

# Scanning for Signals of Change



Bay Area Community Council  
Futuring Group

Facilitator  
Garry Golden

Session: October 12, 2018

# Agenda

the  
big  
picture



your  
next  
step



**Scanning for Signals  
Tips & Techniques**

**Framework  
Forecasting**

**Next Steps**

# Workshop Recap Questions? Thoughts?



# Fundamental Stages + Activities of Foresight

## 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

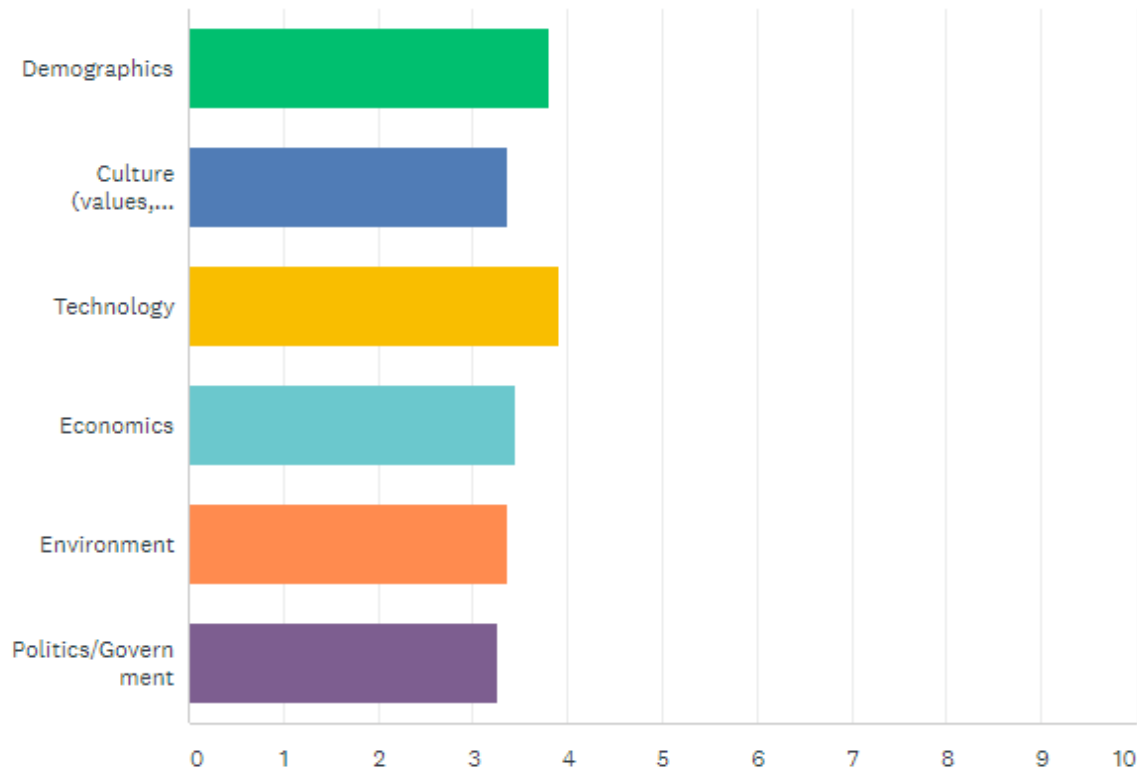
- Visioning & Backcasting
- Planning, Goal Setting & Roadmapping
- Transformation Management



Wendy Schultz/Garry Golden

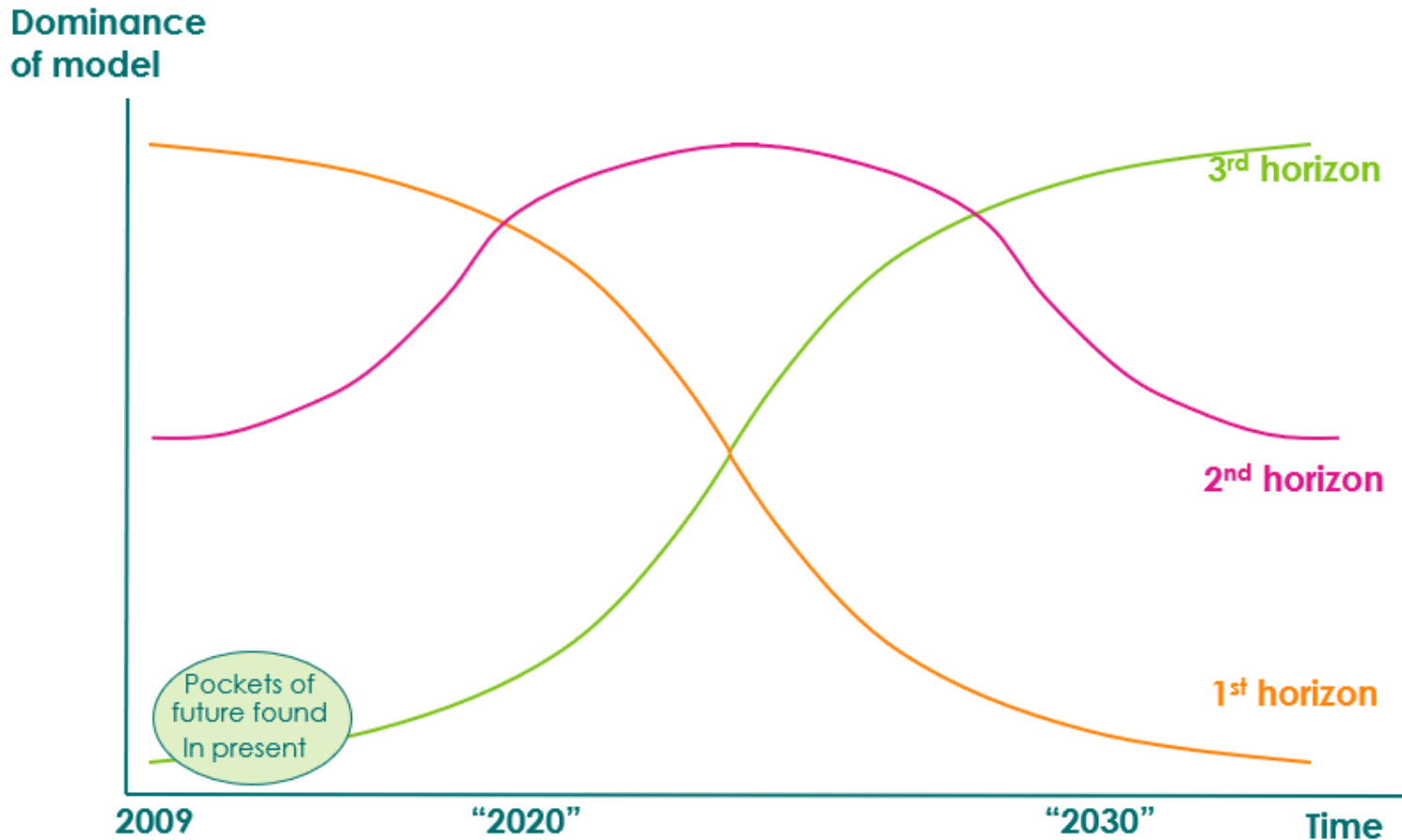
Listed below are several factors that might have an impact on the future. Thinking about your organization's area of operation, how much a factor do you think each of the following will have on shaping your organization's future over the next ten years

Answered: 11 Skipped: 0



# Foresight Scanning + Three Horizons

“Three Horizons” Model of Change (Bill Sharpe)



Graphic courtesy of Andrew Curry, The Futures Company

# The Big Picture: What Signals Scanning is NOT

**Change Behavior  
Shift Mindset**

**Vs**

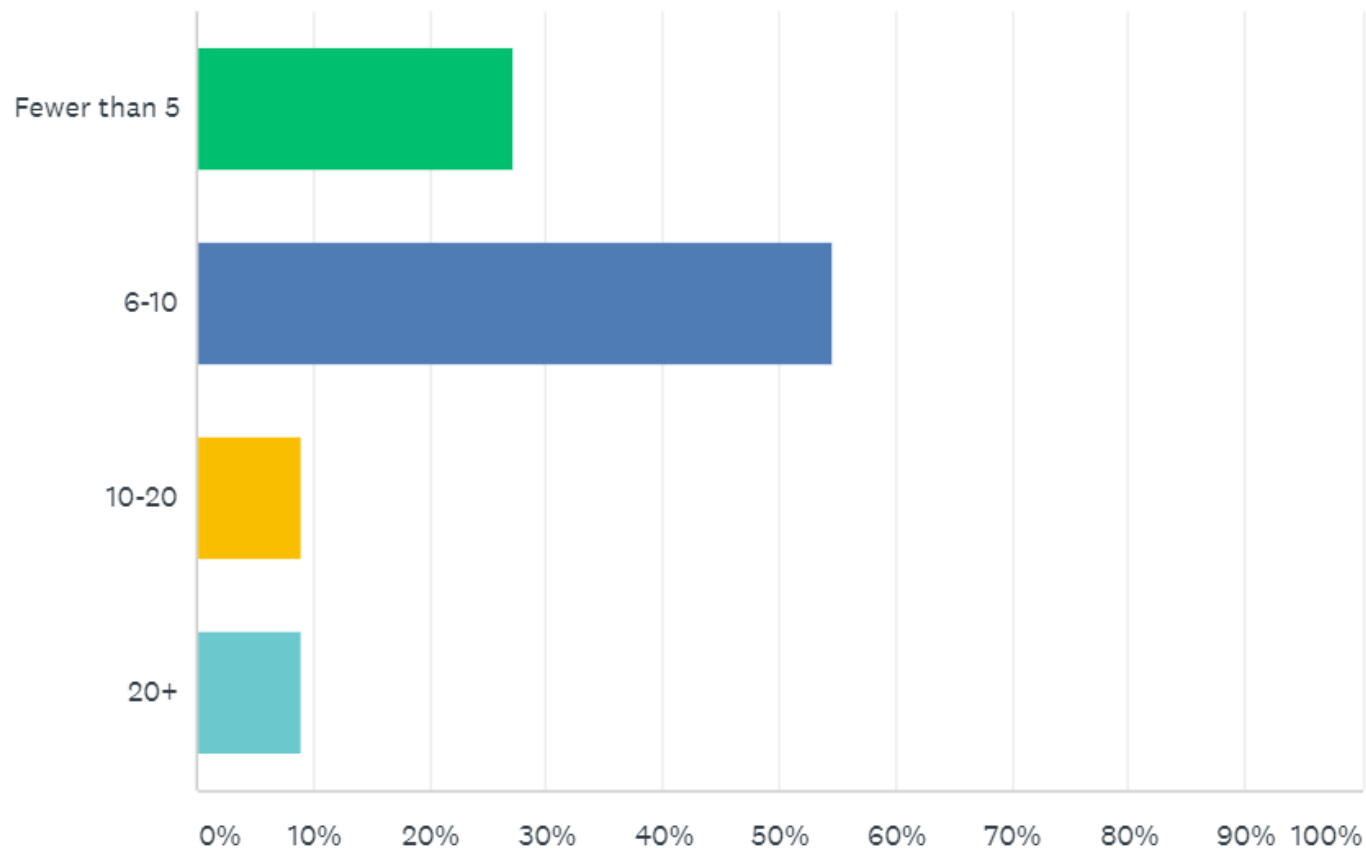
**Scanning to  
*Check the Box***



## Outcome: Seeing More Signals of Change

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

Answered: 11 Skipped: 0

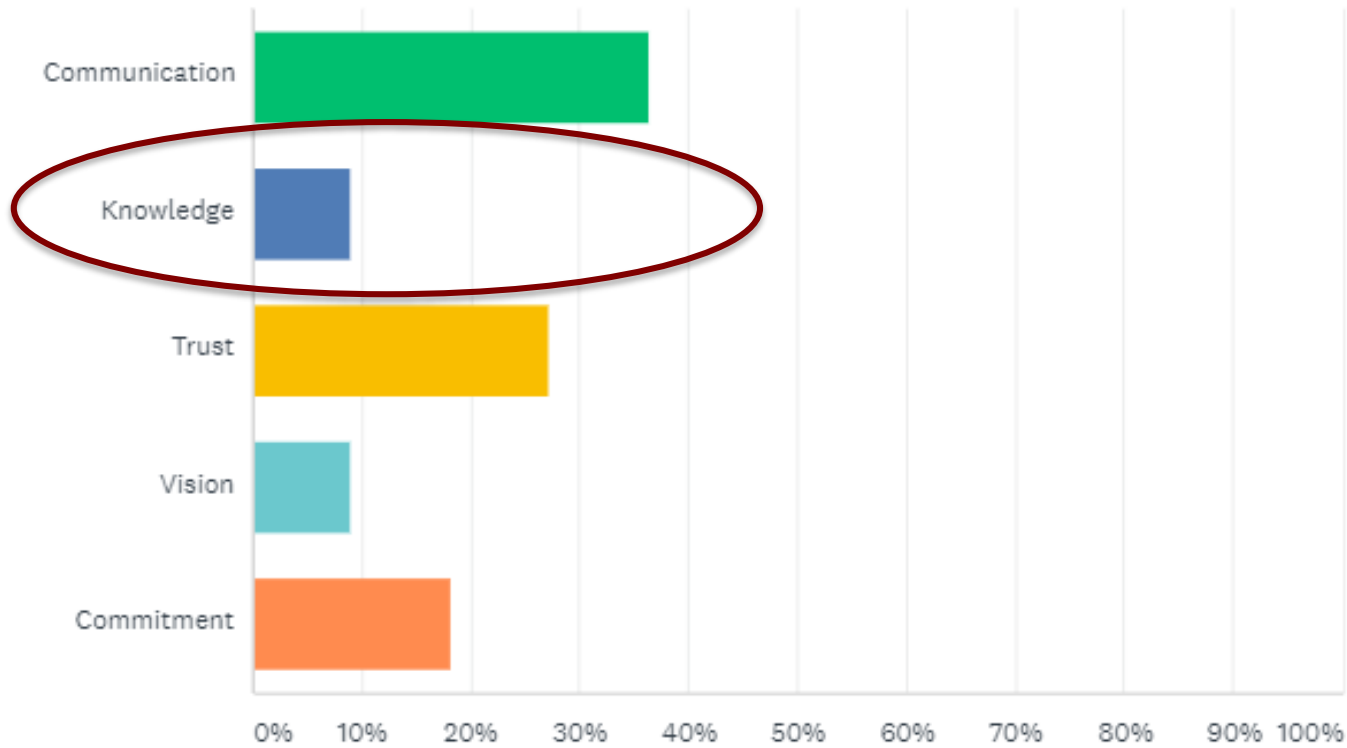




# Outcome: Building Knowledge in Key Domains of Change

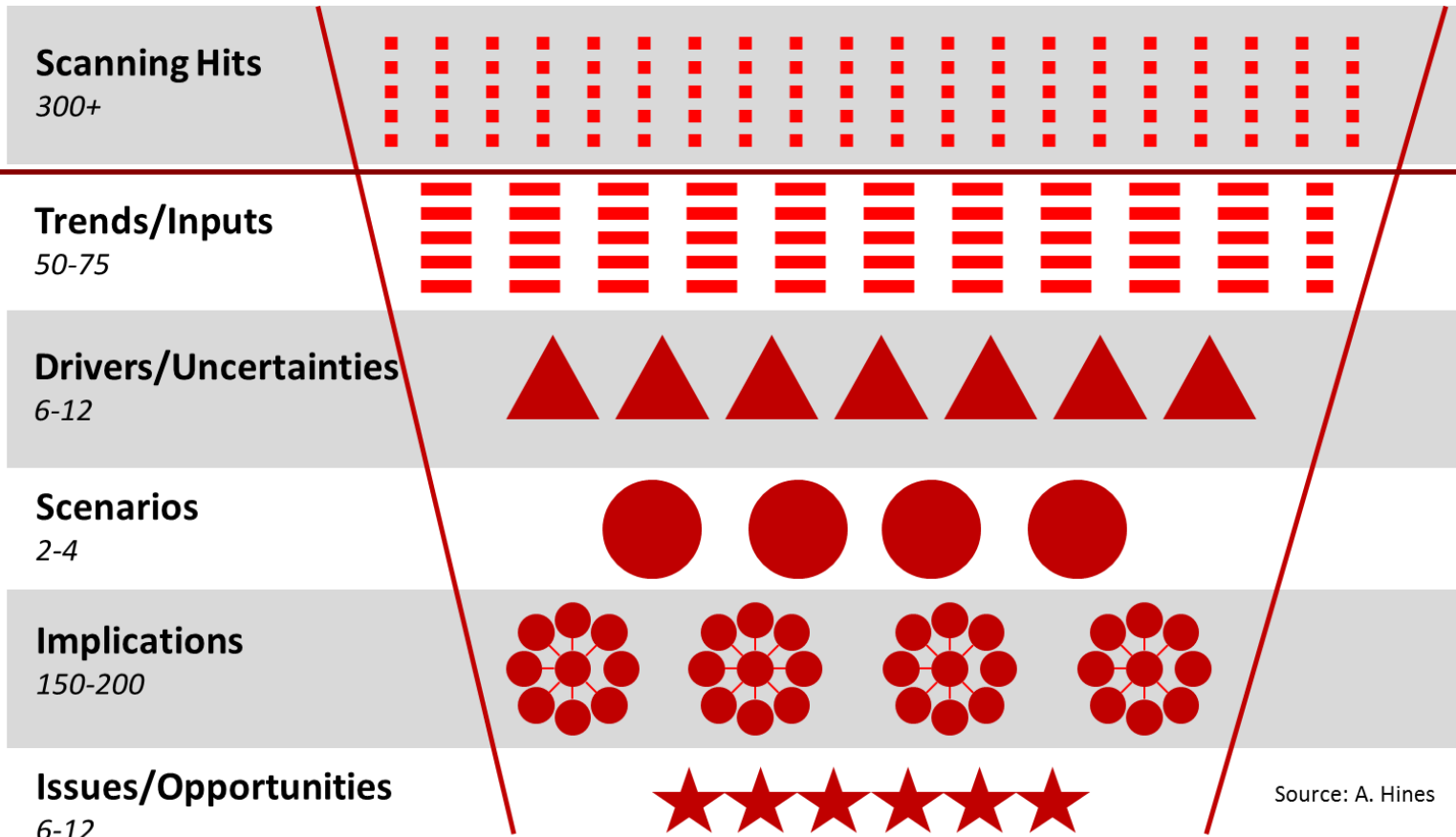
Which is the most frequently overlooked characteristic of successful change?

Answered: 11 Skipped: 0



# Output: Future of Work + XYZ Framework Forecasts

## Framework Foresight Funnel



Source: A. Hines

*Numbers are rough estimates*

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



ASSOCIATION OF  
PROFESSIONAL  
FUTURISTS

**Hinesight**  
For foresight, use Hinesight

# Why Build a Habit in Scanning for Signals?

Outcomes & Outputs



**Information + Inspiration**

A network diagram icon with a central red circle and six surrounding nodes in blue, green, yellow, purple, and orange, all connected by lines. The entire icon is enclosed in a rounded dark red rectangular border.

**Building Knowledge  
(Framework Forecast)**

## Signals

A signal can be a news event, a new service, product, technology, policy, social movement, or conversation stream on Twitter!

Signals grab our attention but can also be easily dismissed as noise.

A *weak* signal is a small or early step innovation, disruption or constraint that could grow into something larger across society, business or government.

# Judging Signals

## Scanning: Criteria and Considerations

In general, criteria for signals should be judged on the following elements:

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

Scanning can be applied across a wide spectrum of strategic activities. When applied to scenario thinking or customer research a *scan hit* 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

## Signal

### **Source Credibility**

Industry News

### **Unique**

Radical for an Incumbent

### **High Uncertainty**

*Adoption and Execution*

### **Medium Impact**

*Changes Social Norms*

*& Business Models;*

*Limited Uptake?*

### **Momentum**

*Still Early Days*

### **Creates New Scenario**

*(Data; Behavior Change;*

*Incentives; Hardware;*

*Outcomes Model)*



## 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.

## Signal

### ❑ Source Credibility

Tech Industry News

### ❑ Unique

Expected from Upstarts

### ❑ **High Uncertainty**

*Adoption and Execution*

### ❑ **Medium Impact**

*Industry collaboration*

### ❑ **Momentum**

*Increasing; Still early*

### ❑ **Creates New Scenario**

*(Value of Datasets/Algos)*

Consortium.AI wants to cure rare diseases using artificial intelligence

KYLE WIGGERS @KYLE\_L\_WIGGERS JULY 19, 2018 6:00 AM

For DMD sufferers and other patients with rare degenerative diseases, there's now hope on the horizon. Insilico Medicine and A2A Pharmaceuticals today launched Consortium.AI, a new venture founded with the goal of applying advances in artificial intelligence (AI) to cutting-edge drug discovery.



## Signal

Source Credibility

Newness

*Uncertainty*

*Impact*

*Momentum*

*Scenario - ??*



## Amazon scraps secret AI recruiting tool that showed bias against women

Jeffrey Dastin

8 MIN READ



The team had been building computer programs since 2014 to review job applicants' resumes with the aim of mechanizing the search for top talent, five people familiar with the effort told Reuters.

Automation has been key to Amazon's e-commerce dominance, be it inside warehouses or driving pricing decisions. The company's experimental hiring tool used artificial intelligence to give job candidates scores ranging from one to five stars - much like shoppers rate products on Amazon, some of the people said.

"Everyone wanted this holy grail," one of the people said. "They literally wanted it to be an engine where I'm going to give you 100 resumes, it will spit out the top five, and we'll hire those."



## Signal

Source Credibility

Newness

*Uncertainty*

*Impact*

*Momentum*

*Scenario - ??*



Carolina Panthers hire in-house mental health clinician

433 views

👍 16    🗨️ 1    ➦ SHARE    📌 SAVE    ⋮



**Charlotte Observer**

Published on Sep 30, 2018

SUBSCRIBE 4K

The Carolina Panthers hired Tish Guerin as an in-house mental health clinician, a newly created position, as a way of investing in the mental health of the NFL team's players.

SHOW MORE

# Judging Signals – Criteria, Consideration and Questions

## ❑ **Credibility of Source**

(e.g. Blogger vs Industry Analyst vs Company Press Release)

See Emerging Issues Analysis (EIA) and Correlate to Your Source

## ❑ **Newness/Uniqueness**

Is the signal valuable because it is 'new' or 'unique' to whom?

(e.g. myself, colleagues, industry leaders, government leaders)

Why is it unique? (e.g. Lack of exposure to the idea; Truly game-changing idea)

## ❑ **Degree of Uncertainty**

Is the signal valuable because it increases uncertainty? (e.g. We have gift of time to act; Place many bets)

Is it valuable because it reduces uncertainty?

(e.g. moves us closer to particular scenario or 'Resolution' stage of emerging issues analysis)

## ❑ **Degree of Impact**

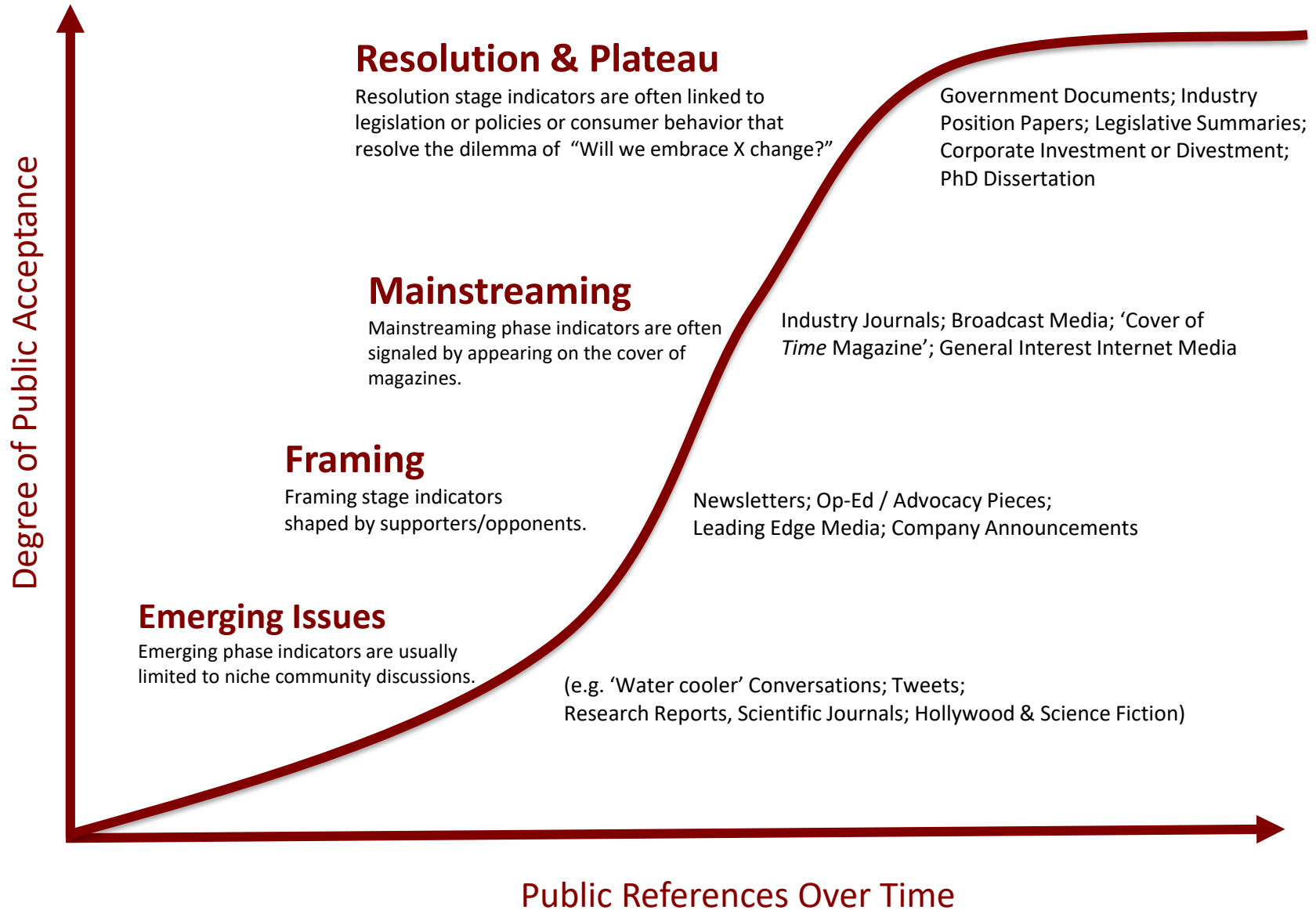
Is the signal valuable a 'Stepping Stone' (supports particular direction of change) or a 'Milestone' (signals 'new era' for industry)? (e.g. Company explores relationship versus Company announces new drug development project)

## ❑ **Momentum (e.g. slowing down, speeding up)**

Is the signal 'snowballing' and gaining momentum and forcing us to act or make decisions?

Is the signal a sign of 'hitting a speed bump or wall' suggesting we do not need to act or move in that direction?

# Graham Molitor's S-Curve of Emerging Issues Analysis (EIA)



# What are 'emerging issues' around the Future of Work?



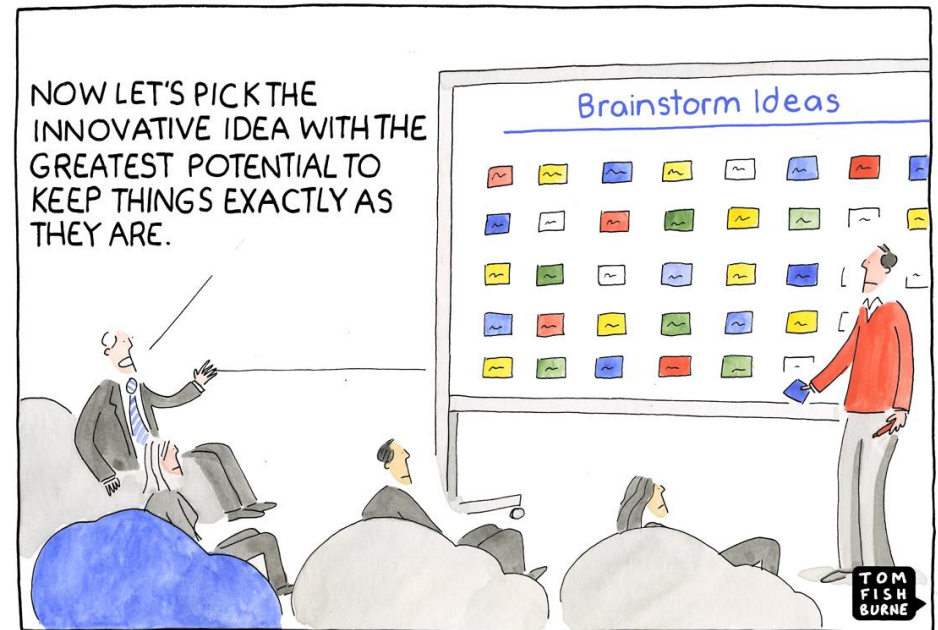
# Share a Signal?



# 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

# Committing to One 'Misunderstood' Idea



"One thing that I tell people is ... if you're going to do anything new or innovative, you have to be willing to be misunderstood."

"If you cannot afford to be misunderstood, then for goodness' sake, don't do anything new or innovative."



**Scanning for Signals  
Tips & Techniques**

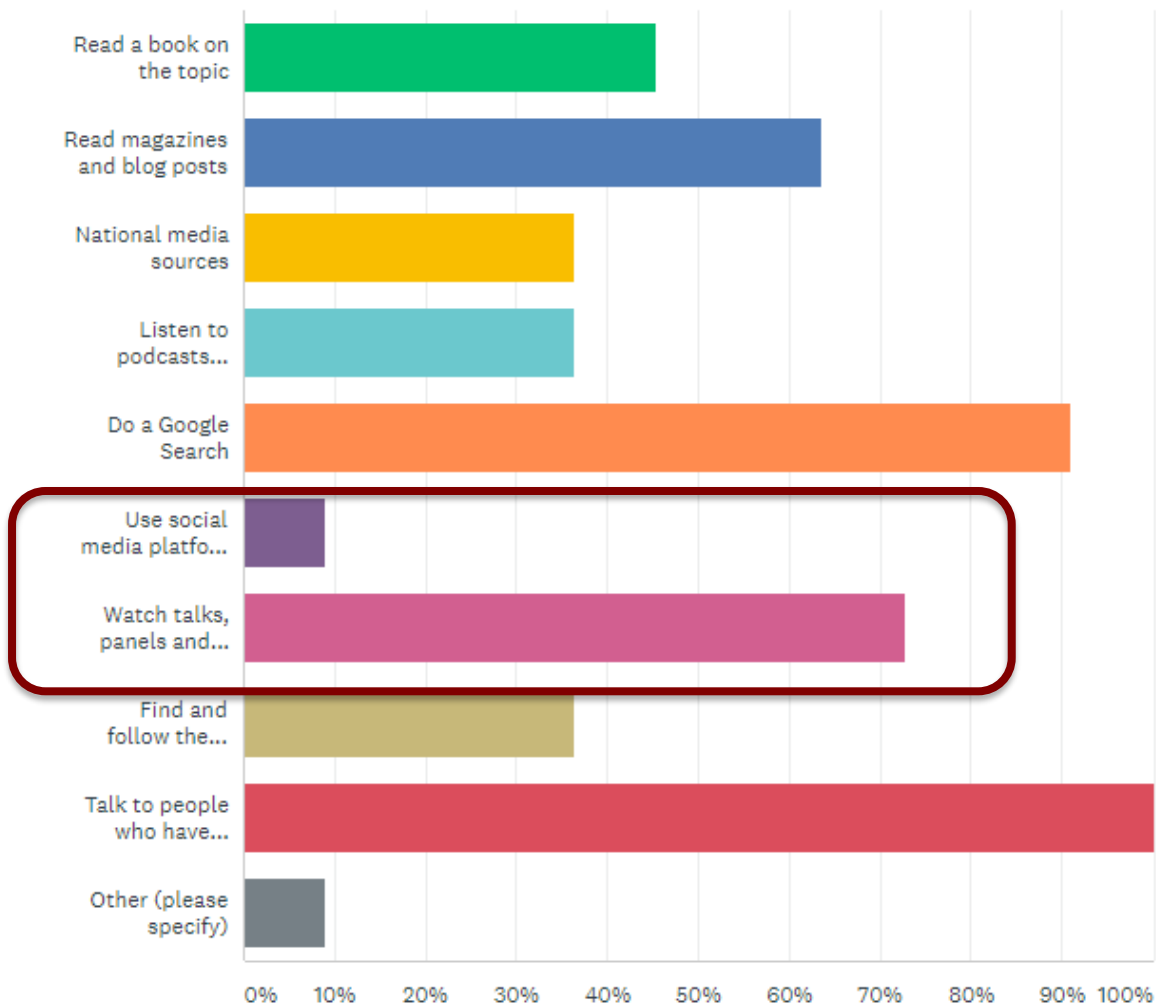
Framework  
Forecasting

Next Steps

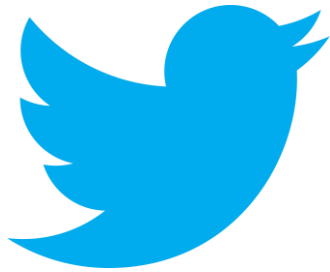


# When I want to learn about a new topic – my preference is to (Check all that apply)

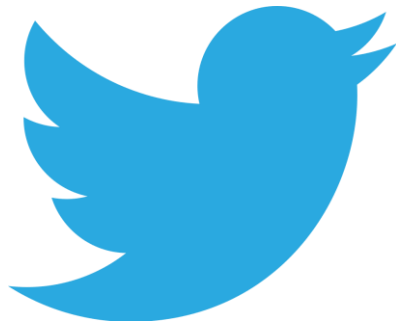
Answered: 11 Skipped: 0



# Techniques: Signals Sourcing Strategy



# Twitter: Hash Tag Taxonomies + Sources



**Aligning Taxonomy  
with Hash Tags**

## **Task Goal for Your Domain:**

- Identify 10-20 *hash tags* for consideration

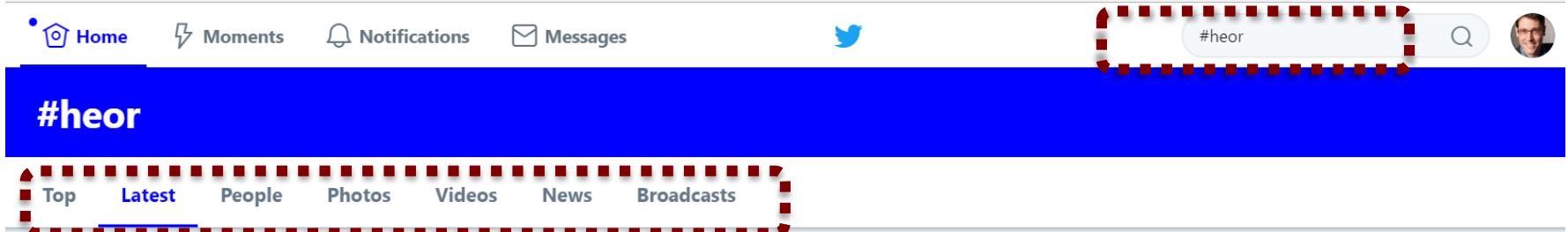
## **Starter Hash Tag List:**

- #futureofwork
- #AI
- #aging
- #agingworkforce
- #algbias
- #automation

**Dynamics Hash Tags -** **Upside:** Orbit Object for People, Ideas and Communities;  
Best used around 'events' (Conferences; Chats)  
**Downside:** Noise; Spam; Vendor dominated

# Scanning Technique

Looking beyond your own 'Following' Feed and search via #hashtags



**Valid Insight** @ValidInsight · 4h  
Ireland has become the first country in Europe to switch a complete population suffering from Haemophilia A & B from conventional short acting clotting therapies. This highlights the importance of a good #marketaccess strategy for #pharma: [ow.ly/A0YX30irJYL](https://ow.ly/A0YX30irJYL) #HEOR



1 retweet 1 like

**ISPORJournals** @ISPORJournals · 21h  
Read a brief round up of #HEOR news in the latest issue of #VOS. [ow.ly/wzBT30ix84U](https://ow.ly/wzBT30ix84U)

**HEOR NEWS**

**5 Analyzing behavioral economics and psychology are key to engaging patients to make meaningful changes** (HealthcareIT)  
So many well-meaning patient engagement efforts are based on a fallacy. The logical assumption is that by connecting patients with technology—equipping them with access to their personal health data or the educational information relevant to their condition—they will take a more active role in their personal health. But all the portals, apps, and Bluetooth-connected scales in the world will only make so much difference—and only on a certain portion of the patient population. “The idea that we should educate people and help them make better decisions has only minimal effectiveness,” says David Asch, MD, executive director of Penn Medicine’s Center for Health Care Innovation.  
<http://www.healthcareitnews.com/news/analyzing-behavioral-economics-and-psychology-are-key-engaging-patients-make-meaningful-changes>

**6 Biogen ‘optimistic’ for NHS access to Spinraza** (PharmaTimes)  
Biogen says it is “optimistic” that patients in England and Wales with a rare spinal disorder will get rapid and broad access to Spinraza (insuman) via the National Health Service. According to the firm, the National Institute for Health and Care Excellence (NICE) has formally invited the group to submit Spinraza, which

**8 Cost effectiveness of de-escalation from micafungin versus escalation from fluconazole for invasive candidiasis in China** (Journal of Medical Economics)  
Guidelines on treating invasive candidiasis recommend initial treatment with a broad-spectrum echinocandin (eg, micafungin), then switching to fluconazole if isolates prove sensitive (de-escalation strategy). This study aimed to evaluate the cost effectiveness of de-escalation from micafungin versus escalation from fluconazole from a Chinese public payers perspective.  
<http://www.tandfonline.com/doi/abs/10.1080/13696998.2017.1417332?journalCode=imeo20>

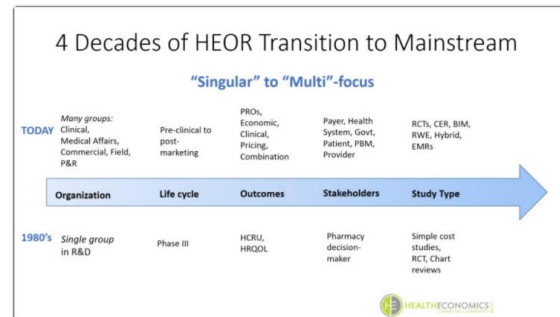
**9 Did the government overpay for hundreds of drugs? It's complicated** (STAT)  
It looked like the watchdog had found something big—in December 2017, a government report proclaimed that drug companies might have stiffed Medicaid over a billion dollars by pricing some brand-name drugs like generics. The report didn't name those companies, but Mylan, maker of Epipen, landed in hot water for similar behavior the year before. In August 2017, the company paid a \$465 million settlement, facilitated by the Department of Justice, and agreed to have its pricing practices reviewed in order to resolve claims that it overcharged Medicaid for Epipen. See: <https://www.washingtonpost.com/news/energy-environment/wp/2017/08/22/epipen-settlement-465-million/>

1 retweet 1 like

**HEORO** @HeoroCom · Feb 20  
Filter our database by geographical location to quickly find #HEOR studies relevant to one or more country [ow.ly/vGSP30i70Mu](https://ow.ly/vGSP30i70Mu)

1 comment 1 retweet 1 like 1 message

**HealthEconomics.Com** @www\_healthecon · 21h  
The genesis of #HEOR from the 80's to today



1 comment 1 retweet 1 like 1 message

# Twitter: Sources + Taxonomies

List URL

<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](http://garrygolden.com)  
📅 Joined April 2008

Subscribed to

Member of



44 Members

**govt2.0**

63 Members

**health+wellness**

103 Members



List Dynamics -

**Upside:** Allows you to build large Twitter Follow lists

**Downside:** Very few; Slight embarrassment of List Names

# Tip: Be Careful of Your Public Named Lists

**Futurist - Consultants** by S Emory Grove

Futurist Topic Consultants

71 Members



**smartypantsbigbrains** by Sara Lobkovich

70 Members



**Crypto Camelot Elite** by ArthR

1132 Members



# Tip: Start Building Lists from Events (Conferences, Webinars)



**Anusha A** @AnushaA100 · 14h

Lack of [#diversity](#) in news and newsrooms continues to affect whose voices get heard and the ways stories are told, meanwhile [#Twitter](#) subcultures are helping fill gaps. Join [#tech](#) [#media](#) leaders Monday to discuss: [kng.ht/2ptCsr0](https://kng.ht/2ptCsr0) [#journalism](#) [#inclusion](#) [#twitterandnews](#)

**KNIGHT FOUNDATION**

## Twitter and the news: Improving trust between journalists and diverse communities

**Tune in Monday to a conversation on Twitter, diverse communities an...**

A recent Knight Foundation report, produced in collaboration with digital studio Postlight, reveals how subcultures on social media, specifically BI...

[knightfoundation.org](https://knightfoundation.org)



**Olivier Kamanda**

@kamanda

Director of learning and impact strategy  
@knightfdn; former dir of @codedotgov;  
former PIF @innovfellows, founder  
@ideallmpact; views are my own

Washington, DC

[kamanda.org](https://kamanda.org)

Joined June 2008

Tweets	Following	Followers	Likes	Lists
1,157	794	1,071	235	1

## Twitter

- Dive in, Build Follower Network  
(Revise it over time!)
- Build out your Lists (Private/Public)
- Use the Mute function when needed!



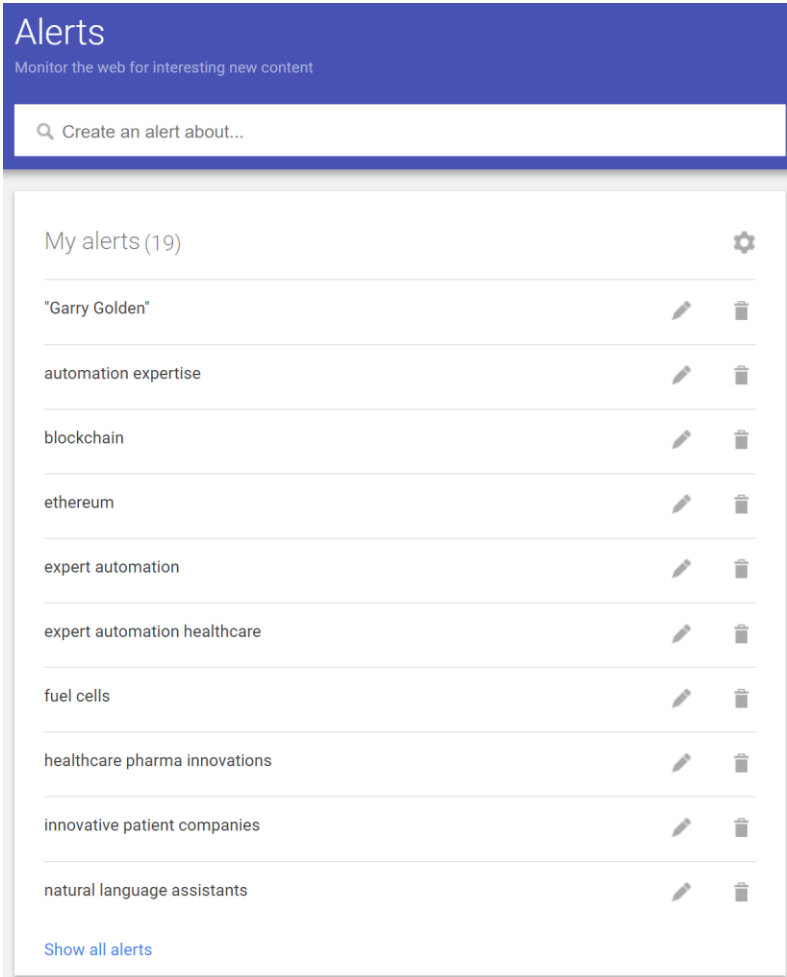


# Expanding Our Signals Sourcing Strategy

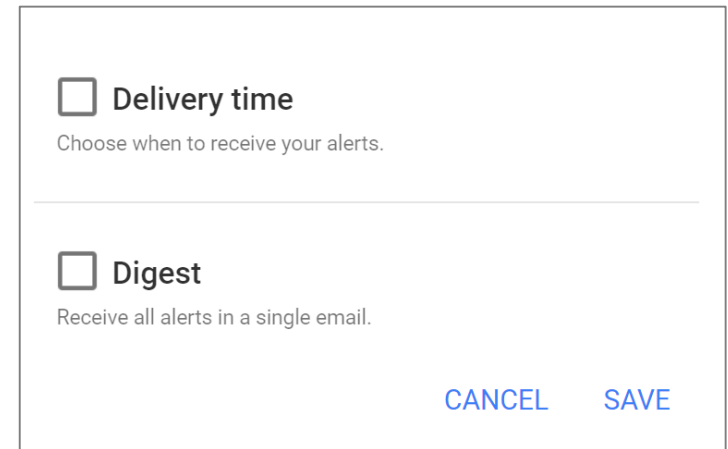


# Google Alerts: Keywords

- 1) Go to: [google.com/alerts](https://www.google.com/alerts)
- 2) Enter Series of Keywords



- 3) Choose Delivery Time vs. Digest to Manage Flows



The screenshot shows the settings dialog for Google Alerts. It has two options, each with an unchecked checkbox. The first option is "Delivery time" with the description "Choose when to receive your alerts." The second option is "Digest" with the description "Receive all alerts in a single email." At the bottom right of the dialog, there are two buttons: "CANCEL" and "SAVE".



# Google Alerts: Keywords

The screenshot shows two overlapping Google Alerts configuration windows. The top window is for the keyword "AI Pharma" and shows a preview of a news article titled "Why AI needs to be used intelligently in pharma" from EPM Magazine. The bottom window is for "AI Clinical Trials" and shows a preview of an article titled "Sight Diagnostics uses computer vision to analyze blood samples" from VentureBeat. Both windows include a search bar, a confirmation message, and "Create Alert" and "Show options" buttons.

This screenshot shows the Google Alerts configuration interface for the keyword "regtech". The configuration includes:

- Frequency: At most once a day
- Sources: Automatic
- Language: English
- Region: Any Region
- How many: Only the best results
- Deliver to: garrygolden@gmail.com

A dropdown menu is open on the right side, listing content types: Automatic (checked), News, Blogs, Web, Video, Books, Discussions, and Finance. The "Create Alert" and "Hide options" buttons are visible at the bottom.

🔍 regulatory innovation

🔍 compliance innovation

# Google Alerts: Keywords

Google Alerts <googlealerts-noreply@google.com>

10:14 AM (12 minutes ago) ☆



to me ▾

## Google Alerts

**regtech**

Daily update · May 18, 2018

NEWS

---

**US And UK FinTech And RegTech Leaders Featured On “CFTC Talks”**

Exchange News Direct

The Commodity Futures Trading Commission provides a unique opportunity for “CFTC Talks” podcast listeners to hear about the agency’s efforts to ...

Flag as irrelevant

---

[See more results](#) | [Edit this alert](#)

You have received this email because you have subscribed to **Google Alerts**.  
[Unsubscribe](#) | [View all your alerts](#)

## Google Alerts

### innovative patient companies

Daily update · June 21, 2018

NEWS

#### **Patient Safety Offers Lucrative Prospects for Innovative Solutions Providers, says Frost and Sullivan**

Markets Insider

Patient Safety Offers Lucrative Prospects for Innovative Solutions Providers, says Frost and Sullivan ...

Corporate Communications – Asia Pacific

Flag as irrelevant

#### **Disruptive innovation – the impact on clinical trials**

BioPharma Dive

Disruptive innovation – the impact on clinical trials ... 'Disintermediation', where a company goes directly to patients for clinical trials rather than going ...

Flag as irrelevant

#### **UCI, Beckman Coulter Diagnostics announce strategic collaboration**

Longview News-Journal

partnerships the company envisions around the globe. Beckman ... a Beckman Coulter office at the Cove @ UCI Applied Innovation for. seamless ... healthcare and laboratory professionals provide better patient care by. delivering ...

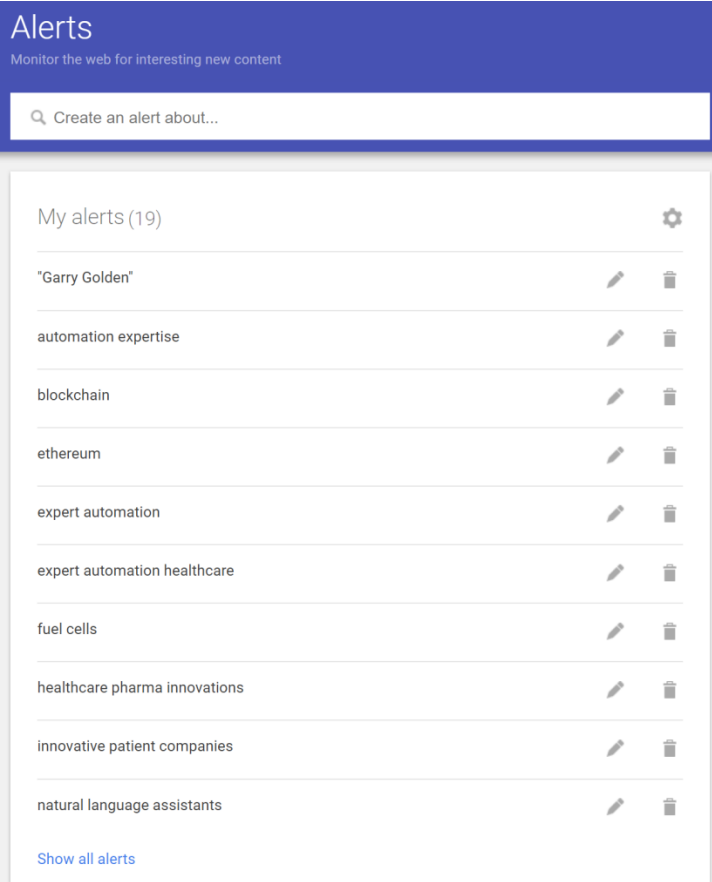
Flag as irrelevant

#### **Bracket to Demonstrate Technology that Brings Pharmaceutical Companies Closer to their Patients ...**

SYS-CON Media (press release)

Featuring innovative solutions for eCOA, Patient Engagement, Neuroscience, and IRT & Clinical Supplies, Bracket helps life science companies and ...

Flag as irrelevant



## Tips for Getting Started

- 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

# Expanding Our Signals Sourcing Strategy



# LinkedIn Network



**Samson Williams**

Problem Solving Educator: Fintech | Blockchain | Crowdfunding | Humans  
1d



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

Like Comment Share



pharma AI



Home



My Network



Jobs



Messaging



Notifications



Me



**Rob Kowalski**

Regional Sales Manager at NVIDIA  
3d

**Celgene** is advancing pharma research and discovery with the help of AWS EC2 P3 instances powered by NVIDIA Tesla V100 Tensor Core **#GPUs**.



Celgene Advances Pharma Research and Discovery with the Help of AI  
wired.com

1 Like



**Roy Wilkinson**

Founder & CEO at WBC, Inc. and Mutual Rx  
2d

Blockchain and AI will be the technology of the future for healthcare. MutualRx is creating the pharma ecosystem that will be ready.



Internet of Things, AI to Play Key Role in Future Smart Hospitals  
healthitanalytics.com

LinkedIn Dynamics - **Upside:** Professional News Focus; Comments  
**Downside:** Fluff; Vendor Noise



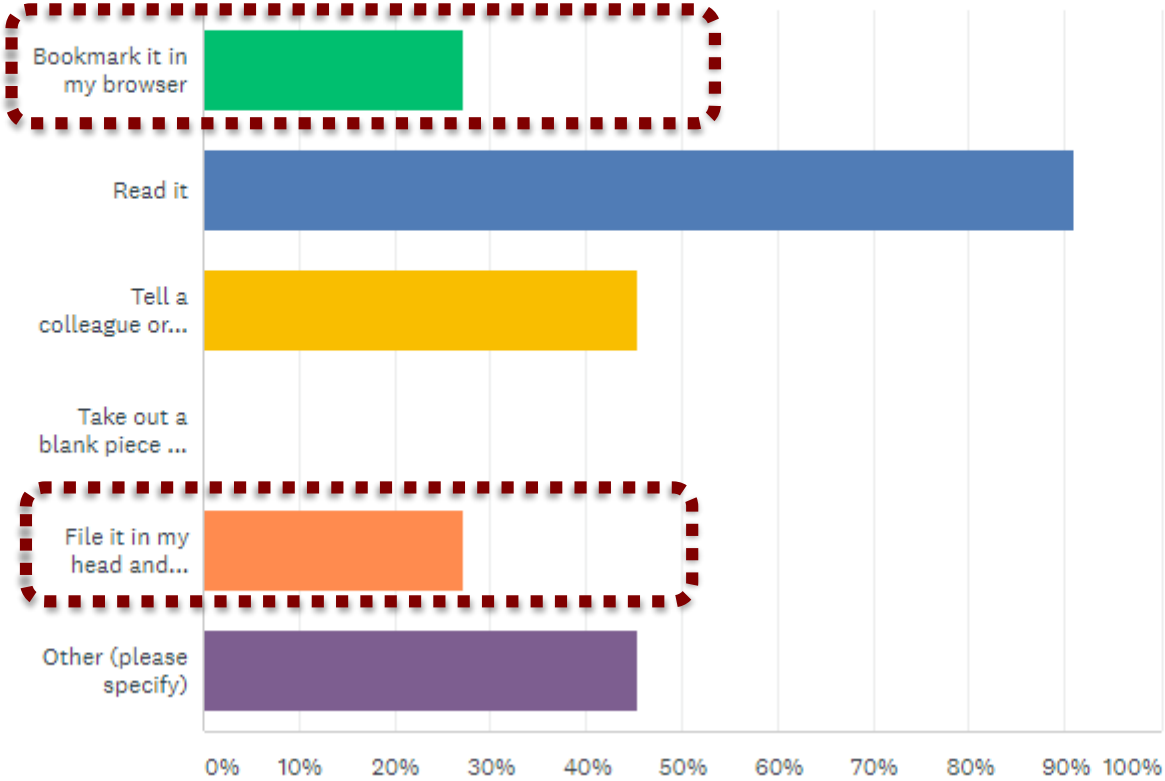
# Questions?

## Your Approach to Sourcing Signals?



# When I find an interesting story that challenges my view of the future, my first reaction is to... (Check all that apply)

Answered: 11 Skipped: 0





**Tool:  
Organizing Your Signals**

**‘Tagging’  
‘Social Bookmarks’**



## Collect & Share Signals as Social Bookmarks

healthcare 🔍 → View Popular, Search in Google

468 items total Filter: All Collapse Date Updated:

- Chicago's Outcome Health hires Twitter engineering VP, its first big hire after \$500 "Outcome Health" less than a minute ago  
venturebeat.com news hire healthcare Chicago innovation 2017 communication
- Health Nucleus: Explore The Story of You about 6 hours ago  
www.healthnucleus.com company healthcare health
- FDA Pushes the Envelope on Clinical Trial Design and Research Requirements | A about 7 hours ago  
www.appliedclinicaltrialsonline.com FDA healthcare clinical
- Epic Announces Worldwide Interoperability with Share Everywhere about 8 hours ago  
www.epic.com healthcare IT
- Yeyo taps Uber-like model for Medicaid-paid trips to the doctor - The San Diego Un Sep 13, 17

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 help 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.**

diigo

→ [View Popular](#), [Search in Google](#)

468 items total

Filter: All

Collapse

Date Updated

[Chicago's Outcome Health hires Twitter engineering VP, its first big hire after \\$500](#) ^

less than a minute ago

"Outcome Health"

[venturebeat.com](#) [news](#) [hire](#) [healthcare](#) [Chicago](#) [innovation](#) [2017](#) [communication](#)[Health Nucleus: Explore The Story of You](#)

about 6 hours ago

[www.healthnucleus.com](#) [company](#) [healthcare](#) [health](#)[FDA Pushes the Envelope on Clinical Trial Design and Research Requirements | A](#)

about 7 hours ago

[www.appliedclinicaltrialsonline.com](#) [FDA](#) [healthcare](#) [clinical](#)[Epic Announces Worldwide Interoperability with Share Everywhere](#)

about 8 hours ago

[www.epic.com](#) [healthcare](#) [IT](#)[Veyo taps Uber-like model for Medicaid-paid trips to the doctor - The San Diego Un](#)

Sep 13, 17



→ [View Popular](#), [Search in Google](#)

41 items total

Filter: All

Collapse

Date Updated

## [IBM pitched Watson as a revolution in cancer care. It's nowhere close](#)

Sep 07, 17

www.statnews.com [IBM](#) [Watson](#) [AI](#) [healthcare](#) [critique](#) [oped](#) [cancer](#)

## [doc.ai](#)

Aug 25, 17

doc.ai [company](#) [data](#) [AI](#) [blockchain](#) [tokens](#) [ICO](#) [startups](#) [healthcare](#) [semantic](#)

## [Artificial intelligence and blockchain companies partner to advance healthcare rese](#)

Aug 15, 17

www.eurekalert.org [news](#) [blockchain](#) [AI](#) [healthcare](#) [startups](#)

## [AI will fix healthcare's biggest and least sexy problem - MedCity News](#)

Jul 24, 17

medcitynews.com [blog+post](#) [oped](#) [healthcare](#) [ai](#)

## [Infor Announces Coleman AI Platform](#)

Jul 18, 17

www.infor.com [healthcare](#) [software](#) [AI](#) [intelligent+assistant](#) [bots](#)

## [AI enters the hospital room - CNET](#)

Jun 29, 17

www.cnet.com [CNET](#) [ai](#) [healthcare](#) [clincial](#)

healthcare blockchain



→ [View Popular](#), [Search in Google](#)

79 items total

Filter: All

Collapse

Date Updated

## [Patentory Investment Analysis – Jsho Crypto – Medium](#)

10 minutes ago

medium.com [news](#) [medium](#) [blockchain](#) [crypto](#) [healthcare](#) [EHR](#)

## [Bowhead Health - The world's first medical instrument powered by blockchain](#)

Aug 29, 17

bowheadhealth.com [company](#) [medical](#) [devices](#) [connected+devices](#) [healthcare](#) [data](#) [blockchain](#) [IoT](#)

## [doc.ai](#)

Aug 25, 17

doc.ai [company](#) [data](#) [AI](#) [blockchain](#) [tokens](#) [ICO](#) [startups](#) [healthcare](#) [semantic](#)

## [burstIQ](#)

Aug 24, 17

www.burstiq.com [company](#) [healthcare](#) [blockchain](#) [services](#) [software](#)

## [Healthcare Blockchain Summit – Edward Bukstel – Medium](#) <sup>^</sup>

Aug 24, 17

" , Clinical #Blockchain, #Pharmaceutical, #Healthcare Technology, #Ethereum w"

medium.com [medium](#) [blockchain](#) [healthcare](#) [clinical](#) [case+for](#)

## [25+ blockchain companies in healthcare to know | 2017](#)

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www.beckershospitalreview.com [blog+post](#) [list](#) [startups](#) [healthcare](#) [blockchain](#) [JW](#)

## [Artificial intelligence and blockchain companies partner to advance healthcare rese](#)

Aug 15, 17

# Getting Started – Part 1

Set up a Free Profile at:

diigo

[www.diigo.com/](http://www.diigo.com/)

Sign up

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 innovation council.

<https://www.diigo.com/user/garrygolden/>

Install Plug-in / Extension on the web browser you use most often:



Install 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.



# Getting Started – Part 2

## Delay (Deep) Assessment with 5 second Filter

- 1) See it, + 5 second Judgement on Value of Signal
- 2) Tag it (3-5 keywords)
- 3) Come back to group tags when you have time to read and process implications

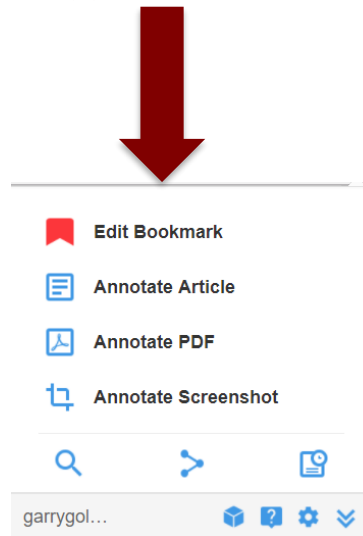
1) See an article you wish to 'tag' (archive) so you can review later or share with others.

### VentureBeat

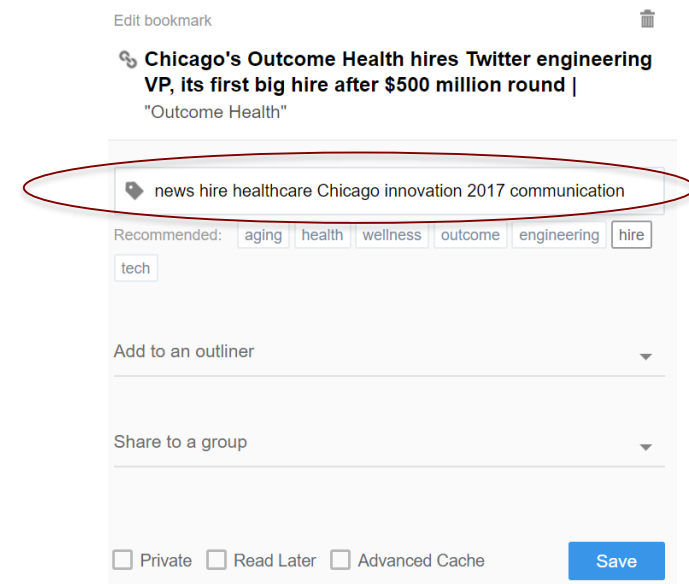
Chicago's Outcome Health hires Twitter engineering VP, its first big hire after \$500 million round

ANNA HENSEL @AHHENSEL AUGUST 28, 2017 10:15 AM

2) Press the Diigo icon in browser and a pop up window should appear.



3) Enter keywords that describe article



Edit bookmark

**Spurred By Convenience, Millennials Often Spurn The 'Family Doctor' Model | Kaiser Health News**

Add a description...

# Spurred By Convenience, Millennials Spurn The 'Family Doctor' Model

retail clinical hospital healthcare millennials Kaiser

Recommended: youtube SOFCs fuelcells propane millennials

family doctor model kaiser health news

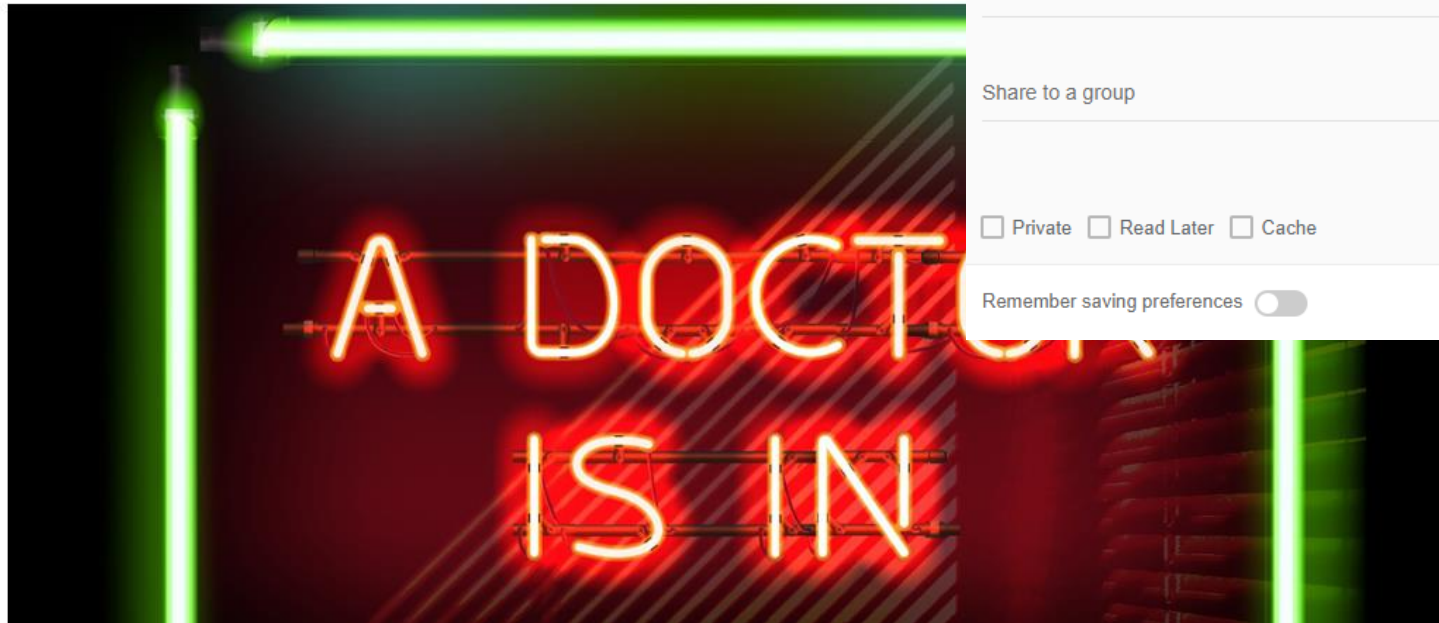
Add to an outliner

Share to a group

Private  Read Later  Cache

Remember saving preferences

Save



# Diigo is Your External Memory Bank

diigo My Library My Outliners My Groups Tools Back to classic garrygolden

My Library #millennials Collapse All Bulk Edit

All Page 1 of 371 results for "#millennials" Filter Privacy Date Updated

Annotated

Unread 1146

More

Related Tags

- millennials x
- guide 51
- work 50
- blog+post 46
- culture 38
- social+change 38

Spurred By Convenience, Millennials Often Spurn The 'Family Doctor' Model | Kaiser ...  
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Starcity — Reimagine Home  
starcity.com company housing innovation millennials


Census 2016: Welcome to the decade of intergenerational tension  
www.theaustralian.com.au oped demographics generations boomer millennials australia society

**Via your Diigo Profile page you can see your library of signals by keyword 'tags'.  
You can share tags with colleagues interested in similar trends.**

# 15 minute Morning Twitter Session



- Quick Scan  
*Signals Pass Sniff Test*
- Broad  
*Personal & Professional*
- Judging  
*Mostly 'confirming' signals of themes I understand*

M Search in Title, URL, Annotations & Tags 

56409 items total, 1070 unread Filter: All Collapse Date Updated

**Energy** [Hyster goes with hydrogen - Transport & Logistics News](#)  
www.tandline.com.au [hydrogen](#) [fuelcells](#) [news](#)

**Crypto** [CCO - First savings system in cryptocurrency](#)  
peculum.io [company](#) [crypto](#) [startups](#) [finance](#)

**Design** [Lab49 - Strategy, design and technology for capital markets](#)  
www.lab49.com [company](#) [capital](#) [finance](#) [design](#) [strategy](#) [technology](#)

**Financial**

**Deep History** [Washington's Ice Age Floods](#)  
wadnr.maps.arcgis.com [deeptime](#) [geology](#) [water](#) [washington](#) [toread](#) [storytelling](#)

**Energy** [SFC Energy and Beijing Green Century Technologies sign business partnership ag](#)  
fuelcellworks.com [china](#) [fuelcells](#) [germany](#) [news](#) [2018](#)

**Energy** [HyperSolar Receives Additional US Patent for Methods of Manufacturing of Its Cor](#)  
www.nasdaq.com [patent](#) [news](#) [solar](#) [hydrogen](#)

**Design Behavior** [Behavior Change for Good Initiative](#)  
bcfg.wharton.upenn.edu [project](#) [behavior](#) [impact](#) [social+change](#)

**Foresight** [Brewer Science | Microelectronic Materials Manufacturer](#)  
www.brewerscience.com [company](#) [electronics](#) [integration](#) [manufacturing](#) [advisory](#) [analytics](#) [service](#)

**AI Creepy** [Emotion artificial intelligence: Huawei working on an emotional AI](#)  
www.cnbc.com [emotive-tech](#) [huawei](#) [CNBC](#) [AI](#) [future](#) [scenario](#)

**Friend Library** [131: Rebekkah Smith Aldrich – Circulating Ideas](#)  
circulatingideas.com [library](#) [podcast](#) [tolisten](#) [sustainability](#)

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**Learning** [City Tech OpenLab](#)  
openlab.citytech.cuny.edu [proejct](#) [nyc](#) [open](#) [innovation](#) [collaboration](#) [learning](#) [teaching](#)

**Graph** [TigerGraph | The Graph Database Landscape Infographic](#)  
www.tigergraph.com [graph](#) [database](#) [101](#) [overview](#) [infographic](#) [list](#) [knowledggraph](#)

**Data Risk Transp** [KDDI, OYO and Toyota Agree to Cooperate on Gathering Data to Realize Disaster](#) ^  
...  
start of a movie plot  
newsroom.toyota.co.jp [toyota](#) [data](#) [cities](#) [disaster](#) [situational-awareness](#) [weak+signal](#)

# Agenda

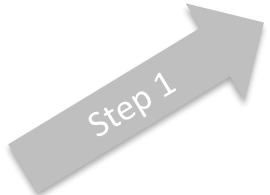


**Framework  
Forecasting**

**Next Steps**

# Why Build a Habit in Scanning for Signals?

Outcomes & Outputs



Information + Inspiration

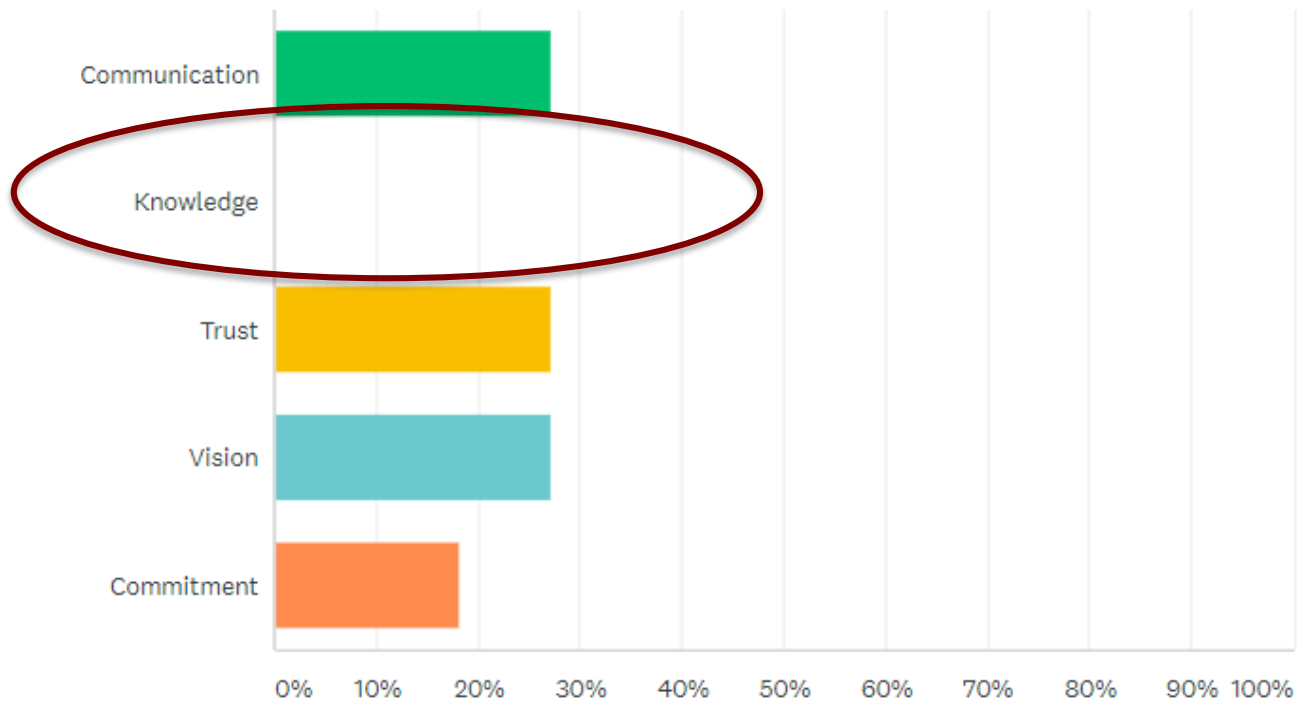
A blue icon of a document with a pencil, representing knowledge or writing.

**Building Knowledge**  
(Framework Forecast)

# Outcome: Building Knowledge in Key Domains of Change

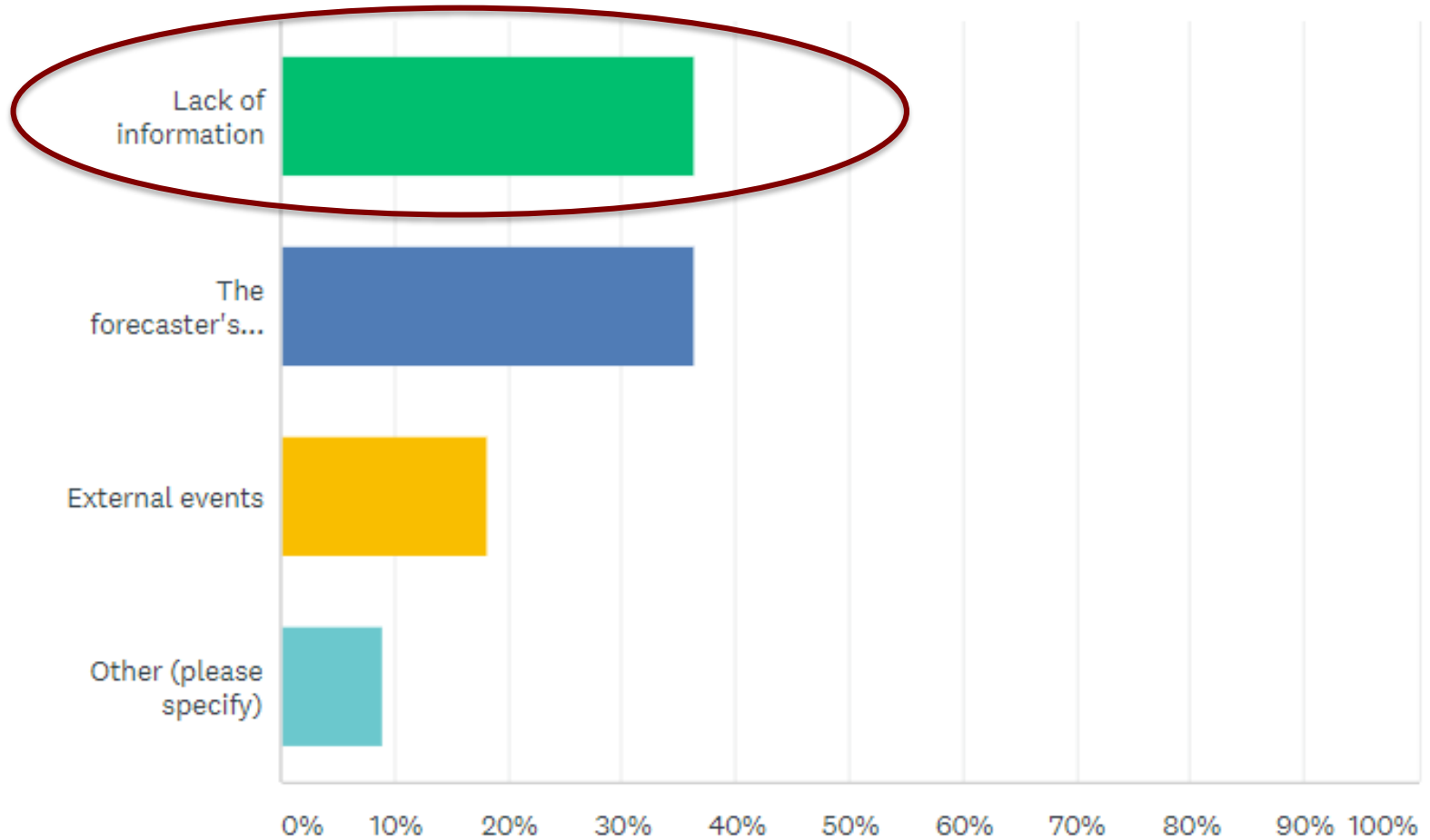
Which is the most frequently overlooked characteristic of successful change?

Answered: 11 Skipped: 0



# Which is the most serious cause of forecasting errors?

Answered: 11 Skipped: 0





# Framework Forecasting



Contents lists available at SciVerse ScienceDirect

Futures

journal homepage: [www.elsevier.com/locate/futures](http://www.elsevier.com/locate/futures)



## Framework foresight: Exploring futures the Houston way



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### ARTICLE INFO

*Article history:*  
Available online 29 May 2013

*Keywords:*  
Framework Foresight  
Foresight method  
Forecasting  
Scenarios

### 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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# Framework Foresight Funnel

Scanning Hits

300+



Trends/Inputs

50-75



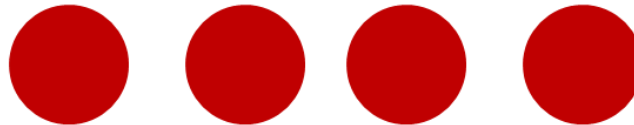
Drivers/Uncertainties

6-12



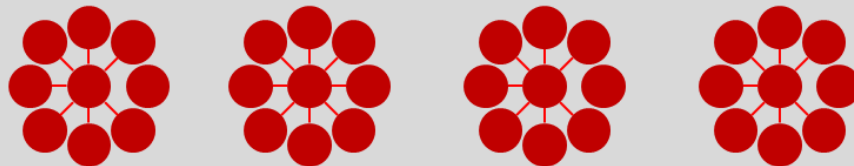
Scenarios

2-4



Implications

150-200



Issues/Opportunities

6-12



Source: A. Hines

*Numbers are rough estimates*

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



ASSOCIATION OF  
PROFESSIONAL  
FUTURISTS

**Hinesight**  
For foresight, use Hinesight



## **Domain Knowledge Base Framework Forecast**

### **Future of \_\_\_\_\_**

Define the Domain

Map out Key Concepts (Glossary)

Timeline / History

Conferences

Stakeholders (By Players)

- Associations / Consortium

- Companies – Legacy/Incumbent (Large)

- Companies – Startups (Small/Growth)

- Investors / VCs

Key People to Follow

Stated Plans

Stats / Figures

Trends

Uncertainties

Emerging Issues

Miscellaneous Notes

# 1) Domain Understanding

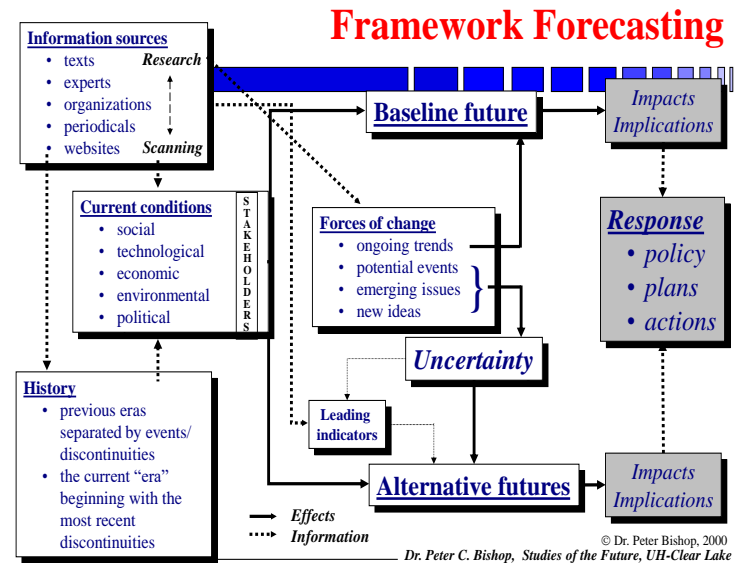
Concepts, Stakeholders, et al

# 2) Forecasts

Trends, Plans, et al.

# 3) Scenarios

Sections: Ideas, Uncertainties, et al



# Future of \_\_\_\_\_

## Define the Domain

Capture the collective voice of definitions that describe *what the domain*. *What is it? (What does it not include)*  
*Why is the domain important? What are key implications connected to the future?*

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

## Key Qualities or Statistics

A catch-all section to provide any key qualities, conditions or statistics about the domain

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

## **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 (Sector**

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

### **301 Level – Concepts Discussed at the Leading Edge of the Domain**

- 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

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

## Trends

Describe the domain 'trends' in language of More or Less.

Statements should describe or hint at direction and moment (From x to y) that reveal direction and momentum

- *More* text text text, (Source)
- *More* text text text, (Source)
- *More* text text text, (Source)
- *More* text text text, (Source)
- *More* text text text, (Source)
  
- *Less* text text text, (Source)
- *Less* text text text, (Source)
- *Less* text text text, (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)

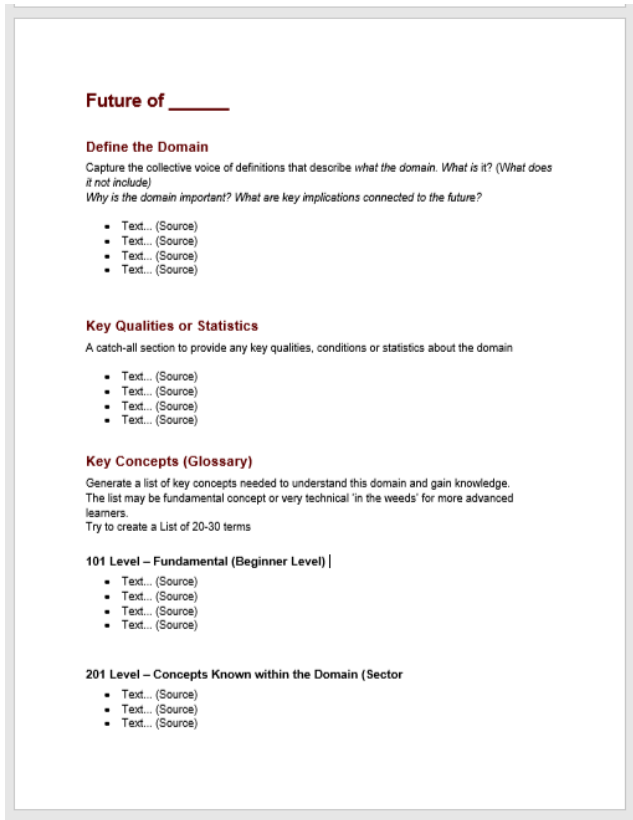
## Uncertainties

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

# Tips for Domain Forecasting Framework



## Navigation Pane – Jumping Around the Document

Microsoft Word's Navigation Pane for jumping section to section.

## Copy + Paste (with Source)

The Framework Forecast approach is designed for speed. It is best used as a working document that is in 'perpetual beta' and internal use only. Approach a 'copy-paste' model of research with a simple (Source) that would include a copy of the hyperlink/URL for further research.

## CSV Format – Comma Separated Values

Comma Separate Values (CSV) for potential data scrapping

# Agenda

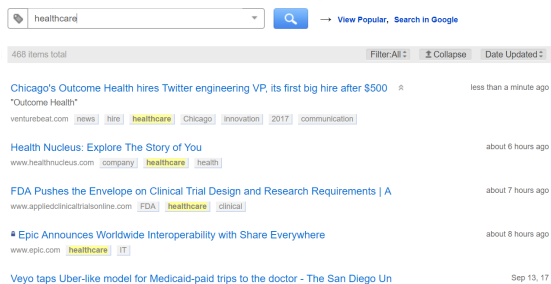
your  
next  
step



# Homework



**Develop Lists that Expand Sources & Communities**



## Build Out Inputs

- Follow Fifty People**  
Create Five (5) Lists (Public/Private) to Help Your Scanning on Future of Work + (Your Theme)
- Five Key Phrases**  
Google Alerts
- Start Tagging!**  
Build out habit of scanning and tagging;  
Build out your Diigo Library



## Consider Your Framework Forecast Theme: Future of Work + TBD

### Future of \_\_\_\_\_

Define the Domain

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Emerging Issues

Miscellaneous Notes

**Questions?  
Comments?**

