Group Resources:

Turning Signals into Stories

Session: November 9, 2018

Bay Area Community Council
Futuring Group

Facilitator
Garry Golden
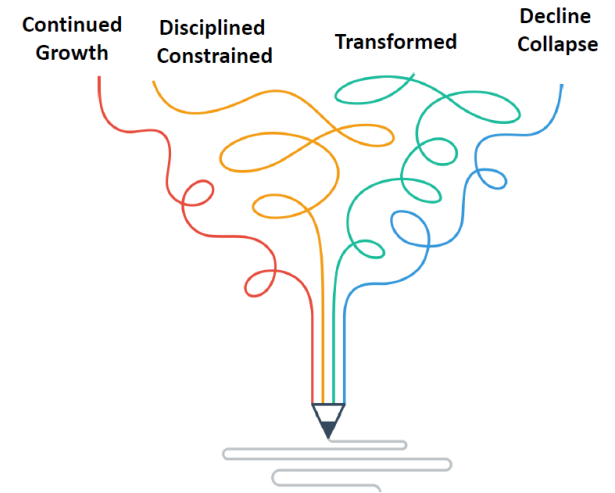
Activity – for Nov 30th
Bullet Point
Your Organization (or Sector's)
Four Futures 2030 **

Two 'futures' bulleted out would be great!
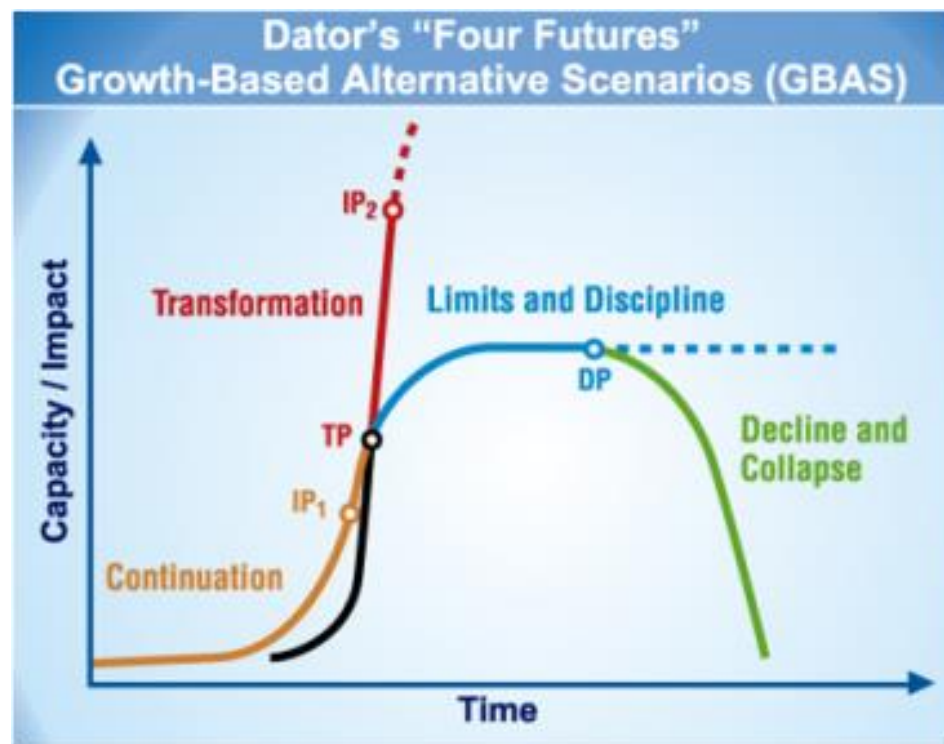Transformation / Decline-Collapse

Disciplined/Transformation

Four Futures

Signals to Story Approach

Using one or several signals as the foundation of a
Four Futures story:

❑ Continuation
❑ Constraint (Disciplined)
❑ Transformation
❑ Collapse

Dator's "Four Futures"
Growth-Based Alternative Scenarios (GBAS)

Four Futures: <u>Name of Transformation Scenario</u>

MASTERFLEET

The Transformation Story

- ❑ In 2021, Congress passes mandate to transform trucking and heavy equipment industry. Accelerate H2-Electrification and autonomous trucks.
- ❑ In 2023, Schneider commits to purchase 500 Nikola H2 Trucks.
- ❑ In 2025, Masterfleet launches industry-wide EV Technical training program.
- ❑ In 2029, Nikola invests $10M for Masterfleet stake; Opens training center as national destination.
- ❑ By 2030, Masterfleet revenues soar as Electric Truck contracts include maintenance and uptime-based business models.
- ❑ In 2045, last diesel engine oil change at Masterfleet service center

Signals to Support this Scenario

- ❑ Signal Title/Link
- ❑ Signal Title/Link
- ❑ Nikola launches Hydrogen Electric Truck for European Market, <u>Nikola Press Release</u>

Four Futures Thinking: Continued Growth (Continuation)

Continuation is story based on signals that reflect *known knowns* and extrapolation of generally positive forces. This scenario may be viewed as the 'baseline' (extrapolation) or 'official future' which reflect the shared (often unspoken) assumptions of an organization.

When you create the Continuation story it should include
❏ Familiar stakeholders and partnerships
❏ Services & value offerings, and customer needs
❏ How you overcame new twists & turns along the way

Bullet Point Story should include challenges of new social norms and market dynamics but inevitably reveal how your organization leverages its core capabilities and 'rides the wave' of change.

Four Futures Thinking: Disciplined/Constrained

Disciplined/Constrained is a story of the future where your organization continues to operate in a traditional manner despite evidence that the world around you has shifted. Key organizational challenges are maintaining relevance and returning to growth.

When you create the Disciplined/Constrained story be sure to reveal:
- ❑ Signals that suggest your current services and value offerings are less relevant or aligned to market and client needs.
- ❑ Signals that challenge organizational culture or processes.
  The story's tone is not fatalistic but morale and expectations for growth are muted. You will survive but not thrive.

Bullet Point Story might surface how the organization's inability or refusal to change has hit a 'limits to growth' phase. The story element tone is not fatalistic but morale and expectations for growth are muted. You will survive but not thrive.

Four Futures Thinking: Transformed

Transformed is a scenario archetype where the world and organization have gone through an era-step change. Think caterpillar to butterfly – or Industrial to Information Economy.

The story should reveal how the organization became something different. This may be the emergence of a new department or team. Or it might be a wholesale reinvention of the entire organization culture or value proposition.

The story tone is not utopian. There should be new problems and challenges that appear as expected – or as unintended consequences. Leave some issues unresolved.

Bullet Point Story should show how the organization is empowered and feels in control of its future in this new world based on a new direction. Avoid being utopian and include new challenges you must confront.

Four Futures Thinking: Decline/Collapse

Decline/Collapse is a scenario archetype where the world has changed and your company has not.

The Collapse Story connects signals that suggest:
❑ Your imminent demise (e.g. Shut down organization; Merger)
❑ An End of Growth (A Burning Platform)
❑ Stagnation is challenging your culture

Bullet Point Story elements should describe both external conditions (outside-in changes) and internal actions (inside-out changes). You might also emphasize inactions or decisions not made. The story may describe innovative efforts that failed and did not succeed as you attempted to transform the organization.

Four Futures: Tips for Story Structures

Find Your Most Compelling Signals as Inspiration for One or All Four Futures

Experiment with Story Structures
- ❑ Multi-paragraph stories
- ❑ **Bullet points of storyline elements**
- ❑ Visualizations that communication the message

Integrate Multiple Signals
- ❑ Direct References to Signals or Create Fictional Extensions of the Signal
- ❑ Support the Signals with other themes across the STEEP categories of change:

    Society
    Technology
    Economy
    Environment
    Politics (Legal)

Institute for the Future

ALTERNATIVE FUTURES SCENARIOS

Growth, constraint, collapse, and transformation are four distinct but plausible directions of change identified by Jim Dator, director of the Hawaii Research Center of Futures Studies, in his work on alternative futures scenarios.

GROWTH:

current trends and conditions, both good and bad, continue to grow as they have in the past.

CONSTRAINT:

society, either led by governments or grassroots efforts, takes austerity measures to constrain the behavior of groups of people or individuals.

COLLAPSE:

change in which major social systems are strained beyond the breaking point, causing system collapse and social disarray.

TRANSFORMATION:

fundamental transformation of a society or system that signals a break from previous systems.

While linear growth represents one potential shape of the future, we can learn from recent history that constraint, collapse, and transformation are other ways of thinking about how change can occur. For example, China averted an infrastructure breakdown by **constraining** population growth with its one-child policy. Western housing and financial markets **collapsed,** surprising those who assumed past trends would continue. And the Internet and, more recently, social media, **transformed** the way the world communicates information—leaving traditional media outlets scrambling to adapt.

We can also find examples of these four directions of change in the global food web's history:

Source: Flickr user Paco Calvino

GROWTH: In the early 1970s, the United States Department of Agriculture adopted policies that encouraged farmers to produce as much food as their land could bear. This reversed decades of government caps on production. The ensuing growth in the availability of commodity crops like corn helped bring down the prices of animal feed, and ushered in a boom in meat consumption. Throughout the world, obesity has increased dramatically, while the number of people who go hungry recently passed the ominous milestone of one billion globally.

Source: Library of Congress

CONSTRAINT: The chaos and violence of World War II brought with it widespread interruptions to food supplies as part of coordinated efforts to use hunger for military advantage. To manage this challenge, countries including the United Kingdom and United States imposed rationing systems to keep food prices in check, ensure equitable distribution of food supplies, and mitigate the threat of widespread starvation.

Source: State Library of New South Wales

COLLAPSE: The Dust Bowl of the 1930s resulted in a collapse in food supplies. After years of wet—and productive—weather, plains states and provinces in the United States and Canada were hit with a severe drought. This, along with problematic farming practices, saw fertile soil give way to dust, which displaced millions of people and led to widespread poverty and hunger. Today, fisheries worldwide are facing various degrees of collapse.

Source: Flickr user Vanessa Stewart

TRANSFORMATION: In the past few decades, refrigeration has paved the way for stable food storage, ready-to-eat meals, and massive global trade in perishable fruits, vegetables, and meats. In turn, this new technology has fundamentally reshaped our relationships with food, and with each other. Family members can individually heat up their own dinners; meals can even be eaten alone in cars. Refrigeration has also enabled a globalization of taste. For example, sushi can be bought all over the world—even in places thousands of miles from a source of fresh fish.

Alternative futures scenarios based on these directions of change—growth, constraint, collapse, and transformation—provide a useful framework for considering the future of the global food web and how finding, buying, and consuming food might evolve in the next decade.

Four Futures

GROWTH — WELL-BEING IS PRODUCTIVITY
and more choice increases experiential well-being

SCENARIO DYNAMICS
- Economic growth occurs in localized booms and busts.
- GDP and economic growth paradigms remain dominant.
- Global consumption increases.
- Rich-poor gap grows.
- Innovations in science, finance, and markets are siloed.

KEY VALUES
- Financial and material expansion
- Personal responsibility
- Productivity
- Material comfort
- Opportunity and liberty

The economy continues to struggle and businesses reposition themselves in an increasingly crowded well-being marketplace. The expansion of well-being choices and the challenges of aging and chronic illness spur people to see health as a core component of every choice. Health becomes increasingly valued but also increasingly hard to attain.

Health remains primarily a personal responsibility—one beyond the capabilities of people on shaky financial ground. While wealth and technology expand the well-being options for a growing upper-middle class in global economies such as China,

Brazil, and India, changes to diet and lifestyle also lead to increases in obesity and chronic illness. Growing disparities in wealth mean that the poorest have even less access to basic health inputs.

The marketplace further complicates simple decisions, adding new information literacies to everyday life. With so many technology-laden, connected experiences—from cars to food to clothing—reorienting around health and well-being, consumers gravitate toward products that provide immediate benefits, even if those products do little to improve (and may even harm) health in the long run.

bodies
Expanding Markets — Well-being markets grow as people purchase products and services based on their touted health benefits.
Creature Comforts — People pay more attention to material contributions to physical and mental health, seeing comfort and tangible near-term benefits as cornerstones of well-being.
Producing the Self — Well-being consumption becomes the means of gaining a competitive edge and refining an ever more augmented and productive body and self-image.

networks
Widespread Inequality — Well-being inequity increases, and while the more affluent use their networks to expand their global options, everyone else navigates a landscape of expanded risk.
New Authorities — Abundant, confusing choices drive people to rely on new well-being authorities—with or without formal qualifications—to vet efficacy claims.
Commercialized Networks — More networks are organized around commercial services and become key resources for innovation in financing, services, and product marketing.

environments
Stressful Choices — The health decision-making environment, full of complexity and contradictions, is a major source of stress in everyday life.
Optimized Healthspans — People accept the limits of medicine, living with trade-offs in managing chronic conditions and fundamentally shifting their attitudes toward end-of-life and palliative care.
Diverging Growth Strategies — Increasing numbers of communities sacrifice local well-being resources and long-term sustainability in pursuit of short-term growth.

CONSTRAINT — WELL-BEING IS COMMUNITY
and taking care of others increases personal well-being

SCENARIO DYNAMICS
- Economic indicators remain weak and experimentation with local currencies rises.
- Priorities shift from economic growth to maintaining stability and comfort.
- Sustainability paradigms dominate market and policy activity.
- Policies, limits, and quotas reinforce restraint and optimization.
- Games and participatory monitoring connect actions to environmental effects.

KEY VALUES
- Environmental awareness
- Personal, household, and community restraint
- Stability and aversion to change
- Prevention and optimization
- Making difficult trade-offs

In a world where resource constraints—in domains such as energy and potable water—place practical limits on everyday life, new practices to optimize well-being increasingly focus on maintaining stability and stretching scarce resources. As sharing of resources and knowledge grows, the community leaps to the forefront of well-being.

Restraint and frugality are grudgingly accepted as virtues. Recognizing limits contributes to a shift in values surrounding longevity, as palliative care is seen as increasingly central to medicine. Creativity, happiness, and personally optimized well-being become major priorities for people and governments.

Environmental objections to the pharmaceutical and hospital industries lead people to avoid them whenever possible, and food becomes the favored pathway to health and well-being.

High unemployment persists, engendering small-scale experiments that redefine the meaning and nature of work. Communities explore ways to exchange value through local currencies and networks of social production. People who cannot afford the medical care they need start skipping routine care and simple interventions, in effect making cancers and other diseases far more deadly.

bodies
Changing Behaviors — Widespread behavior change efforts focus on reducing energy, water, and medical resource use.
Optimized Healthspans — People accept the limits of medicine, living with trade-offs in managing chronic conditions and fundamentally shifting their attitudes toward end-of-life and palliative care.
Transition Anxieties — The difficulty of accepting resource and other limits leads to increased levels of anxiety, depression, and other mental health challenges.

networks
Participatory Well-being — Well-being shifts from a largely individual to a largely communal pursuit as people cultivate social connections and are mindful of their impact on the commons.
Social Priorities — People rely more on sharing and commons-based action, and less on market sustainability offerings, to stretch well-being resources and reduce spending.
Sharing for Care — Both medical care delivery and scientific research production are increasingly based on sharing resources, personal data, and health experience.

environments
Risk and Resource Transparency — Participatory mapping reveals environmental risks and underutilized resources, and mitigates resource-based health challenges.
Local Resilience — Environmental constraints and the quest for local resilience drive localization of food and manufacturing supply chains as well as an expansion of good-Samaritan training initiatives.
Mandatory Green Health — The medical industry is forced to adopt greener practices, from super-efficient building retrofits to avoiding single-use plastics and other resource-intensive products.

COLLAPSE — WELL-BEING IS SECURITY
and escape from real and perceived threats

SCENARIO DYNAMICS
- Local and regional collapses begin to interconnect and cascade.
- Social, environmental, and financial resources dwindle.
- Public and private bankruptcies drive economic dislocation.
- Low-transparency monitoring maintains security.
- Hoarding, shadow economies, and luxury markets take hold.

KEY VALUES
- Safety and risk avoidance
- Family integrity
- Opportunism
- Keeping up appearances
- Competition for resources

While natural and human disasters devastate many regions, the resources that produce good health—from housing security to access to nutritious foods to social cohesion—are decimated everywhere. Many cities, states, nations, and private enterprises fall into bankruptcy. Many more industries—including health care—consolidate, reducing people's choices; large surviving organizations are not responsive to radically diverse needs in different localities. Trust in institutions is at an all-time low, with corruption, stockpiling, and counterfeiting becoming ubiquitous.

In the face of widespread scarcity and hoarding, violence and organized crime increase. People retreat into securing basic needs and safety for themselves and their families, and look for well-being in any temporary peace of mind. Social pressure and people's desires to escape from harsh realities become vital pillars of formal and informal economies. Luxury markets persist as the gap between rich and poor grows wider, and those who can afford it use private supply networks to obtain luxury foods and medical necessities. Regional disparities spur migration and medical tourism—though well-off communities seek to exclude outsiders.

bodies
Trauma of Uncertainty — Constant uncertainty and a lack of steady access to basic resources leaves biological imprints of stress and anxiety on large numbers of people.
Safety First — People adopt self-quarantining strategies and manage their health by avoiding unsafe food and health products.
Mobile Information — Dependence on—and cost of access to—digital health records accelerates as natural disasters destroy paper records.

networks
Tight-knit Networks — People are more reliant on close circles of friends and family, and trust becomes a highly valued resource, in part because denial and deceit are widespread.
DIY Medicine — Do-it-yourself medicine websites stand in for over-whelmed hospitals, and folk medicine propagates as people form ad hoc networks to share health knowledge.
Mobile Health Access — Mobile health and wellness services—run off personal devices, kiosks, and retrofitted vehicles—are increasingly common in neighborhoods of all economic classes.

environments
Ecological Disruptions — Extreme weather and natural disasters force people to migrate and increase the threats of infectious disease, leading to vicious immigration debates and futile quarantine attempts.
Well-being Enclaves — Oases of well-being, areas still rich in financial or health resources, seek to protect their benefits from the less fortunate.
Tough Choices — Communities are forced to choose between spending on long-term health or on security and emergency recovery, as hospitals decide whether or not to maintain public safety-net programs.

TRANSFORMATION — WELL-BEING IS ECOLOGICAL
and collaboration builds capacities for holistic well-being

SCENARIO DYNAMICS
- Social production transforms traditional organizations.
- Participation shapes economic activity.
- Governance, manufacturing, and services follow small-scale, distributed models.
- Bio-based innovation and ecological management paradigms gain visibility.
- Open work networks and crowd-sourced unbundled tasks.

KEY VALUES
- Holistic perspectives
- Local resilience
- Reciprocity and openness
- Sincerity and accountability
- Sustainability and resource renewal

People are increasingly creating well-being in a systematic way—from the molecular to the planetary scale. They organize themselves in fundamentally new ways to create resilience in local communities—and connection to global processes. Well-being is about feeling aligned at all scales with a world in the process of healing itself.

Some individuals and institutions struggle to maintain the status quo. While governments, NGOs, and corporations increasingly strive to assign accurate values to personal and environmental contributions, others still work to externalize costs and tightly control assets. Monetary incentives to

treat symptoms of illness in perpetuity are under fire as players shift to delivering appropriate and accountable care. A growing number focus on root causes, offering personalized windows into—and services for tinkering with—individual epigenetic processes.

Self-care and formal medicine focus on teaching skills to help people interpret personal data and navigate their environments, while city environments and food systems are rebuilt to provide optimal well-being. Localized models of micro-employment and on-site service provision ensure a high-participation economy.

bodies
High-resolution Bodies — The majority of people have at least some access to high-resolution views of their genetics, epigenetics, and chronobiologies, giving them detailed perspectives of their personal risks and assets.
Integrated Care — Systemic understandings of how bodies fit into surroundings spur a move from biomedical definitions of health to more holistic, integrated visions of care.
Biological Uncertainty — Formal professionals and informally educated gurus emerge to help people make sense of the high-resolution details of their bodies.

networks
Contagion Health — Most people are aware of the effect of friends, neighbors, and acquaintances on well-being, and some individuals and communities become scapegoats for social and ecological imbalances.
Sharing as Caring — People protect themselves from stressful events and information anxiety by sharing their well-being observations with larger support and research communities.
Networked Medicine — The role of medical institutions shifts from treating individuals to convening networks of people with common social, health, and biological traits to care for and support each other.

environments
Resource Footprints — People are more attuned to the idea that everything has an effect on large and small scales, and attempt to preserve and renew local watersheds, soils, and food varieties.
Ecological Design — Ecological thinking becomes central to engineering and design, and rooms, buildings, and even whole cities are retrofitted to keep temperature and humidity at beneficial levels.
Living Assets — Recognizing the assets already in the environment, facilities of all kinds—but especially medical facilities—start integrating life forms, including beneficial microbes, rather than pursuing sterile environments.

signals

Whole Foods is opening members-only "wellness clubs" to promote healthy eating and further expand its reach into health and well-being. source: Whole Foods and PFSK

Nissan is redesigning cars to build in health features such as seats that enhance blood flow and air vents that release Vitamin C. source: Nissan

Fireside is a Chicago restaurant that started accepting bartered goods and services for food. source: Fireside Chicago

SeeChange Health Insurance Company Issues Park Prescriptions, a program of reimbursements for state park memberships. source: SeeChange Health and Flickr user Miguel77

A coalition of doctors has run pilot projects in Haiti with the iChart iPhone app, in hopes of developing an international standard for electronic medical records in disaster situations. source: PMMF and the U.S. Army

A recent University of Wisconsin study suggests that temperature increases could lead to spikes in diabetes and other diseases—with the potential risks being distributed disproportionately to the very old and young. source: news.wisc.edu/18494

BioCurious.org — A hackerspace for biotech. Experiment with friends. Join the biotech revolution. BioCurious is a coalition of graduate students and amateur scientists trying to democratize genetics and biotech research. source: BioCurious via Kickstarter

The Biology and Built Environment Center at the University of Oregon explores the "built environment microbiome" and its interactions with human health and sustainable architecture. source: biobe.uoregon.edu

Assessing Four Futures – Key Questions

When written, engage colleagues in answering strategic questions:

❑ What signals or trends have you seen that might support the future described in this scenario?

❑ What are the internal implications for our partners and business teams?
   What might our clients do differently to thrive in this future?

❑ Where might the story go from here? Write a few extensions of this future.

❑ What indicators or milestones might we monitor that represent a tipping point of this future?

Force Field (Push vs Pull) Analysis

| Scenario Name |
| :---: |

Restraining Forces (Pulling You Away) ←   **Driving Forces (Pushing Toward Scenario)** →

- 10	- 5	- 1	Force	+1	+5	+10
- 10	- 5	- 1	Force	+1	+5	+10
- 10	- 5	- 1	Force	+1	+5	+10
- 10	- 5	- 1	Force	+1	+5	+10

Assessing Four Futures – Force Field Analysis

Tools such as *Force Field Analysis* ask you to rate "push-pull" forces that might be holding the organization back within a particular scenario.

'Forces' are extracted from the story. They might be: Rise of Automation, Shifting Client Expectations, New Service Models, New Policies, et al.

Force Field Analysis

Scenario Name

Restraining Forces | **Driving Forces**

| +10 | +5 | +1 | **Force** | +1 | +5 | +10 |

| +10 | +5 | +1 | **Force** | +1 | +5 | +10 |

| +10 | +5 | +1 | **Force** | +1 | +5 | +10 |
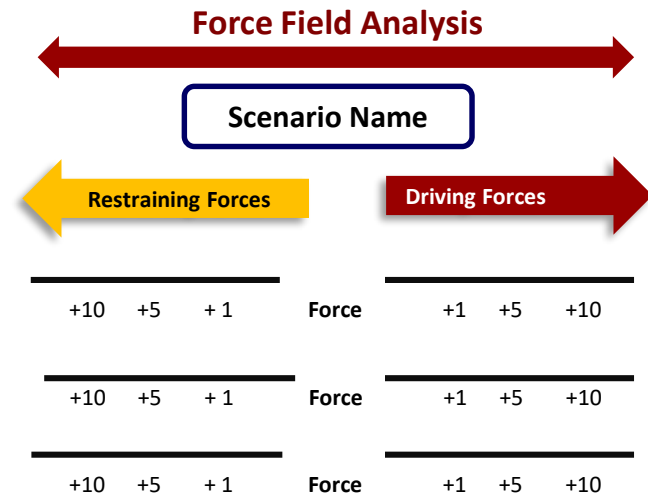
Steps

1. Review the Scenario / Issue

Have your team review the scenario – discussing the new set of assumptions you are being asked to embrace.

2. Describe the Forces

Have your team write out the forces of change. Place one force on each line.

3. Rate it / Weight it!

Next, have each person provide a quantitative value to each force that reflects the strength of the force. Forces of change that have strong stakeholder influence, policy support or favorable factors receive the highest weight.

Option 1 – Weight each with a number (e.g. 1-10; 1 being weakest; 10 being strongest)

4. Re-arrange

On a new template average out the Rate/Weight factors then put the forces of change that have the most influence at top; weakest at the bottom. When your Force-field analysis chart is complete you will have a sense from your team how to identify challenges and opportunities.

5. Address Challenges & Opportunities

The next step is to discuss strategic ways of confronting negative forces (obstacles to change) holding you back; and ways to reinforce positive momentum pushing you towards the scenario.

Four Futures: Name of Transformation Scenario

The Transformation Story

- ❑ In 2021…
- ❑ In 2023….
- ❑ In 2025…
- ❑ In 2029…
- ❑ By 2030…
- ❑ In 2045…

Signals to Support this Scenario

- ❑ Signal Title/Link
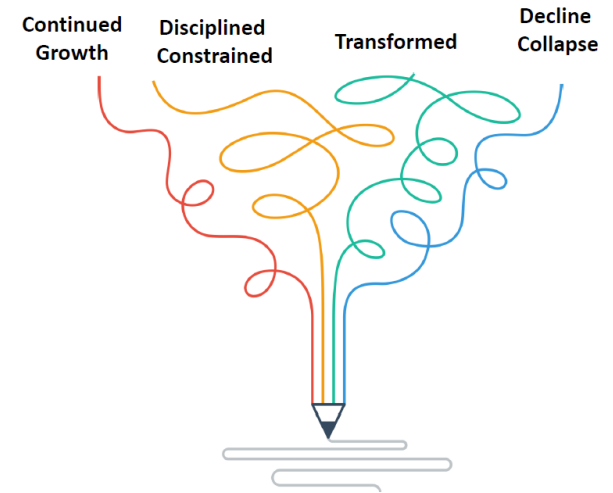- ❑ Signal Title/Link

Activity – for Nov 30th

Bullet Point

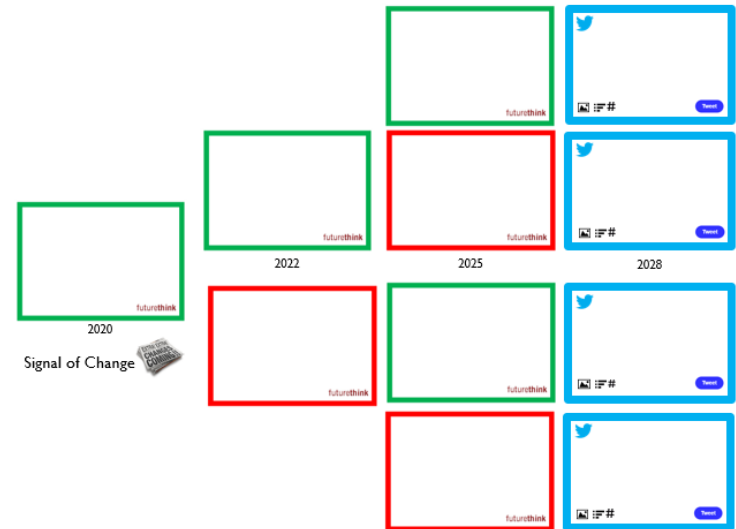Your Organization (or Sector's)

Four Futures 2030 **

Two would be great!
Transformation / Decline-Collapse
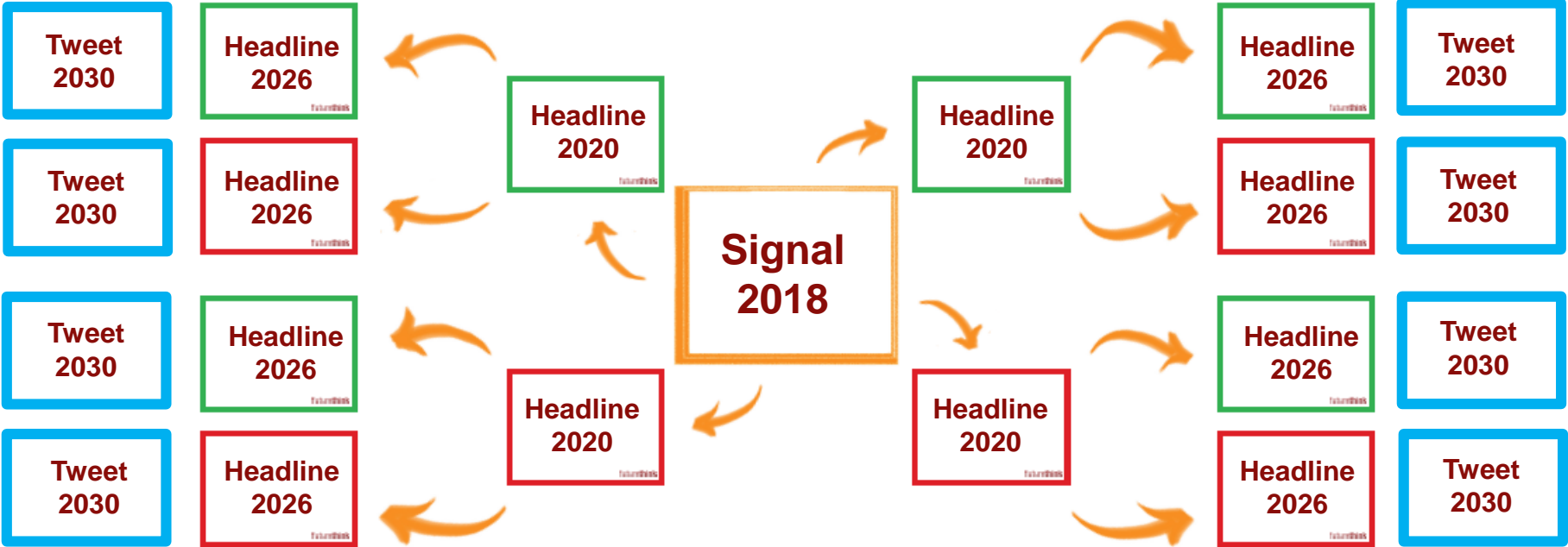
Disciplined/Transformation

Continued Growth

Disciplined Constrained

Transformed

Decline Collapse

Activity #2 - for Nov 30th
Transform a Signal into a Futures Wheel for 2030

The Futures Wheel

** Popularized by Joel Barker

Technique for Taking Mental Leaps

**Signals Plus
2nd & 3rd Order Implications**

- ❑ **Competition**
- ❑ **Sector Structure**
- ❑ **Business (Operational) Models**
- ❑ **Client Experiences**
- ❑ **New Service Models**
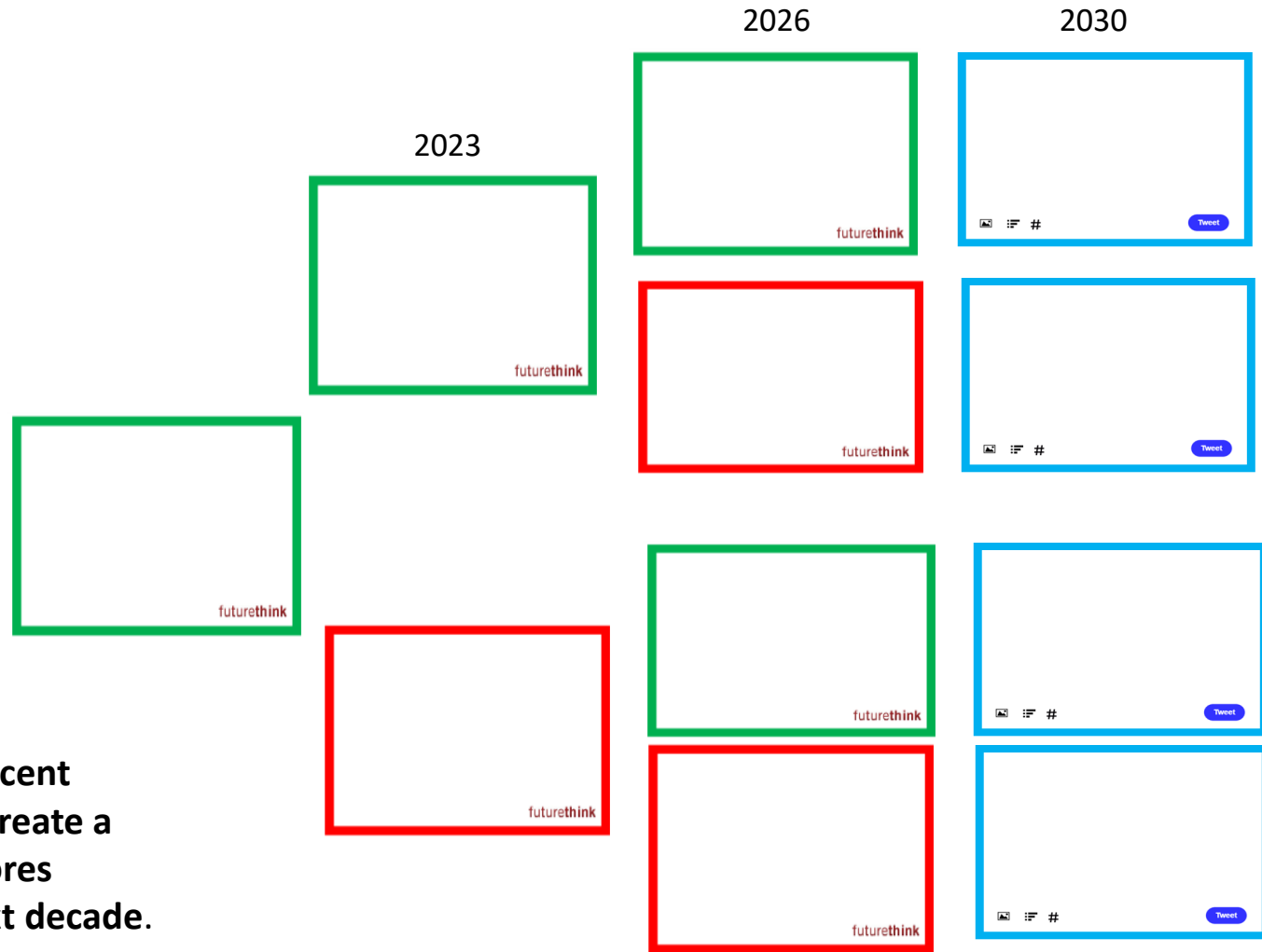- ❑ **New Regulations**
- ❑ **Business Processes**

**Story Format:
News Headlines**

Sept 2023

Apple buys Disney
announces age of retail
experience entertainment

Activity #2 – Complete a Futures Wheel

2026

2030

2023

Stories based on Mental Leaps

Take one of your more recent provocative signals and create a Futures Wheel that explores implications over the next decade.

Fill in these Blanks

2023

2026

2030

Signal Headline		

Signal Headline
futurethink

2023

Positive / Growth Headline
futurethink

Negative / Challenging Headline
futurethink

2026

Positive / Growth Headline
futurethink

Negative / Challenging Headline
futurethink

Positive / Growth Headline
futurethink

Negative / Challenging Headline
futurethink

2030

Your Organization's or Key Stakeholder's Response
Tweet

Your Organization's or Key Stakeholder's Response
Tweet

Your Organization's or Key Stakeholder's Response
Tweet

Your Organization's or Key Stakeholder's Response
Tweet

❑ **Email Garry with drafts if you need some help taking leaps!**

Tips on Creating Compelling Headlines

❑ **Bring it to Life**
Use names of known stakeholders, places and companies

❑ **Leap, Don't Tweak**
Headlines should capture disruptive leaps of innovation

❑ ***Focus on the Art of Double Take***
At first glance the headline feels real. Moments later they look back to re-read the headline.

❑ ***Revise Headlines as You Push Out Along the Wheel***
Elevate any initial generic statements with headlines that embody the change and bring it to life:

Generic	Bring it to Life
Traffic accidents down 30%	Nationwide Insurance goes bankrupt
AI destroying service jobs	India passes Universal Basic Income Law as automation decimates workforce
Voice search at 80%	Pew Survey: Millennial Parents fear their children won't learn to text

The Futures Wheel: Small Group Activity
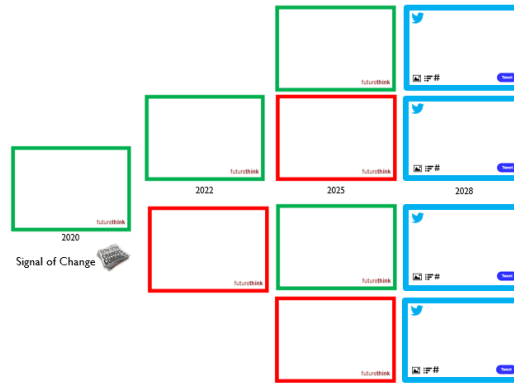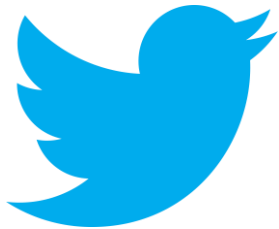
Overview, Example & Your Signal

Teams Work with Blank Sheet or White Board

Create a Provocative Futures Wheel

2020 – 2022 – 2025 - 2030