

Strategic Foresight Workshop

# How to Anticipate & Activate Growth Opportunities



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**futurethink**  
INNOVATION SIMPLIFIED



Foresight Workshop: September 29, 2016

**Start**

**End**



**Activity**  
***Trend Cards***

2:30 p.m.

Break  
3:45 p.m.

**Activity**  
***Futures Wheel***

4:00 p.m.

**Next Steps**

4:50 p.m.

# Foresight 101: Key Activities

## Step One

### Identifying & Monitoring Change

- Horizon Scanning
- STEEP Category:
  - Society
  - Technology
  - Environment
  - Economy
  - Politics
- Emerging Issues Analysis
- Indicator Analysis  
(Leading vs Lagging)

## Step Two

### Exploring Implications

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

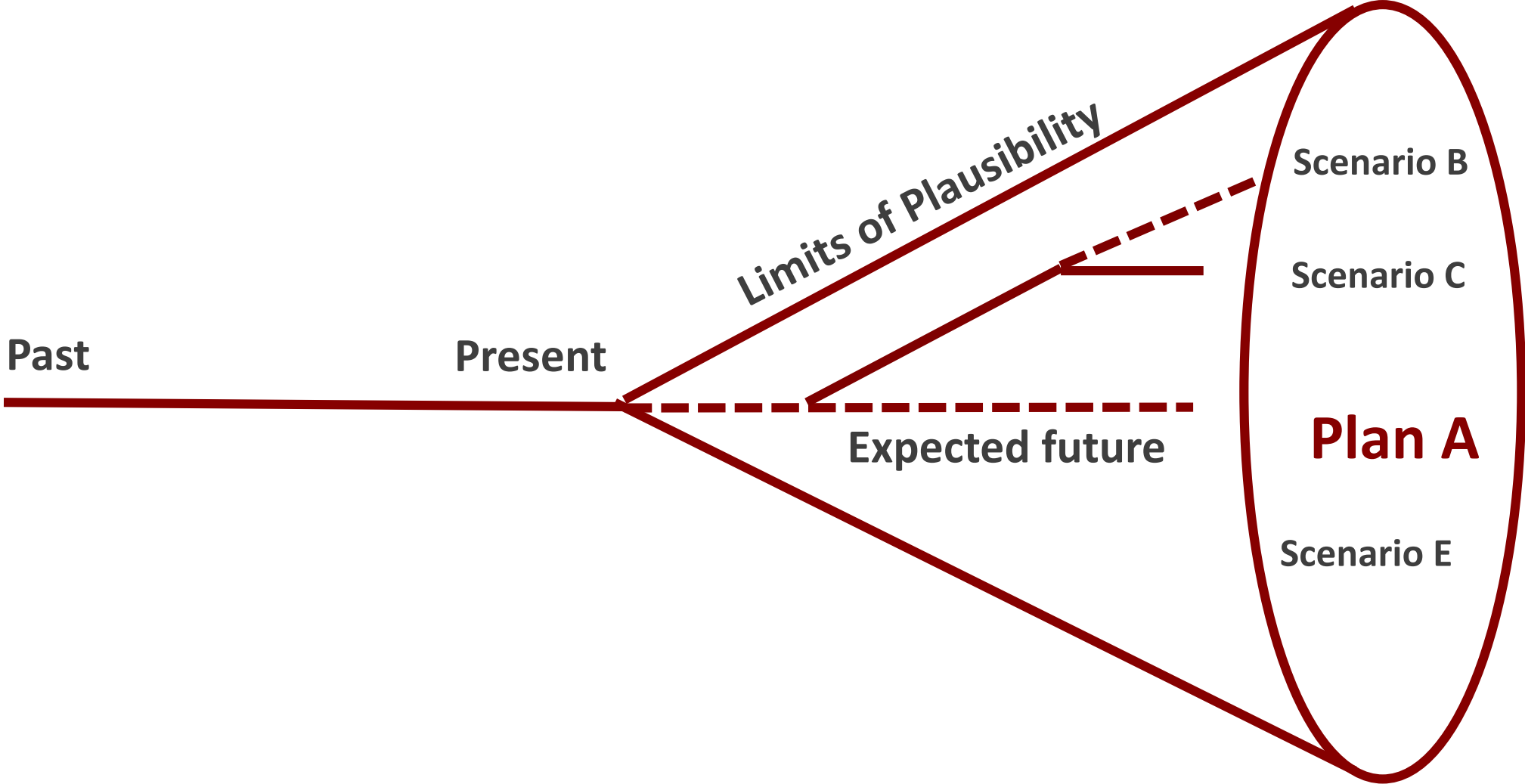
## Step Three

### Communicating the Need for Change

- Visioning
- Backcasting
- Planning
- Goal Setting  
Objectives - Actions
- Roadmapping

# Foresight 101: Cone of Plausibility

Multiple Outcomes, Multiple Time Horizons



# Foresight as *Front-End* of Innovation and Growth Strategies



## **Forecast-based Thinking:**

- Confidence in assumptions
- *Stable marketplace/culture*
- *Focus on 'Prediction'*  
(*What should happen*)



## **Scenario-based Thinking:**

- Unsure of dominant assumptions
- Markets shaped by uncertainty
- Focus on 'Anticipation' ('could happen')
- Manage uncertainty across a range of plausible outcomes
- Focus on continual monitoring of change

## Could we write the Four Futures of Bing?



**Continued  
Growth**



**Disciplined  
- Constrained**



**Transformed**



**Decline  
- Collapse**

# Activity: Trend Cards

## Output: Generate Ideas that Solve Problems + Grow Business



## Alternative Constraint Layers

### Fictional Event Cards:

- New Laws + Regulations
- New Competitors
- New Internal Rules
- New Leadership
- Disruptive Wildcards

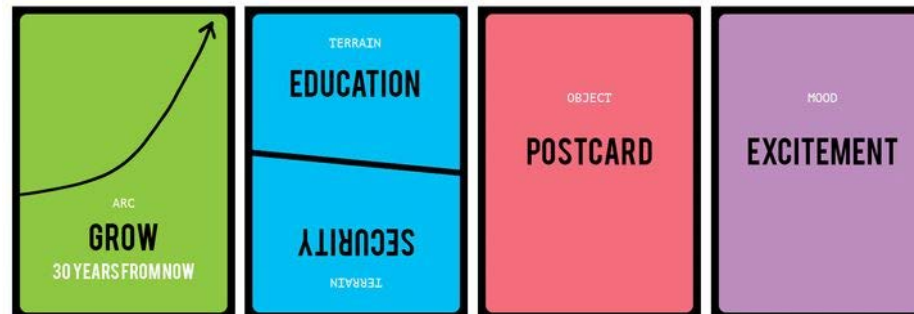
# Long Game: Best Design Constraints for Bing Team Trend Deck



**ARUP: Drivers of Change**



Arc = Grow, 30 years from now  
Terrain = Education  
Object = Postcard  
Mood = Excitement



**OCAD: The Thing from the Future**



# Trend Cards

## Data-driven Innovation



## Designing for Behavior Change



## Social Inclusion: Society as Stakeholder



## Millennials Grow Up



## Natural Language Intelligent Assistants



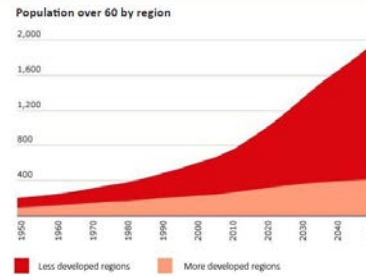
## The "She-Economy" Goes Global



## Blockchain Applications



## Aging Populations



## Evolution of Mobile Life



## Mindfulness + Mental Health



## People Analytics



## Next-11 Emerging Economies



## Rise of Cities + Urban Lifestyles



## Consumerization



## Internet of Things (IoT)



# Activity: Trend Cards

## Output: Generate Ideas that Solve Problems + Grow Business

**Blockchain Applications**

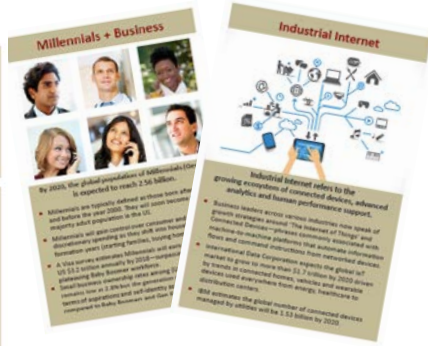


The blockchain is a decentralized ledger of transactions that can support everything from digital currencies to smart contracts. Blockchain-based digital transactions experienced rapid growth in 2017, with total volume growing 100% year-over-year. Blockchain-based digital transactions are expected to reach \$1.5 trillion by 2020, up from \$1.5 billion in 2017. Blockchain-based digital transactions are expected to reach \$1.5 trillion by 2020, up from \$1.5 billion in 2017.

**Opportunity Examples:**

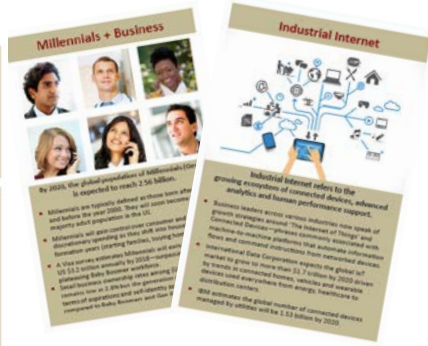
- **Global banks use the blockchain** to create a new global blockchain for banking, underwriting, and selling financial products.
- **Using the Ethereum blockchain**, blockchain partners for insurance and investment services are expected to reach \$1.5 billion by 2020, up from \$1.5 billion in 2017.
- **Healthcare is using blockchain** to create a new global blockchain for healthcare, underwriting, and selling financial products.
- **Finance has created a blockchain** to create a new global blockchain for finance, underwriting, and selling financial products.
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**Millennials + Business**

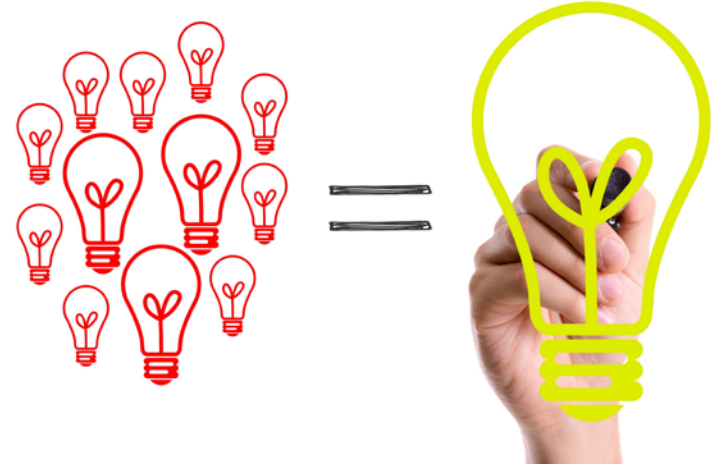


Millennials are rapidly defined as those born in and before the year 2000. They will reach majority status in 2018. Millennials will spend more on consumer goods and services than any other generation, spending \$1.5 trillion annually by 2020, up from \$1.5 billion in 2017.

**Industrial Internet**



Industrial Internet refers to the growing ecosystem of connected devices, advanced analytics, and human performance support. Industrial Internet is expected to reach \$1.5 trillion by 2020, up from \$1.5 billion in 2017.



Generate Lots of Ideas then Select One Path



Shark Tank Business Idea

Trend Cards

# Activity: Trend Cards

## Output: Generate Ideas that Solve Problems + Grow Business

**Blockchain Applications**



- The blockchain is a decentralized ledger of transactions that can support various use cases, from "smart contracts" that automate business processes and asset management.
- Blockchain-based digital transactions experienced rapid growth last year, with "smart contracts" for financial instruments, such as private debt, property titles, customer wish applications, internet-connected medical devices or health-based services.
- By reducing the need for third-party mediators, crypto can be used to create clear, verifiable, digital records without a third or (in theory) banking-related party.
- 4G information and communication technologies fueled by world economic recovery, 71% believe users will be utilizing using a blockchain by 2020, while 22.8% affirmed they believe 10% of global gross domestic product (GDP) would be stored on a blockchain by the year.

**Opportunity Examples:**

**Explore industry-wide blockchain solutions:**

- Financial institutions are exploring with more than 50 global banks to create a new global blockchain for trading, underwriting and selling financial transactions.
- Using the Ethereum blockchain, IBM-developed partners for "Blockchain as a Service" (BaaS) solution to enable the insurance and investment services and digital marketing.
- Enterprise-wide financial companies to ensure that the Blockchain is creating new value for them and for us. The company has created BaaS solutions to reduce and submit to the bank chain, reducing their operating costs.
- Healthcare is putting healthcare documents and insurance claims records on a blockchain system to reduce and ensure validity of medical records.
- Apple has created a blockchain lab to develop applications for healthcare and wellness markets.
- Food, healthcare, travel and hospitality are using a blockchain approach to bring transparency and accountability to supply chains.

**Millennials + Business**



- Millennials are rapidly defined as those born in and before the year 2000. They will reach nearly 50 percent of the U.S. population by 2020.
- Millennials will open up opportunities for companies and individuals looking to enter the market, looking for a new source of revenue, and looking for a new source of revenue.
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**Industrial Internet**

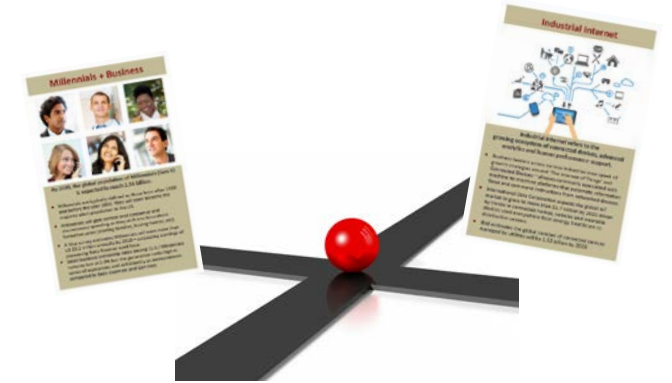


**Industrial Internet refers to the growing ecosystem of connected devices, advanced analytics and human performance support.**

- Business leaders across various industries are speaking of the "Industrial Internet of Things" (IIoT) and machine-to-machine (M2M) systems connected with data and control information from industrial devices.
- Industrial Internet of Things (IIoT) is expected to grow to more than \$1.2 trillion by 2020, up from \$400 billion in 2015.
- IIoT is expected to grow to more than \$1.2 trillion by 2020, up from \$400 billion in 2015.

1) Breadth via Events + Intersections of Change

2) Focus + Depth on Leveraging Single Trend



## Trend Cards

	Team 1	Team 2	Team 3
Horizon 1	<p>Designing for Behavior Change</p> 	<p>Recent changes in digital marketing</p> 	<p>Blockchain Applications</p> 
Horizon 2	<p>Role of Cities in Urban Livability</p> 	<p>Blockchain Applications</p> 	<p>Recent changes in digital marketing</p> 

# Alt Version: Focus + Depth on Single Driver of Change



## Two Trends, Two Horizons

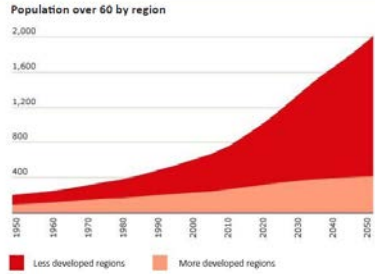
	Team 1	Team 2	Team 3
Horizon 1	<p>Designing for Behavior Change</p> 	<p>Natural Language Intelligent Assistants</p> 	<p>Blockchain Applications</p> 
Horizon 2	<p>Rise of Cities + Urban Lifestyles</p> 	<p>Blockchain Applications</p> 	<p>Natural Language Intelligent Assistants</p> 

### Facilitation Notes:

- 1) Distribute set of 5-6 trend card to small teams
- 2) Ask to discuss implications and vote on most important trend over two time horizons (Now-18 months; Beyond 3 years). They vote using trend image placards; placed on matrix table (above)
- 3) Whole room discussion on voting results (e.g. shared assumptions; outliers; horizon learning curves)
- 4) Teams return to table with task to pick one trend (from their choices or new trend).  
Follow ideation process for generating growth strategies

# Opportunities & Constraints Shaped by Intersections of Change

## Aging Populations



## Millennials Grow Up



## Social Inclusion: Society as Stakeholder



## The "She-Conomy" Goes Global



## Designing for Behavior Change



## Natural Language Intelligent Assistants



## Natural Language Intelligent Assistants



## Evolution of Mobile Life



## Rise of Cities + Urban Lifestyles



## Internet of Things (IoT)



## Data-driven Innovation



## People Analytics



## Blockchain Applications

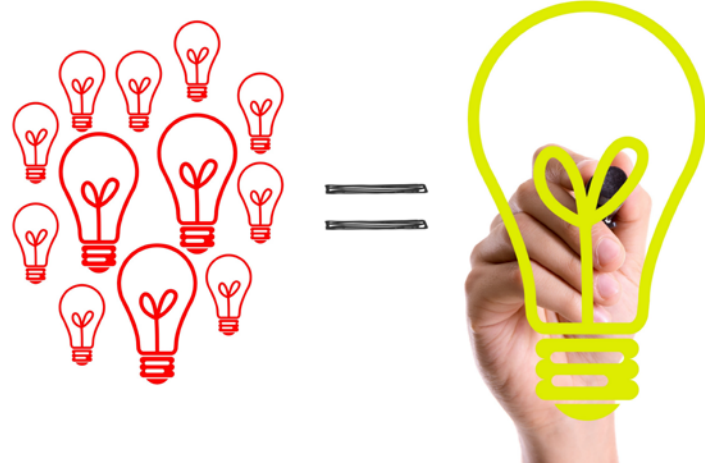


Activity: Trend Card Poker

**Output: Generate Growth Strategies @ Intersection of Change**



Discuss  
Implications



Generate Lots of Ideas  
then Select One Path



Business Idea  
Shark Tank

30 minutes

**1. Discuss Broad Implications Set of Trends**

**2. Choose Intersection of Two Trends**

Horizon: Beyond 2018

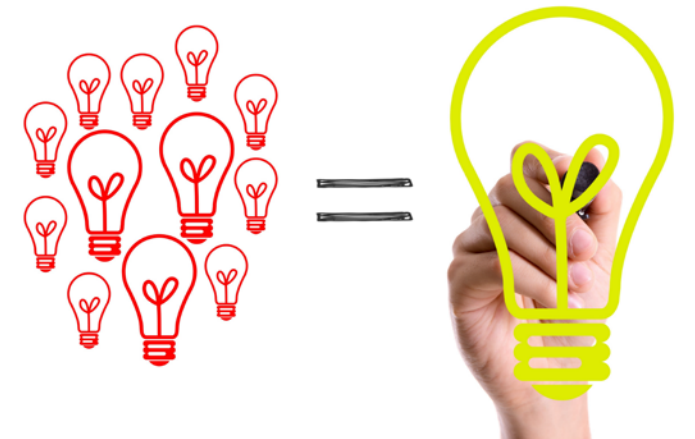
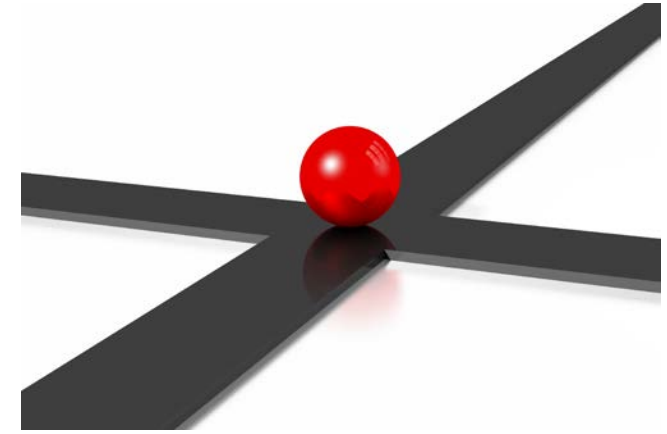
**3. (Alt: Receive Event Cards)**

**4. Ideate at the Intersection of Change**

List Ideas that Solve Problems

+ Grow Your Business

(No debating...Write...)



Generate Lots of Ideas

10 minutes

List Ideas that will  
*Get You....*

**FIRE**

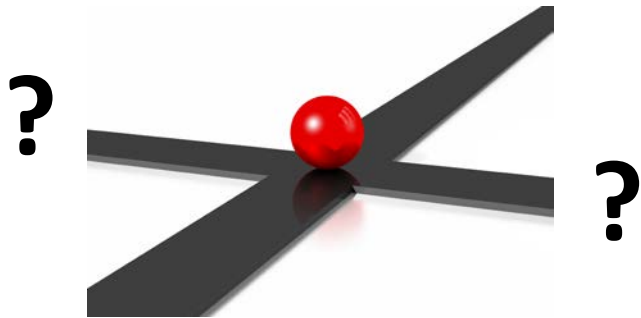


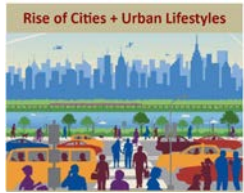
20 minutes

1. Select one (1) Growth Idea  
Beyond 2018...  
Internal or External
2. Create 'Shark Tank' Pitch on Business Idea  
Name Idea  
Draw It...  
Prepare Your 90 Second Pitch



# 90 Second Pitch





Natural Language Intelligent Assistants



Blockchain Applications

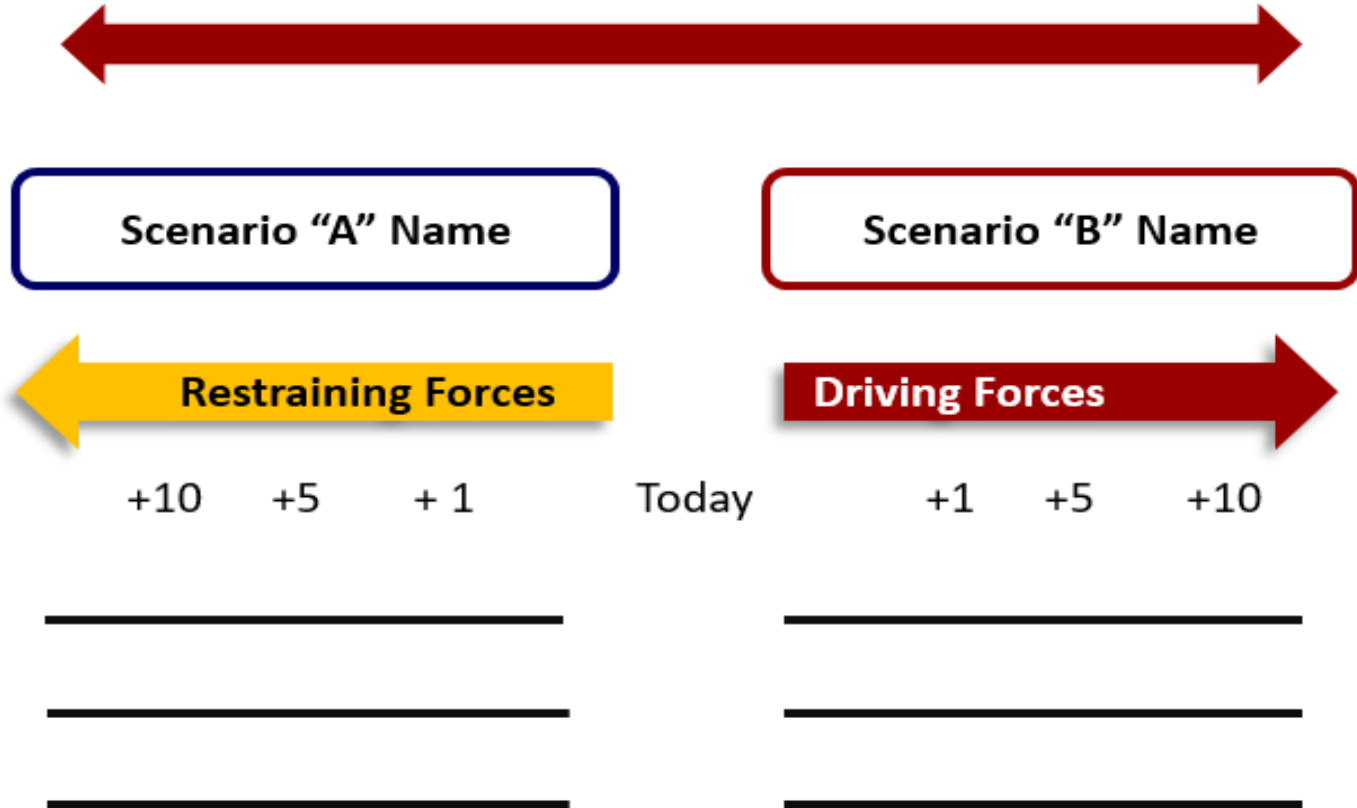


Designing for Behavior Change



# Testing Your Ideas

## Force Field Analysis



**End**

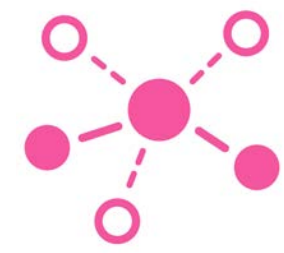


**Activity**  
*Trend Cards*



**Activity**  
*Futures Wheel*

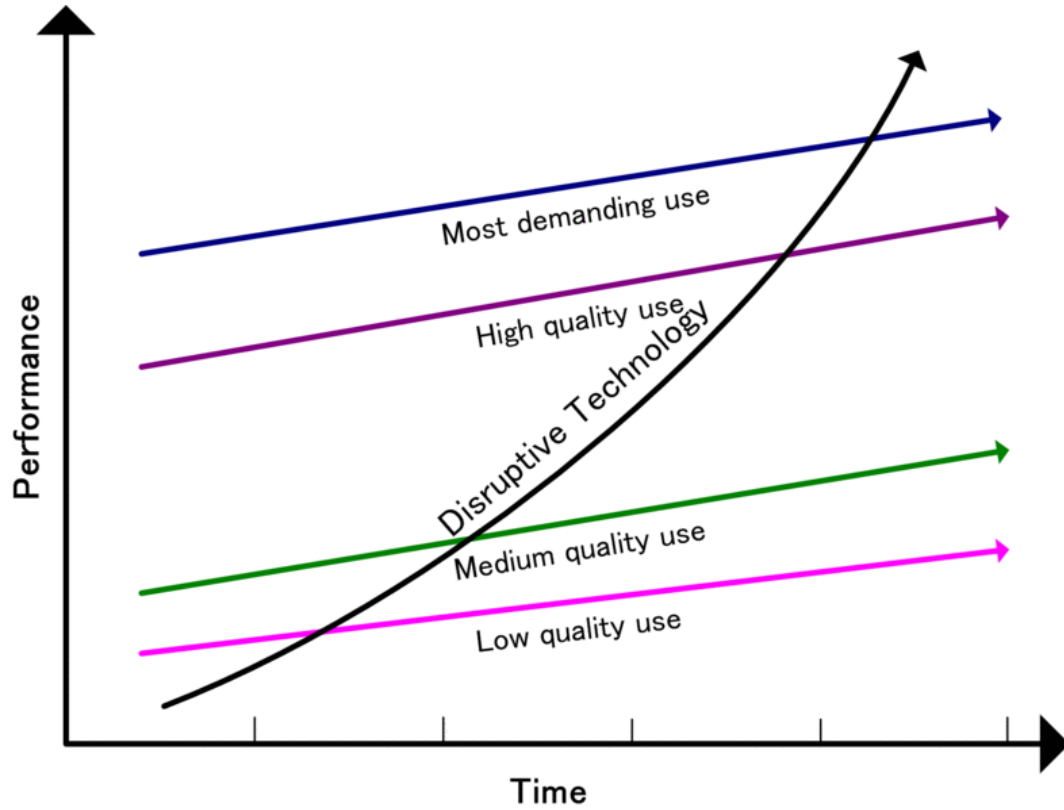
4:00 p.m.



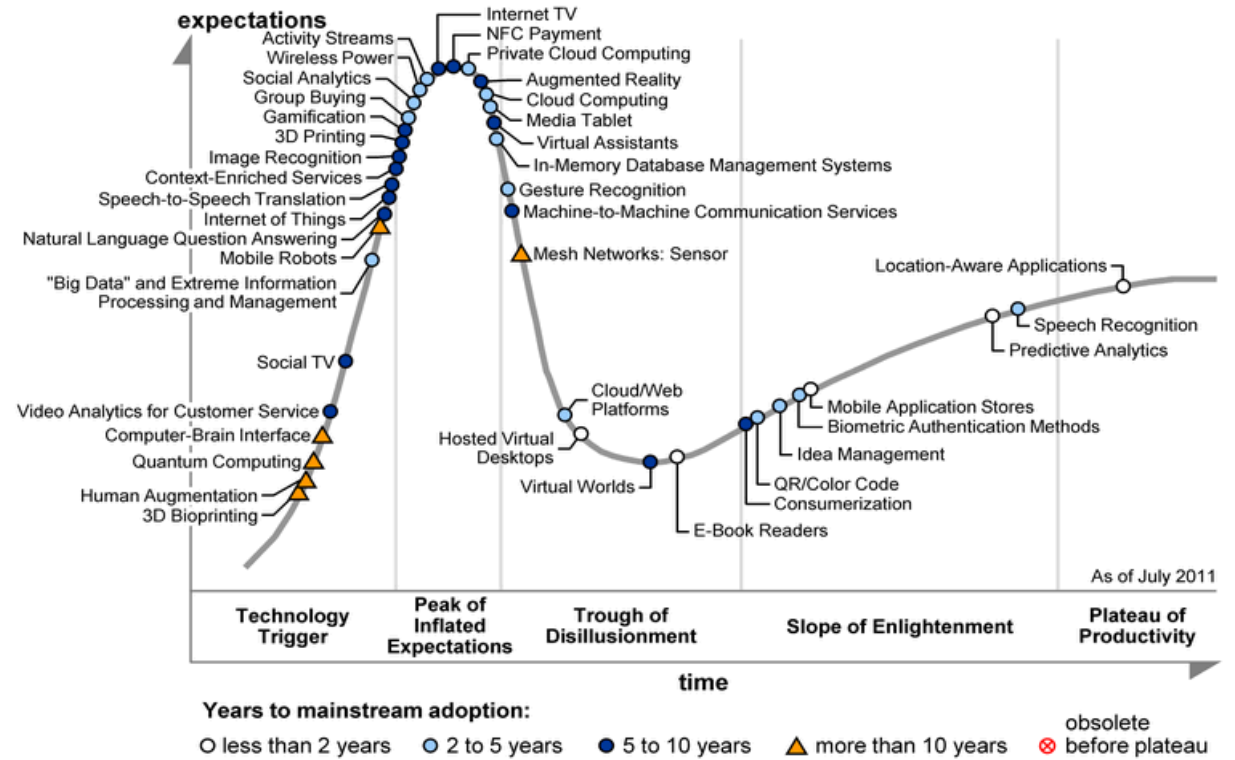
**Next Steps**

4:45 p.m.

# Hype + Hope: *The Slow pace of Fast Change*



 **INNOSIGHT**



 **Gartner**

Activity: Futures Wheel

**Output: Business News Headlines from the Future**

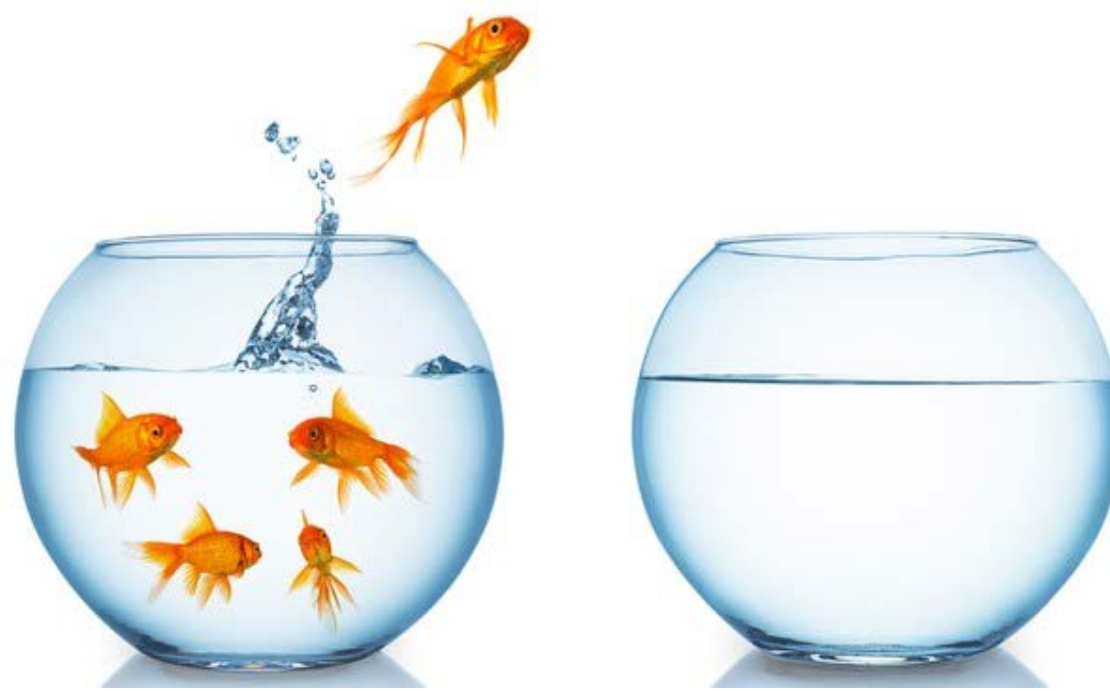


# Imagine Business New Headlines 2018-2030

*You can't trust your judgement if your imagination is out of focus.*

*Mark Twain*

# Habit: Taking Mental Leaps of Radical Change



**News Headlines from...**

**2005**

**World without  
Civilian Drones**

**2015**

**World with  
Civilian Drones**



# Amazon provides new details on its plan for a drone superhighway in the sky

By [Ben Popper](#) on July 28, 2015 12:33 pm



# Drones Used to Stop Elephant and Rhino Poachers in Africa

by ELISHA FIELDSTADT



▶ Drones Used to Battle Rhino Poachers 2:27

[f](#) [t](#) [g+](#) [</>](#)



**Business Insider** @businessinsider · 56m

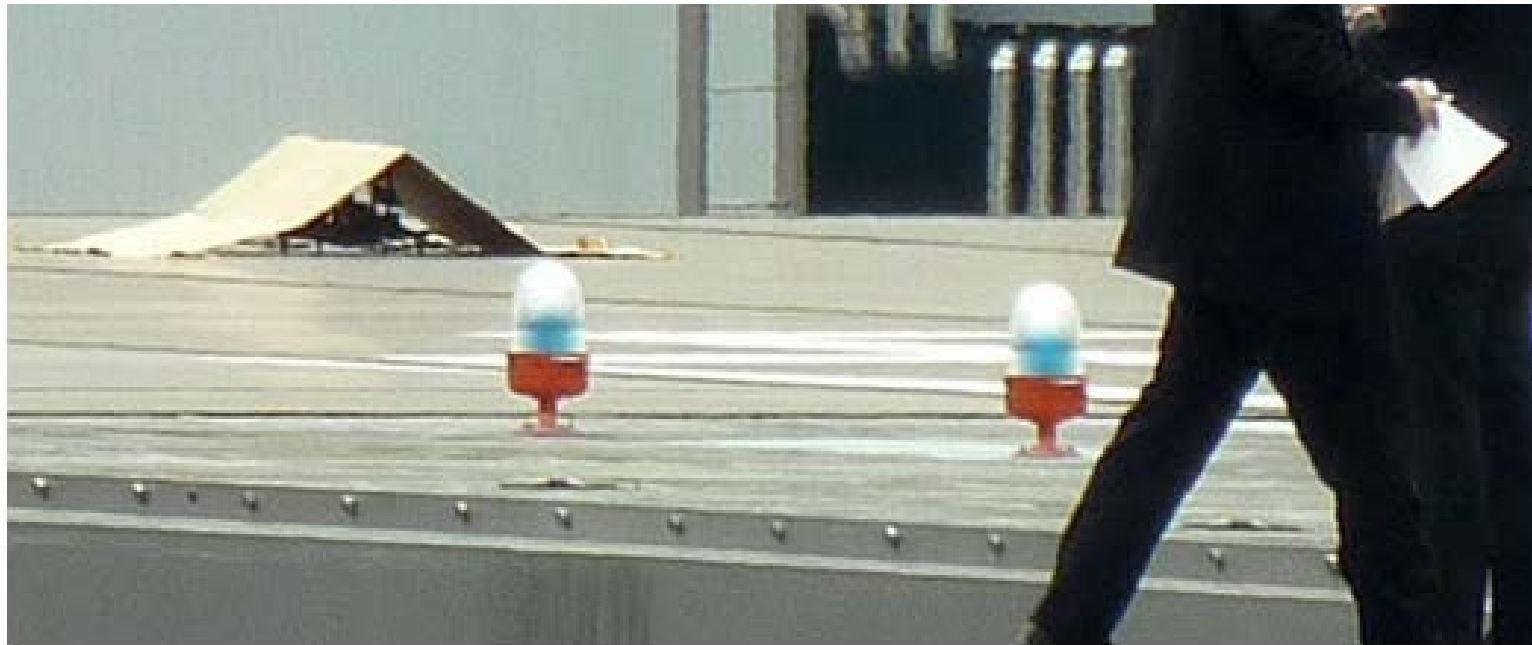
The Connecticut teen who rigged a drone with a handgun has been charged with assault [read.bi/1SFbUYB](https://read.bi/1SFbUYB)



# Arrest after drone with radioactive material lands on Japan PM's rooftop

By Junko Ogura, CNN

🕒 Updated 11:53 PM ET, Fri April 24, 2015

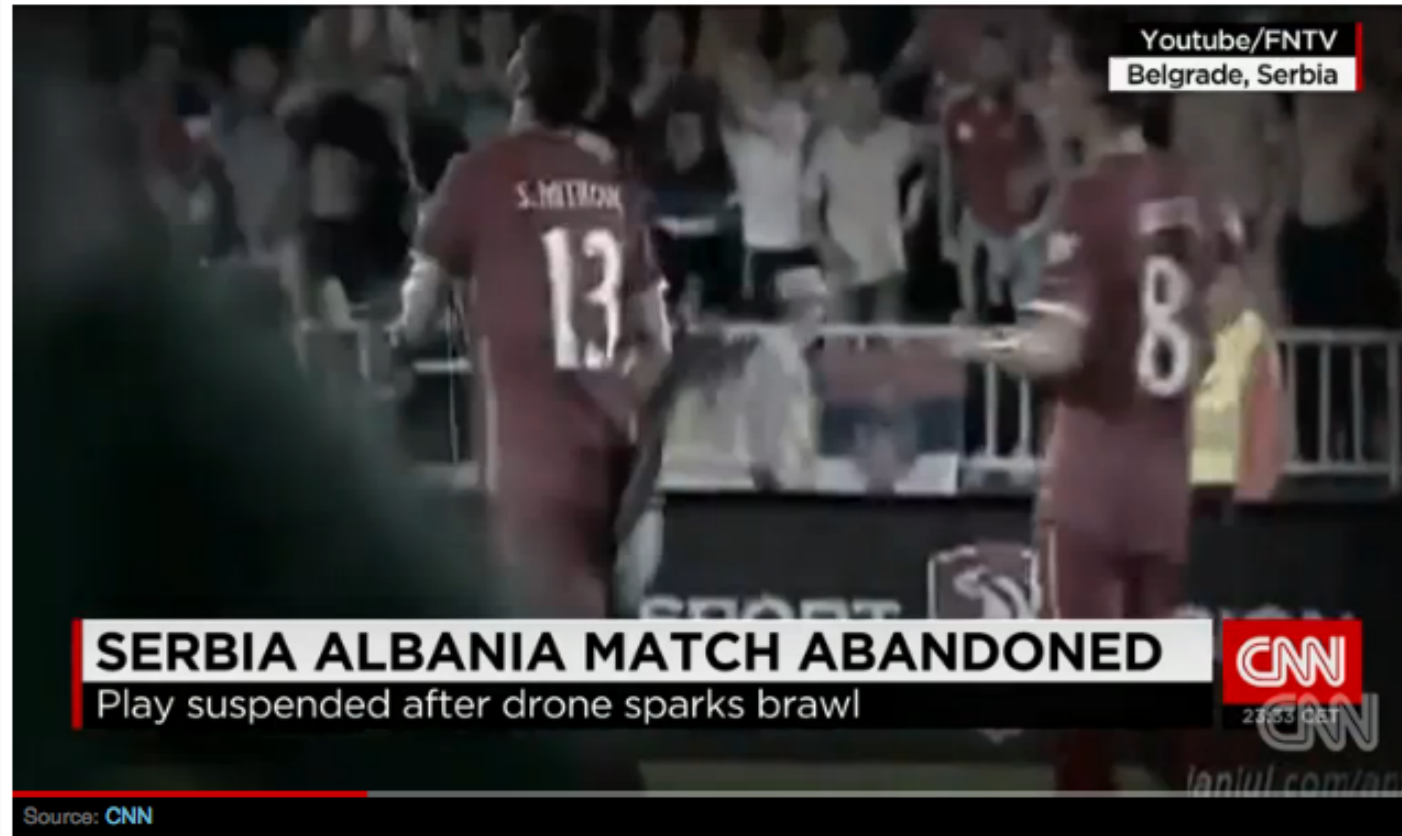


A small drone covered with cardboard is seen on the roof of PM Shinzo Abe's official residence in Tokyo on April 22, 2015.

# Serbia and Albania game abandoned after drone invasion sparks brawl

By James Masters, CNN

updated 6:11 AM EDT, Wed October 15, 2014



## STORY HIGHLIGHTS

• **NEW:** Brother of Albanian PM was arrested after the brawl, Serbian PM's office says

**(CNN)** -- Ethnic tensions in the Balkans and an incident involving a drone led to the abandonment of a major European international football game Tuesday.

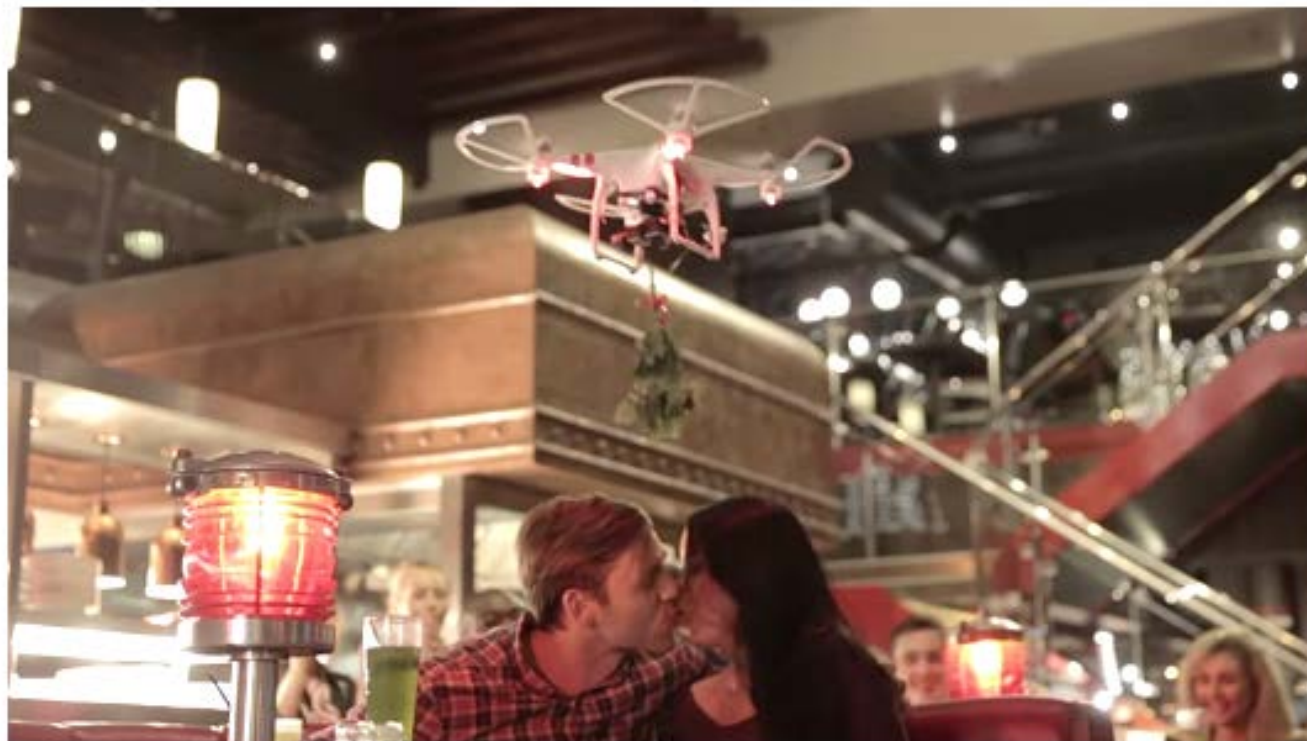
# Report: FAA probing Cowboys for using drones illegally



# TGI Fridays drone delivers bloody 'mistletoe mischief'

Karma Allen | @iam\_karma

Tuesday, 9 Dec 2014 | 12:20 PM ET



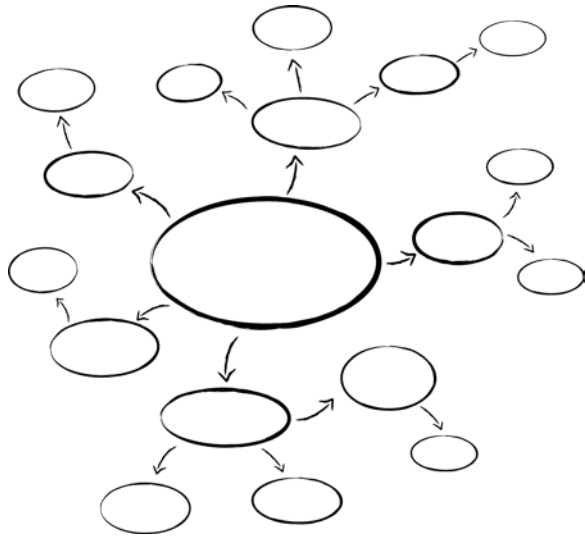
Source: TGIF | YouTube

The drones were intended to hover over couples and inspire a little "mobile mistletoe mischief," according to TGI Fridays.

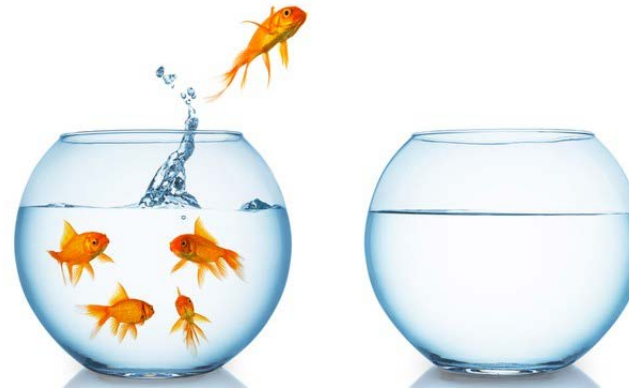


Imagine if you had  
seen those as 'fake'  
headlines in 2005!





**Futures Wheel Technique:  
Taking Mental Leaps**



**News Headlines from...**

- New Policies for Privacy**
- New Industries + Business Models**
- AI Driven Digital Experiences**
- Blockchain**

# The Futures Wheel



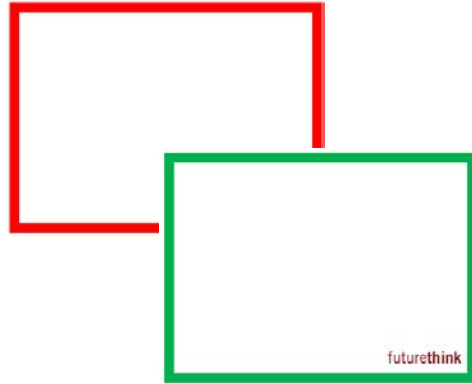
\*\* Popularized by Joel Barker



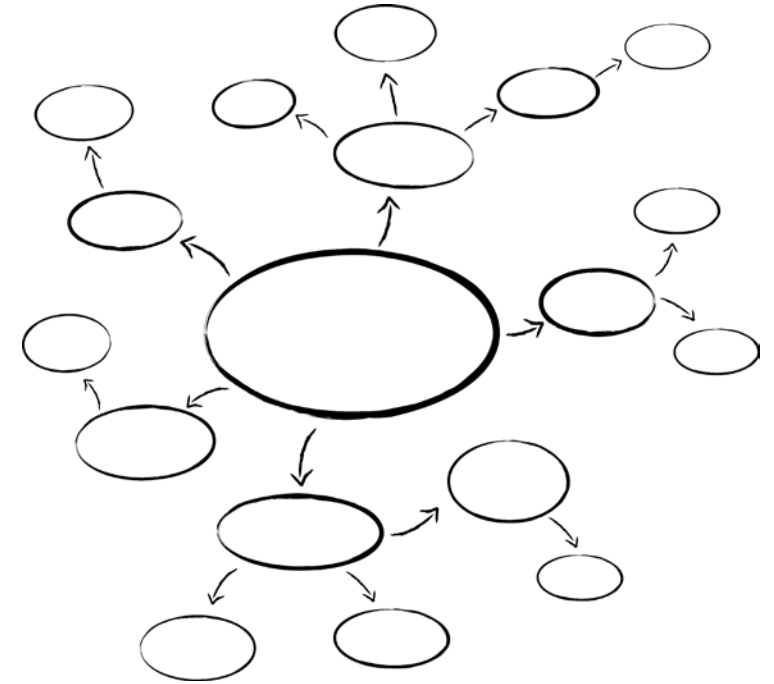
**Event**

CEO announces that  
Motorola Solutions will  
shut down \_\_\_\_\_; or sell  
\_\_\_\_\_.

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**Headlines**



**Multiple Future Outcomes**

## Tips on Creating Headlines

- ❑ Bring it to Life  
(e.g. familiar people, places and companies)
- ❑ Leap, Don't Tweak
- ❑ *Art of Double Take*

### **Generic**

Traffic accidents down 30%

AI destroying service jobs

Voice search at 80%

### **Bring it to Life**

**Nationwide Insurance goes bankrupt**

**Congress passes Universal Basic Income Law**

**Pew Survey: Millennial Parents fear their  
children won't learn to text**

NHSTA Approves  
Fully Autonomous  
Vehicles

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Govt issues 'Captain'  
License for 10 year olds

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Time Magazine:  
Soccer Moms Retires

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Teenagers take over  
Burning Man Festival

futurethink

Ford Foundation  
\$10B Investment in  
Cleantech Mfg

futurethink

Big 3 = 1  
Ford-GM-Chrysler Merger

futurethink

San Jose is  
the New Detroit

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# Future Implications of Embedded Micro Fuel Cells



**'Power Plants'**  
\$1 - \$10 - \$100



**Retail Shelf  
based Fuels**





**'Unplugging' /  
Personal Fuel Packets**

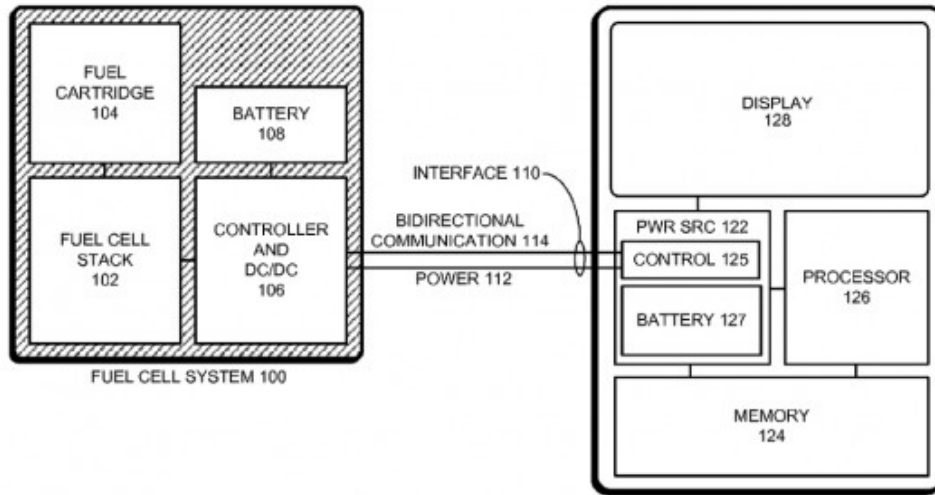
# Seeing Signals + Taking Mental Leaps

MOBILE TECHNOLOGY

Apple files patents for hydrogen fuel cell technology to power mobile devices

By Darren Quick  
December 28, 2011

10 Comments   
2 Pictures 

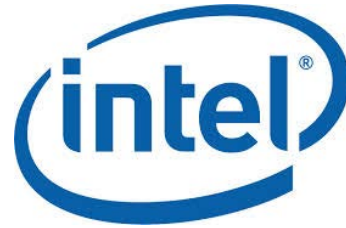


## A phone battery that lasts a WEEK is on its way: Smartphone maker signs deal to add tiny hydrogen fuel cells to handsets

- Hydrogen-powered cell can give handsets up to a seven-day battery life
- It is so thin it fits inside current handsets without making them bulkier
- Fuel cell contains a battery that creates energy from hydrogen and oxygen
- Intelligent Energy has previously tested the technology on the [iPhone 6](#)

By [VICTORIA WOOLLASTON FOR MAILONLINE](#)

**PUBLISHED:** 11:46 EST, 8 February 2016 | **UPDATED:** 04:53 EST, 9 February 2016



House Construction  
without Electrical Sockets

Hardware  
Makers Unite

Opens Fuel-cell  
Plant in China

**Walmart**   
#1 Fuel Distributor

2020

2022

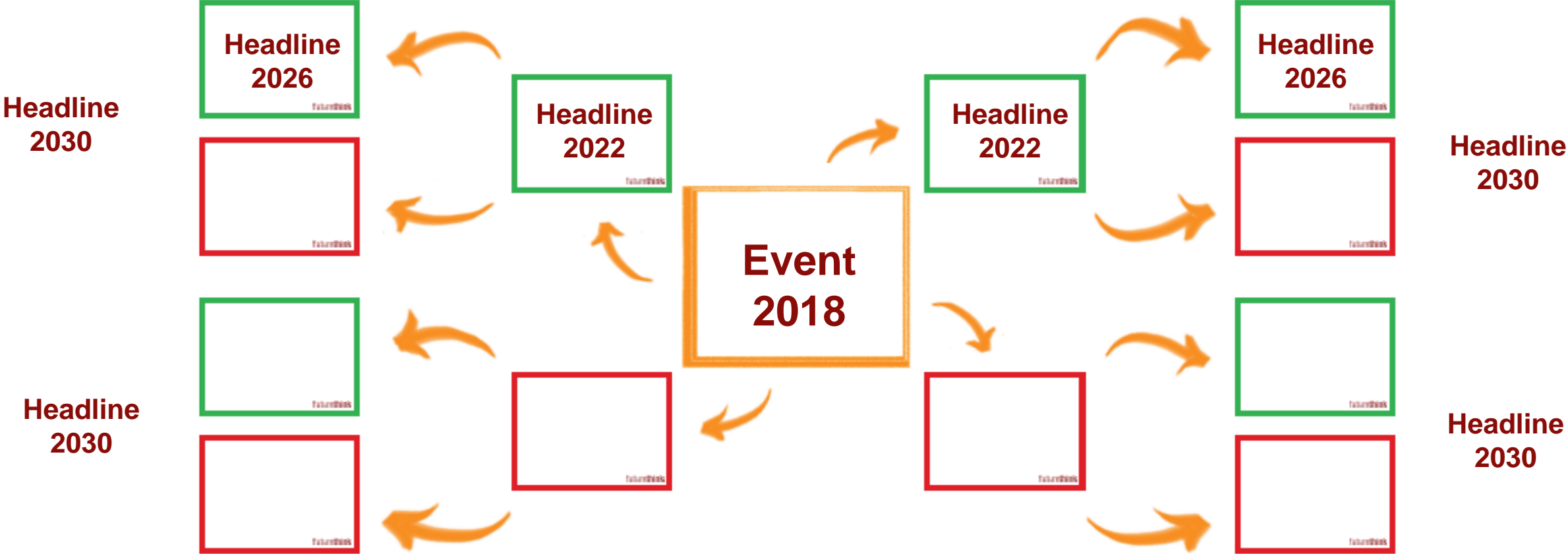
2025

2030





# Your Turn to Create Headlines from the Future!



## **Make up your Headline!**

**Starter Event from 2018 - 2022**

### **Or borrow from...**

- Pew Survey: 40% of College Undergrads Use Intelligent Assistant**
- Global Ad Agencies Launch Blockchain Ad Network; Google shares down 20%**
- Time Magazine Person of Year: Toyota Home Robot for Seniors**

**Share your most provocative path...**





**Activity**  
*Trend Cards*



**Activity**  
*Futures Wheel*



**Next Steps**

**What do we need to unlearn?  
Biggest Risk...?  
Biggest Opportunity...?  
Bridges to future...?**



Visit: [www.futurethink.com](http://www.futurethink.com)  
Email: [ggolden@futurethink.com](mailto:ggolden@futurethink.com)



Structure Brainstorming:

## Redefining the Problem



### **Activity: Tell Me Why It Won't Work!**

Looking for an activity to shock your team and surface critical, but often unspoken issues?

Design a 30 minute rapid fire meeting where you ask everyone to give reasons why a project won't work. Aim high for 20-40 reasons why an idea might... lack support, miss changing customer attitudes, et al. Then have groups vote on the best reasons for why a project might fail. Hand out prizes to top winners who provided those ideas. Now you have a list of barriers to change.

Next design a half day session where staff work against the list developing counter strategies to reframe barriers in a way that the problems can be solved. Now you have a set of potential solutions to internal and external barriers to change.