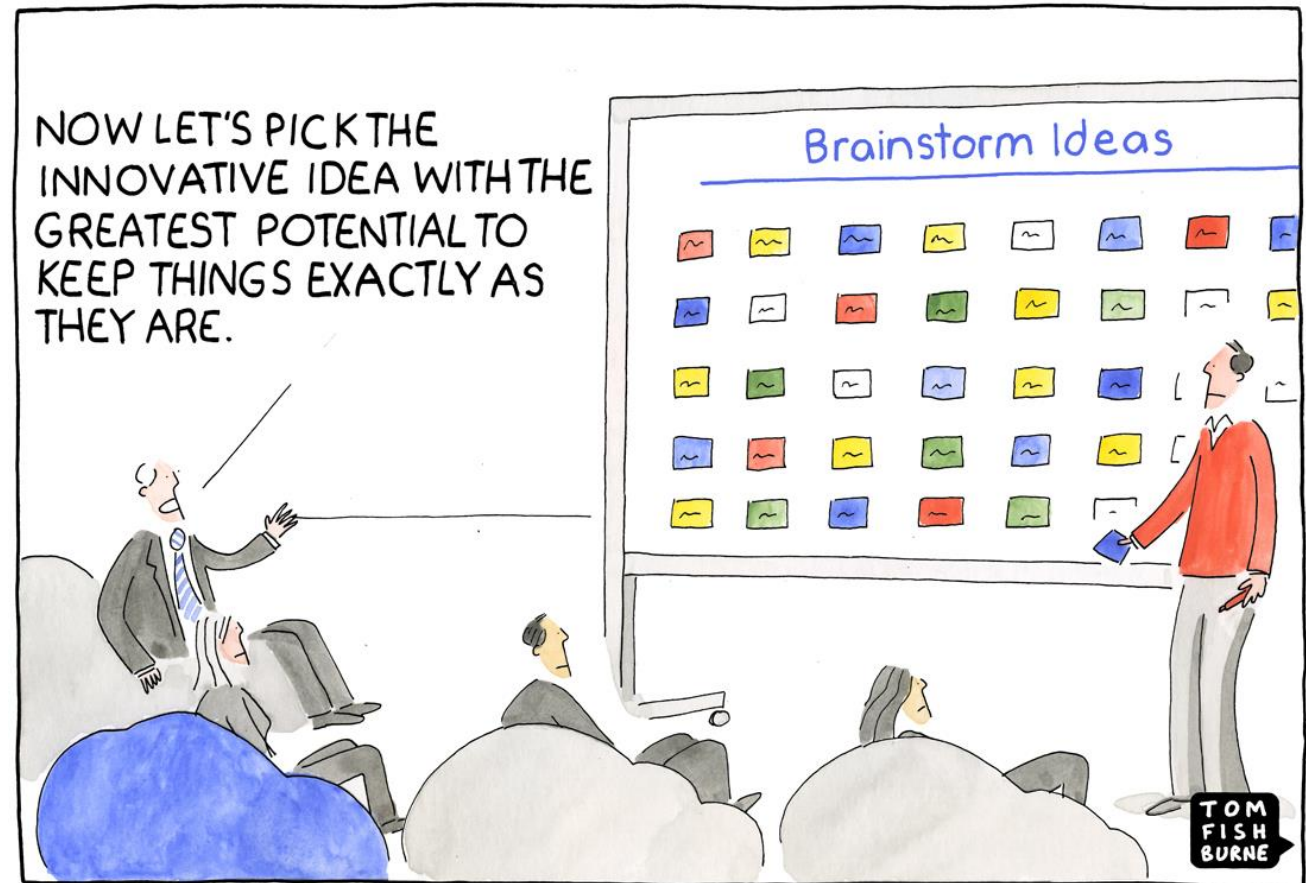
Why Build a Habit in Scanning for Signals?
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Step 1

Information + Inspiration

Step 2

Building Knowledge (Framework Forecast)

Research Tool:
Develop Framework Forecasts on Key Themes of Change

Framework foresight: Exploring futures the Houston way

CrossMark

Andy Hines *, Peter C. Bishop

Graduate Program in Futures Studies, University of Houston, 4800 Calhoun Road, 110 Cameron Building, Houston, TX 77204-6020, USA

ABSTRACT

Over the last several years, the University of Houston developed and codified a method for teaching students how to carry out foresight projects. This development represented a philosophical shift from a neutral presentation of methods without particular advocacy for one or the other. The challenge that this neutral approach presented is that each method is somewhat different and especially for those new to foresight, it became challenging to find common ground, distinguish them, or to know when to use one or the other. Our experience is that our initial wariness of promoting a standard method and thus a "one-right-way" of doing foresight proved unfounded. Not only does it not detract from the teaching of other methods, in fact it has made it easier. Framework Foresight was deliberately built to accommodate and incorporate other methods and approaches. It provides a basis of comparison of how various practitioners and methods do the work, enabling them to assess the strengths and weaknesses of each. Framework Foresight thus could be viewed as a meta-method in that it is a modular approach that accommodates a substitution of, or supplementation from, other methods or techniques at various steps. As students became practitioners and used the method in their practice, they have provided useful feedback and have generally reported back good results. Thus, Framework Foresight is offered to the foresight community as a method for carrying out foresight projects
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Future of _____

- ☐ Define the Domain
- ☐ Key Concepts (Glossary)
- ☐ Timeline / History
- ☐ Conferences
- ☐ Key Stakeholders
- ☐ Key People to Follow
- ☐ Stated Plans
- ☐ Key Figures & Forecasts
- ☐ Trends
- ☐ Uncertainties
- ☐ Ideas (Visionary)
- ☐ Emerging Issues (Policy Questions)

Key Concepts (Glossary)

Generate a list of key concepts needed to understand this domain and gain knowledge. The list may be fundamental concept or very technical 'in the weeds' for more advanced learners.
Try to create a List of 20-30 terms

101 Level – Fundamental (Beginner Level)

- Text... (Source)
- Text... (Source)
- Text... (Source)
- Text... (Source)

201 Level – Concepts Known within the Domain (Insider Level)

- Text... (Source)
- Text... (Source)
- Text... (Source)
- Text... (Source)

Timeline / History + Potential Events

How has this domain changed over time? List key milestones. Bullet point outline of the domain that has created the current conditions and landscape for stakeholders with particular attention to milestones for industry and recent discontinuities that define the past and current 'eras'.

- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- What happened, By whom, When/Year, (Source)
- Potential Events – Likely milestones
- Potential Events – Likely milestones
- Potential Events – Likely milestones
- Potential Events – Likely milestones

People to Follow

Who are important thought leaders and innovators in this domain? Whom should I follow on Twitter?

You might informally label or group them as thought leaders, writers, evangelists, skeptics, business leaders, policy makers, et al

- Person, Organization, Job Title, @Twitter, Website, Noteworthy Notes
- Person, Organization, Job Title, @Twitter, Website, Noteworthy Notes
- Person, Organization, Job Title, @Twitter, Website, Noteworthy Notes
- Person, Organization, Job Title, @Twitter, Website, Noteworthy Notes
- Person, Organization, Job Title, @Twitter, Website, Noteworthy Notes
- Person, Organization, Job Title, @Twitter, Website, Noteworthy Notes

Stated Plans & Projects

List and describe publicly stated plans by stakeholders. This might include investments, partnerships, new services, et al. The list might include turnkey, funded, to be funded or aspirational plans. We want to understand stated commitments for the future.

- Plan (General), Stakeholder, Plan, Place, Investment Level, Goals, et al (Source)
- Plan (General), Stakeholder, Plan, Place, Investment Level, Goals, et al (Source)
- Plan (General), Stakeholder, Plan, Place, Investment Level, Goals, et al (Source)

Emerging Issues

Emerging Issues are best seen as topics that require a decision in the future.
It is often framed as "Will we … or Will we not… do xyz" (e.g. Will we permit growing of genetically modified wheat?)

- Text... (Source – if applicable)
- Text... (Source – if applicable)
- Text... (Source – if applicable)
- Text... (Source – if applicable)

Uncertainties

Closely related to Emerging Issues. Highlight the uncertainties associated with this domain.
What are the biggest uncertainties? What is unknown today but might have clarity in the future?

- Text... (Source – if applicable)
- Text... (Source – if applicable)
- Text... (Source – if applicable)

Decision:
❏ **Desirable?**
❏ **Doable?**
❏ **Tools?**

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