Foresight 101

The Art and Science of Thinking About the Future

Workbook Overview

This workbook is designed to accompany the main *Leading with Possibility* slide deck presentation. It also contains information, guidelines and resources for you to continue learning after the workshop.

Major sections of the workbook include:

- Foresight 101   [Era-based Analysis]
- Identifying and Monitoring Change   [Horizon Scanning; Trendscaping]
- Exploring Implications   [Futures Wheel, Scenario Platforms and Trend Cards]
- Communicating the Need for Change   *[Backcasting]*

Workshop Learning Objectives

- To understand the fundamental applications of strategic foresight within organizational environments
- To explore key drivers of change and emerging issues related to the future of arts/education organizations
- To learn frameworks and techniques for applying foresight on your own and within small teams

Workshop Approach to Fundamental Stages of Foresight:

Step One	Step Two	Step Three
Identifying and Monitoring Change	**Exploring Implications**	**Communicating Need for Change**

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

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

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

Foresight: Institutional Environments

Foresight refers to our ability to construct images of plausible, possible, and preferable futures based on a formal study of change. It is commonly referred to as: futures studies, strategic foresight, futurism, et al.

Strategic foresight is used to improve decision-making related to potential opportunities and threats that exist beyond present-day plans, market conditions or organizational capabilities. In recent years foresight activities have started to shift from something limited to executives offices, to being practiced by *business* units and staff across the organization.

In the practice of foresight we apply a mixture of qualitative and quantitative techniques used in a wide range of applications from forecasting, to scenarios and visioning. Insights are based on a range of disciplines from sociology, economics, organizational behavior, technology forecasting and systems modeling.

The definition of *future* time horizons vary based on clients and industry. Governments and companies involved in infrastructure and natural resources will typically plan using 10-30 year time horizons. Organizations involved in consumer products, services and experiences typically view three to seven years as the furthest practical time horizon.   Non-profit organizations tend to focus on time horizons linked to funding resources. Alternatively, news companies, stock markets, celebrity/ad campaigns and consumer attitudes refer to time horizons based on seconds, days or weeks ahead.

The aim of strategic foresight is to avoid single-point forecasts (e.g. predictions) and create a range of plausible outcomes (e.g. scenarios within a *cone of plausibility*) that help us avoid surprises and expand our ability to respond effectively when changes do occur. Foresight is a skill set and mindset that needs to be cultivate and developed over time. This program is designed to teach the foundations for self-directed and professional community-based learning.

The Evolution of Foresight & Parallels with other Emerging Disciplines

In the early 20th century the study of economics and psychology shifted from fringe and misunderstood areas of academic study to mainstream disciplines that influenced all aspects of public and private life. Today the two fields are integrated into *neuro-economics* and shape branding and marketing efforts across most Fortune 500 companies. A similar fringe to mainstream transition is occurring around foresight and the study of social change. Foresight is becoming more closely integrated into formal strategy efforts and is commonly referred to as *the front-end of innovation*. The history of foresight, however, dates back to the early 20th century.

- **1930s – Social Change and Role of Technology**
  Sociologist William Ogburn writes *Recent Social Trends* which explores the notion of a cultural lag as society adjusts to technological change of the industrial age.
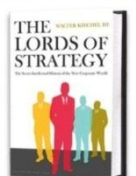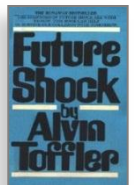- **1950s – Scenario-based Decision Making**
  Hudson Institute Founder Herman Kahn works with government leaders to use scenario-based planning at the height of threats associated with the Cold War.
- **1970s – Systems Thinking and Principles of Interdependence**
  Authors of the book *Limits to Growth* use systems-based modeling to understand effects of non-linear change from the relationships of population growth, industrial production, and natural resource management.
- **1980s – Accelerating Change and Competitive Advantage of Strategy**
  Birth of modern day *strategy* field with release of Alvin Toffler's *Future Shock*, John Naisbitt's *Megatrends,* and emergence of prominent strategic advisory focused consulting firms: McKinsey and Co., Boston Consulting Group (BCG), and Monitor Group.

When asked what single event was most helpful in developing the
Theory of Relativity, Albert Einstein replied, "Figuring out how to think about the problem."

Era- based Analysis: Key Learnings

- Era-based analysis helps us to recognize threats and opportunities associated with the growth cycle of major platforms for products, services and social paradigms.
- While incremental innovation preserves assumptions of the current day business era, transformative innovation creates new assumptions designed for the emerging era of technologies, policies, and consumer behavior.
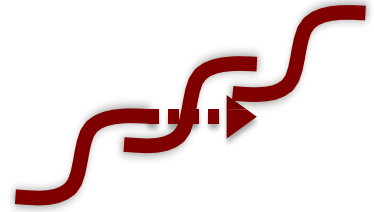
Era-based Analysis: Overview

An era is a period of time when our assumptions about how the marketplace functions remains consistent. Era-based analysis is often framed around an *S-curve* development model to change that describes the increase of performance (X-axis) over time (Y-axis). There are three stages of change that signal the limits to innovation within the era: slow change, accelerating change, and a plateau of change.

Organizations use *S-curve* models (*Ref: Slide Deck*) to anticipate the falling price of technologies, the rate of consumer adoption, and the eventual plateau of performance and innovation. A balanced innovation portfolio should include products/services and experiences suited for incremental innovations targeted to the current era, as well as many *small bets* on ideas relevant to the emerging era.

Related Era-based Concepts:

Experience Curve (Learning Curve); Crossing Chasm Adoption Model (Geoffrey Moore); Low-end Disruption (Clayton Christensen, Author of *Innovator's Dilemma*); Gartner Hype Cycle™

Guidelines to Consider:

Clarify Scope & Timelines
How are you going to define the time horizons of past, present, and future? Are you focusing on major or minor era transitions? Specific divisions or whole organization?

Determining Indicators / S-Curve Stages
To determine location within the S-curve select from a wide range of indicators (e.g. startups, patents, investments, growth rates vs market share) that reveal insights into real-world impact.

Integrate with Strategic Planning Efforts
Identify ways to keep this framework current as a living document and part of the strategic planning processes that exist within your organization.

Assessing Era-based Innovation Strategies

When thinking about your opportunities and threats to era-based change, consider how the speed of innovation and market adoption may be increasing or slowing down along the way to the plateau.

As we look at the limits *to incremental innovation* within the current era, what are:
- Major assumptions to be challenged?
- Metrics that seem less relevant to success?
- Sources or types of fear about change?

As we look at the *transformational innovation* within an emerging era, what are:
- New assumptions to explore?
- New metrics to consider?
- New needs we can create or anticipate?
- New models for piloting prototypes?

Era-based Analysis - Worksheet

This worksheet is designed to help your team identify past and present eras of business – and sources of change so that you can better anticipate potential disruptions in the future. It is typically applied during the early stages of strategic planning to help distinguish between incremental and transformative goals. In each box, write down a few key bullet points about different eras of your company and sector. First focus on the 'past' era preceding the current one; move left to right, then down each row past to future. Lastly, examine the Disruptive Elements boxes carefully to brainstorm characteristics of the future era your company could enter over the next few years.

	Past	Present	Emerging
Vision The vision and mission guiding your organization			
Society / Markets Describe dynamics of culture and social change that influenced your organization's mission			
Product/Service Cycle What / how do you *provide*; How fast do *customer* demands change? What was considered innovative?			
Customers / Audience Describe your customer segments? What are their needs and lifestyles?			
Partners Who were your partners? (Successes? Failures?)			
Minor Eras Were there small but significant changes within the organization? Industry?			
Disruptive Elements Disruptive elements that led to the next major era? What are the 'limits to growth' within this era?			

In times of change, learners inherit the Earth, while the learned find themselves
beautifully equipped to deal with a world that no longer exists. – Eric Hoffer

Identifying and Monitoring Change: Key Learning

- Scanning is a fundamental activity of foresight and helps to expand the quality of inputs which challenge our thinking about changes happening in the world.
- Organizations use scanning to support innovation and strategic planning activities – as well as create a culture of curiosity.

Overview: Horizon Scanning

Horizon Scanning or Environmental Scanning describes the identification and monitoring of *change over time* that might represent a future opportunity or threat. A balanced approach to horizon scanning includes both continuous and project-specific efforts; and is based on a wide range of inputs that come from the **STEEP** categories of change: **S**ociety (Culture and Demographics), **T**echnology (Info, Bio, Materials), **E**conomics (Macro, Micro), **E**nvironment (Energy and Natural Resources), and **P**olitics (Legal, Regulatory).

There is one major *outcome* and one major *output* to scanning. First, we are focused on expanding our knowledge base on a cross section of domains (e.g. demographics, technology, policy). The *outcomes* goal is to learn about important things that challenge conventional thinking. Second, we are looking to produce *outputs* known as **scan hits** which are evidence of change in the world that might have relevance to the future of our industry.

Scan hits (alt: Signals or Signposts) can be applied to formal strategic planning efforts—or used for less formal brainstorming on long-term implications of change using tools such as the *Futures/Implications Wheel*.

Scanning: Criteria and Considerations

In general, criteria for *scan hits* should be judged on the following elements:

- Source Credibility
- Newness/Uniqueness
- Degree of Uncertainty
- Degree of Impact
- Momentum (e.g. trends converging, 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

Types of Scanning Projects

- **Horizon or Environmental Scan**—a continuous or periodic survey of broad global changes

- **Emerging Issues Scan**—a targeted survey of issues that will require a significant public or private policy decision

- **Industry or Sector Scan**—an in depth, industry specific survey

- **Technology Scan**—specific focus on technology platforms and related issues shaping culture, policy, and product development

- **Delta Scan**—survey using primary inputs, usually from a group of experts from diverse fields

- **Sigma Scan**—a summary survey of existing publicly available horizon scanning documents

How Do I Begin? Keep it Simple and *Social*

Scanning will inevitably include both formal and informal team-based activities. Keep in mind – scanning should be fun and enriching – not a chore. We recommend the following steps as a way to ensure that self-directed scanning will be effective and find real-world applications within your organization.

Step One: Integrate Scan Hits within collaboratively built *Trendscape* Maps

Working with colleagues, establish your *Trendscapes* as the frameworks for monitoring signals of change. The maps will establish a set of larger STEEP (Society, Technology, Economics, Environment, Politics) categories and sub-trends along with buzzwords and resources that you and your colleagues will share as your guide.

Step Two: Schedule Social Scanning Activities

Individuals may choose to set their own schedule for scanning, but it is essential to dedicate time for social scanning activities that give structure for sharing results. Consider forming a **Scanning Club** (or *Signals Team*) that meets once a week or once a month to share top *scan hits* and discuss how they might have an impact on how you improve your products, processes, or services.

Step Three: Apply your Findings

The final step is to bring life to your *scan hits* by ensuring that they can be applied to existing innovation and planning efforts—or to use foresight tools such as the *Implications Wheel*. If you have a formal strategic planning project ahead, be sure to include time for sharing key scanning insights during the early stages of the process. Have the scanning club produce Implication Wheels to share or create fake '**Headlines from the Future**' that provoke new thinking.

Set up an Infrastructure for "Tagging" Content: Social Bookmark Tools

A great way to *scan for change* is to use tools that allow you to automate and archive your efforts so you can review them all together. Social Bookmarking services such as Diigo, Delicious and Google Bookmarks are great platforms for private/public settings that allow for personal archiving and sharing with colleagues.

Diigo: An External Memory Bank

The advantage of using a social bookmarking site, such as Diigo, is that you can save time by organizing common tags on information you find on the Web. Avoid having to remember where you read something—simply get into the habit of tagging relevant Web site, videos, and reports that you find along the way. When you have time to dive deeper, simply re-visit your Diigo account and click on the archived keyword tags. You can share tags with colleagues via the MyGroups feature.
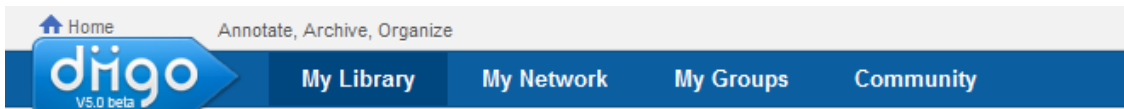
How to Get Started

1. Set up Diigo accounts and then form a group with colleagues.
2. Install a small icon browser plug-in on your favorite Web browser (e.g. Chrome, Internet Explorer, Firefox) to enable one-click saving to your Diigo account.
3. Establish shared tags (Keywords) related to your Trendscape. There is no need to limit the number of keywords but realize the advantages to having a few main tags associated with your scanning.

Activity Review: Trendscaping
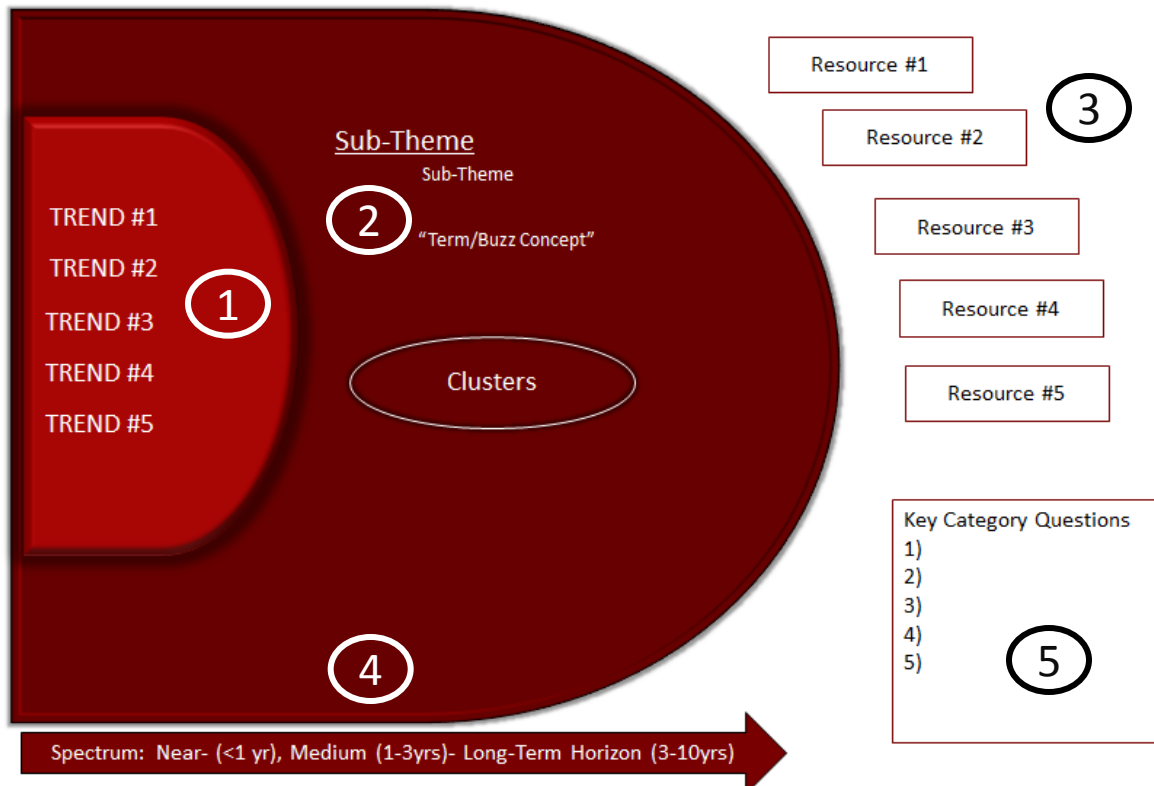
Trendscaping Activity Steps:

Use the Trendscaping (or your own adaptation) framework for each STEEP category:

1) List broad STEEP specific **trend** categories (e.g. Information Tech, Biotech).
2) List **sub-themes** (e.g. Data, Learning Management Systems) and buzz concepts (e.g. Game Mechanics, *Badges*). These are the terms you will be searching for during your scanning activities.
3) List a wide spectrum of **resources** that you will use to search for information and insights (e.g. Journals/Magazines, blogs, conferences, individuals, Twitter groups, etc.).
4) As you build your Trendscape and conduct early stage research you might wish to include a **time horizon** (>1 yr; 1-3 yrs; 3-10 yrs) on when you believe this trend could have an impact on your industry or lives of your customers.
5) As you research trends and emerging issues, keep a list of key strategic questions that your organization might need to address and explore possible implications of the trend.

After you have built your Trendscape, assess your team's comfort and knowledge level for each category and key concept. Highlight concepts that you think are most important and those that you know the least about. These are the areas which you might focus on in the near future.

IDENTIFYING & MONITORING CHANGE: TRENDSCAPE

Build out your *Trendscape*

- TREND #1
- TREND #2
- TREND #3
- TREND #4
- TREND #5

Sub-Theme
Sub-Theme
"Term/Buzz Concept"

Clusters

Resource #1
Resource #2
Resource #3
Resource #4
Resource #5

Key Category Questions
1)
2)
3)
4)
5)

Spectrum: Near- (<1 yr), Medium (1-3yrs)- Long-Term Horizon (3-10yrs)

The best way to have good ideas
is to have lots of ideas. – Linus Pauling

A Starter List: STEEP Concepts and Emerging Issues

Social (Demographics/Culture)
Aging of Baby Boomers
Millennial Household Formation
Urbanization
Rural / Small Town Divides
Experience Design
Globalization (Economic/Cultural)
Religion / Spirituality
Education (Lifestage vs. Lifelong Learning)

Technology
Cloud Computing
Software-as-Service
Location-based Services (LBS)
Machine-to-Machine (M2M)
Internet of Things (IoT)
LTE/4G
Algorithms
Personal Assistants (e.g. Watson/Siri)
Functional Nanomaterials
Synthetic Biology

Environment
Third Places (Built Environment)
Pop-up Architecture
Peak Production of Conventional Oil
Rise of Toxins (BPA-Free)
Commodity Production Challenges

Economics (Macro/Micro)
Entrepreneurship
Social Entrepreneurship
Base of Pyramid (BoP)
Manufacturing
Service/Knowledge Economy
Creative Industries
Behavior Change
Neuro-economics
Trade Policies

Politics
Regulatory Frameworks
Tax Policies
Fragmentation
Global Harmonization
Transparency
Civicware / Govt. 2.0

Arts Edu-specific
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Some of our Favorite Scanning Resources

Scanning Tips and Tricks

Do a Web Search by Filetype:
Using the advanced search features on Google, Bing, or Yahoo allows you to limit results to PDFs and PPT files that might be more relevant to your scanning than websites or articles.

`future of [keyword] filetype:pdf`

Follow Annual Reports
Create a separate list of annual foresight publications released by boutique strategy firms and large organizations like IBM (*Five in Five*), Gartner (*Hype Cycle*) and Pew Research. These publications help to identify new concepts and frame the mainstreaming of emerging trends.

Foresight Booklets

Gartner *Hype Cycle*

Notes:

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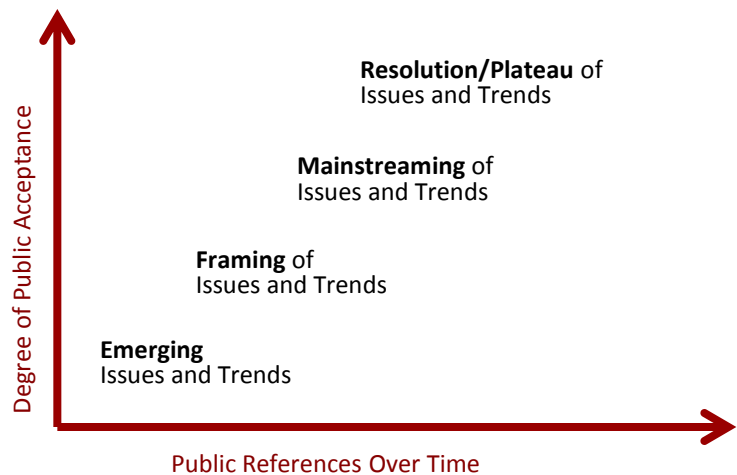_____

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Additional Scanning Notes

Trend and Emerging Issues Diffusion Frameworks

Trends can pass certain milestones and phases of development as they become more widely felt in mainstream life or fade from public awareness. *Emerging issues* are those ideas which require a decision in the realm of private or public policy. We can think of *emerging issues* as those questions which requires us to answer: "Will we…?" or "Will we not..?" embrace *X* change (e.g. Genetically Modified Crops; Privacy Standards).

This framework attempts to quantify the developmental stages of trends and emerging issues as they gain acceptance (or not) within society.

- **Emerging** phase indicators are usually limited to niche community discussions.
- **Framing** stage indicators are shaped by supporters/opponents.
- **Mainstreaming** phase indicators are often signaled by appearing on the cover of Time™ magazine.
- **Resolution** stage indicators are often linked to legislation or policies or consumer behavior that resolve the dilemma of "Will we embrace X change?"

Degree of Public Acceptance (vertical axis)

Resolution/Plateau of Issues and Trends

Mainstreaming of Issues and Trends

Framing of Issues and Trends

Emerging Issues and Trends

Public References Over Time (horizontal axis)

Events

While most scanning focuses on trends (changes over time), we should also be focused on a wide range of events that might occur and have an impact on consumers or our industry.

Events can be categorized into one of three types:

Scheduled Events are highly likely events that can lead to a change of leadership (e.g. CEO, Elected Officials), cultural focus (Olympics), or a shift in policy (e.g. Tax Codes) or in technologies (LTE/4G cellular).

Plausible Events are those which we think are likely and would have an impact on our customers or industry (e.g. Healthcare Reform; Food Regulation; Shift in 501c3 Policies).

Wildcard Events are low probability, high impact events (e.g. Crop Virus, Global Pandemic, Terrorist Attack).

Scanning for Events?

While events cannot be predicted, we can scan for the strengthening or convergence of trends that could increase or decrease the likelihood of an event happening.

> **Events and Contingency Planning**
>
> Consider creating a description of **100 Events** to monitor. Work with company leaders to develop contingency plans that make you more flexible and responsive.
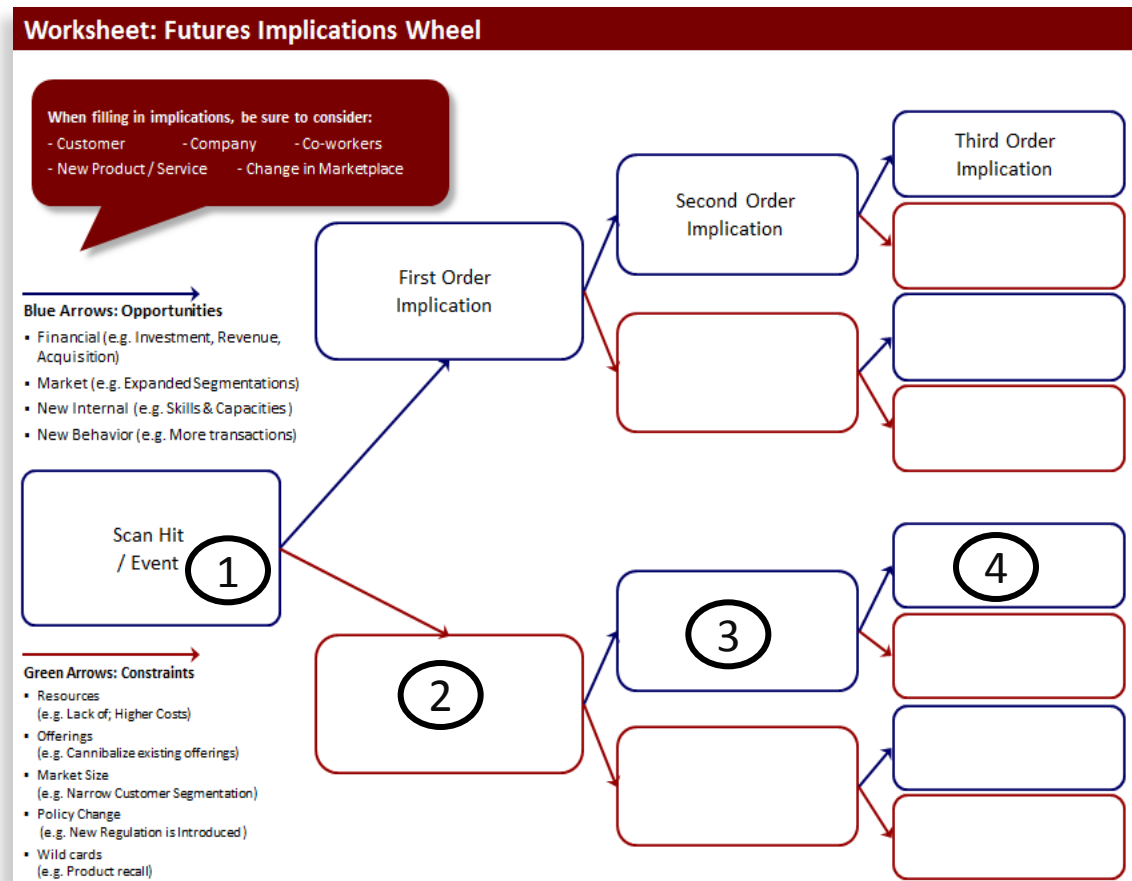>
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Activity Review: Futures Wheel

Futures Wheel Activity Steps:

Take some of your most provocative scan hits and apply them using a simple foresight-innovation tool. The Futures Wheel (or Implications Wheel) explores a range of plausible outcomes from important *scan hits*. The goal is to fill each box with a snappy title or short description that represents a dramatic change in the marketplace as a result of the original *scan hit*:
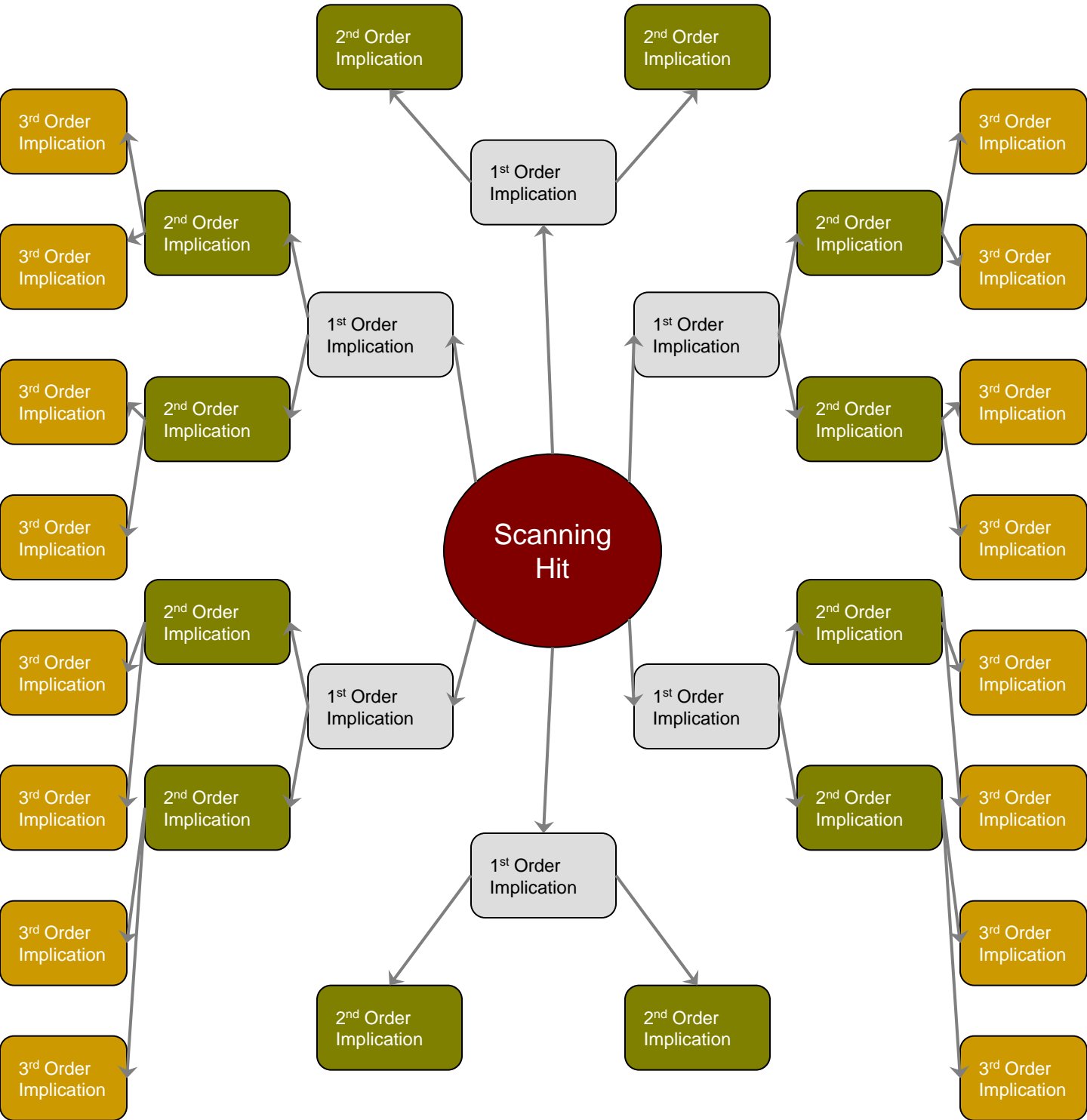
1)Choose a relevant scan hit that is unique and has a high degree of uncertainty and impact
(e.g. if it happens, it will really change our industry, or the lives of our customers?)
2)List a *first order* level implication that represents an opportunity, then along the opposite arrow/box list an implication that represents a possible constraint.
3)Move outward along each box following the same pattern of splitting implications into boxes that represent an opportunity and constraint from the same root.
4)When you have reached an end point to your futures wheel choose your most provocative boxes.

Do not feel bound to this particular hub and spoke framework. We encourage you to expand implications further and wider. There are a number of online "Mind Mapping" tools that can be used to create digital versions of future wheels. The Implications Wheel is meant to be a fast-moving technique that is not constrained by current day thinking or reality. The final products should be possible and provocative.

Worksheet: Futures Implications Wheel

When filling in implications, be sure to consider:
- Customer   - Company   - Co-workers
- New Product / Service   - Change in Marketplace

Blue Arrows: Opportunities
- Financial (e.g. Investment, Revenue, Acquisition)
- Market (e.g. Expanded Segmentations)
- New Internal (e.g. Skills & Capacities)
- New Behavior (e.g. More transactions)

Green Arrows: Constraints
- Resources
  (e.g. Lack of; Higher Costs)
- Offerings
  (e.g. Cannibalize existing offerings)
- Market Size
  (e.g. Narrow Customer Segmentation)
- Policy Change
  (e.g. New Regulation is Introduced)
- Wild cards
  (e.g. Product recall)

Scan Hit / Event — 1

First Order Implication — 2

Second Order Implication — 3

Third Order Implication — 4

2nd Order Implication

2nd Order Implication

3rd Order Implication

3rd Order Implication

2nd Order Implication

1st Order Implication

3rd Order Implication

3rd Order Implication

2nd Order Implication

1st Order Implication

1st Order Implication

2nd Order Implication

3rd Order Implication

3rd Order Implication

3rd Order Implication

2nd Order Implication

3rd Order Implication

Scanning Hit

2nd Order Implication

3rd Order Implication

2nd Order Implication

3rd Order Implication

3rd Order Implication

2nd Order Implication

1st Order Implication

1st Order Implication

2nd Order Implication

3rd Order Implication

3rd Order Implication

3rd Order Implication

2nd Order Implication

3rd Order Implication

2nd Order Implication

1st Order Implication

2nd Order Implication

2nd Order Implication

3rd Order Implication

3rd Order Implication

Activity Review: Trend Cards

Trend Cards Activity Steps:

Trend Cards are an effective way to provide quick inputs for creating loosely structured scenario platforms that can provide insights and inspiration. While typical scenario planning workshops can take hours or days to unfold, Trend Cards are a partially assembled tool that allows you to synthesize relevant drivers of change into short scenario platforms that challenge your thinking about the future.

1) Choose a set of Trend Cards that provides a broad set of *STEEP* category themes. You may wish to create your own *card deck*—or use pre-developed decks from companies such as IDEO or Arup.

2) Include a list of events that serve as source of discontinuity. Event cards provide the creative force that can bring scenario platforms to life.

3) Determine a simple capture format for your scenario. You may ask your team to create a "Day in the Life" story based on the trends—or a mock-up magazine cover or blog post that might be found in society in 2020.

4) When the scenario platform is created use a set of strategic questions to provoke thinking about how your current products or services might be threatened or allowed to thrive in this future scenario world.
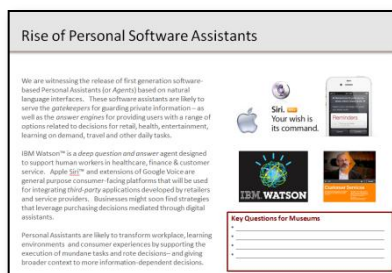
Trend Card inspired scenario platforms are meant to be short stories of possible futures. They are less robust than traditional scenarios but can still be equally provocative in challenging how we see the future unfolding.

Stories can be told in both words and images. Scenario platforms **are not** supposed to be predictions, or recommendations. They should favor *open endings* rather than *happy endings*. The reader should be left with more questions than answers. This is a story platform for exploring implications of converging trends and disruptive events. Describe the world and let your colleagues build bridges to the implications for your products and services.

Sample Strategic Questions Used To Explore Your Trend Card Inspired Stories:

Creating the story is Step One. The real insights come from engaging your teammates in exploring challenging strategic questions. Here are a few to consider:

- What assumptions does this story ask me to surrender/challenge? New assumptions to embrace?
- What other trends and possible events might support the future described in this scenario?
- Are there trends or events that might refute this scenario or make it make it less plausible?
- What are the internal implications for our partners and business teams?
- What might our customers and communities do differently to thrive in this future?
- How might we think differently about metrics and analytics in this scenario?
- What does our company branding and communication strategy look like in this future?
- Where might the story go from here? Write a few extensions of this future.
- What are signals and milestones of trends and emerging issues that we can monitor?
- Describe the opportunities for strategic advantages (and possible threats) in this scenario.

Scenario Planning Resources

We can think of Trend Decks as a quick and easy way to create on-demand scenarios. More formal scenario processes provide a more robust, collaborative approach to synthesizing trends and help us to tell more compelling stories of the future of our industry.
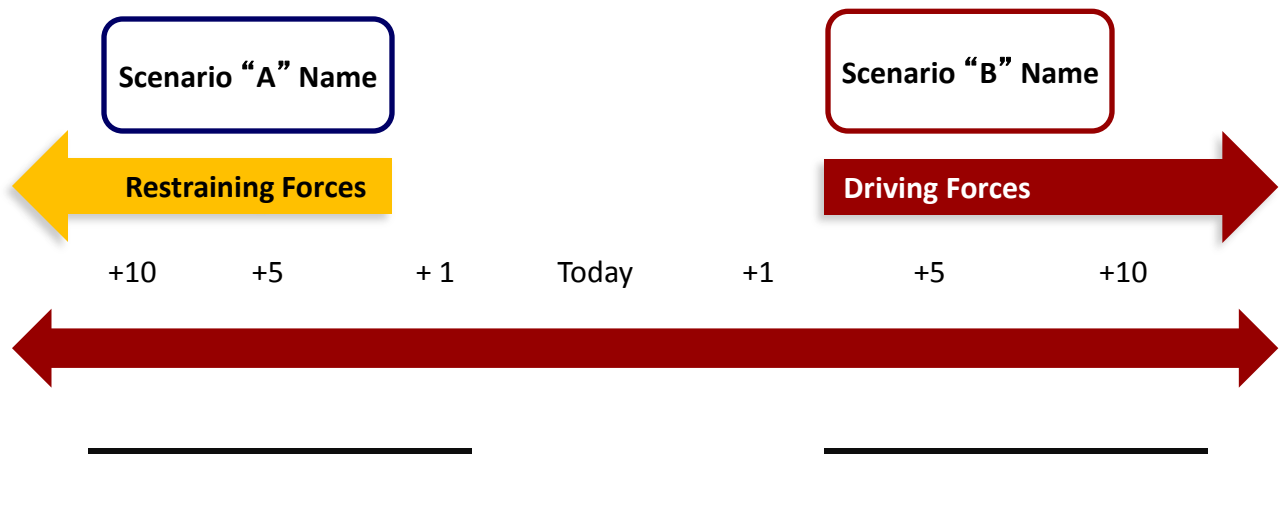
There are also other tools and frameworks for extending scenarios to test your organization's ability to thrive in a different future landscape. You can learn more about tools such as a *Force Field Analysis* that ask you to rate "push-pull" forces that might be holding your organization back within a particular scenario versus driving you towards new opportunities. You can learn more about scenario building via books and web-based resources.

The *Scenario Planning Handbook* (Wilson/Ralston),
Creating Better Futures (Ogilvy) are solid introductions to
formal planning processes. Nancy Duarte's book *Resonate*
is a fantastic resource for understanding the structure and
approach to business communication in the 21st century.
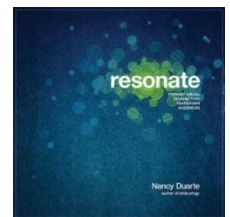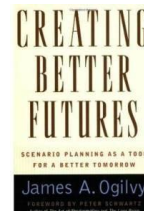
Sample Scenario Evaluation Worksheet: Force Field Analysis

After you have developed more robust scenario planning techniques that move you beyond Trend Cards, you can use other tools and frameworks that test your organization's ability to thrive in a different future landscape. You can learn more about tools such as *Force Field Analysis* that ask you to rate "push-pull" forces that might be holding your company back within a particular scenario versus driving you towards new opportunities.

| Scenario "A" Name | | Scenario "B" Name |

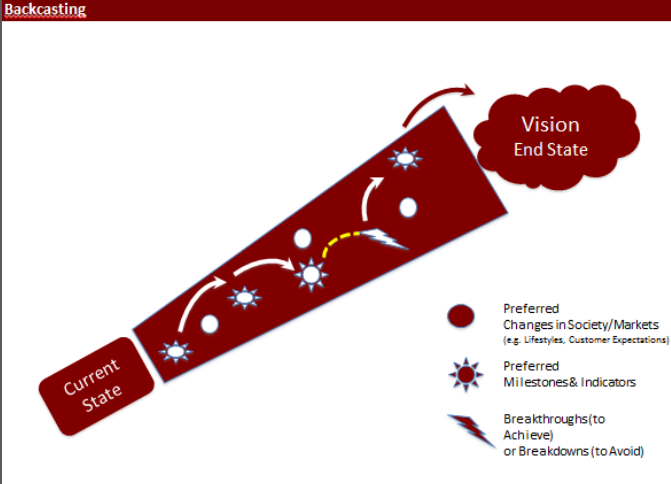| Restraining Forces | | Driving Forces |

| +10 | +5 | + 1 | Today | +1 | +5 | +10 |

Activity Review: Backcasting

Backcasting Overview

Backcasting is designed to be a vision-driven foresight tool. It is often used as a first step in roadmapping and developing formal strategic plans supported by company leaders. When you have established a vision for a new product or service use the following steps as your guideline.

1) **Vision**—Establish a compelling visual image (e.g. create a new snack category) with a reasonable timeline.
2) **Gap Analysis**—Identify a wide range of capabilities of today's Current State versus the End State Vision. This gap analysis will guide you in setting key milestones that consider technologies, markets, internal support, branding and business models.
3) **Describe Your Path**—Using a matrix grid with key dates (usually one to two years apart) begin to consider the key milestones (*stage gates*) you will need to reach in order to continue towards the end state vision.

Backcasting is designed to be a first step in engaging colleagues and partners in thinking about a bold vision for the future of your products and services. Indicators that you find should initially be purely descriptive and qualitative. Real-world quantitative targets are developed through more robust road-mapping and strategic planning activities.

Backcasting

Vision
End State

Current
State

● Preferred
Changes in Society/Markets
(e.g. Lifestyles, Customer Expectations)

✳ Preferred
Milestones & Indicators

⚡ Breakthroughs (to
Achieve)
or Breakdowns (to Avoid)

	Stage 1 2012	Stage 2 2014	Stage 3 2016	Stage 4 2018	Stage 5 2020
Capabilities					
External Partners					
Customer Engagement					
...					

Describe 'signals' (indicators of change) in the marketplace:

Describe breakthroughs:

Getting Started with Thinking and Planning for the Future!

Tip #1
Follow Smart, Passionate People

There is no substitute for learning from smart, informed, and passionate people who can keep you engaged and inspired

Twitter is a great platform for following thought leaders across a range of topics. But it is not the only option! The Web has become a global platform for thought leaders involved in conversations about change. Find people who inspire you via TEDx Talks, PopTech, Vimeo, or Livestream events.

Mark Thoma: @MarkThoma Economics Professor

Alex Osterwalder: @business_design Author of *Business Model Innovation*

Nancy Duarte: @nancyduarte Founder of Duarte Communications

Dan Ariely: @danariely Professor/Behavior Economics

Tip #2
Generate a List of 30 "Killer Questions"

Get the most out of your foresight and innovation efforts by generating a list of provocative starter questions that will be certain to encourage collaborative brainstorming.

HP's Phil McKinney has popularized the notion of "killer questions" that force us to consider more disruptive changes to our core markets. Killer Questions do not have easy answers and require us to learn more about a subject before responding with confidence. McKinney uses these questions on a daily and weekly basis to provoke conversations within the company. He gathers and synthesizes the result during workshops and formal brainstorming sessions.

What might be the right set of killer questions for your organization and the future of arts education?

Getting Started:
▪Organize a small team to create, distribute, and gather questions and answers.
▪Set a scheduled release day for your questions so people know when to expect these thought provoking ideas.
▪Organize a social brainstorming event around a few popular "killer questions," and be sure to gather people from various business units to maximize creative input.

Learn More :
You can follow Phil McKinney on Twitter and see sample presentations of killer questions in action on the Web.

killerquestion
@killerquestion
A feed of killer questions that will unlock killer ideas .. also follow @philmckinney
http://www.killerinnovations.com

killerquestion killerquestion
#KQ What #customer #segment will emerge in 5 years that doesn't exist today? http://om.ly/ytUv
28 Oct

Tip #3
Curate or Create a Set of 101 Guides

Help to build a culture of foresight by curating and organizing a "Best of" list of resource guides to dispel myths and help move your team forward in understanding the opportunities and challenges associated with ideas that might shape the future.

Consider the following strategies and guidelines:
- Start by surveying a small sample of members from various organization units on their level of familiarity and interest in a list of big ideas shaping the future of business and society.
- Build volunteer teams to curate the best learning guides (lectures, PDFs, Web sites, webinars, etc.).
- Provide additional support to your 101 lessons with engaging social programs (e.g. Brown Bags Lunches, contests).
- Develop an online archive for all of your 101 guides.

We recommend looking for 101, *Introduction to…,* and Beginner's Guides via the following sites:

Tip #4
Have Your Team Test a Radical New Assumption about the Future

The idea of testing a radical assumption is meant to be innovative—not subversive. The aim of this team activity is to identity opportunities where we can temporarily suspend conventional wisdom when it comes to how we innovate. Find a way to pilot a new approach to your products/services and experience design. If you are going to fail– remember it's better to *fail forward*.

Getting Started:
- Meet with team leaders to discuss how to frame these small experiments.
- Brainstorm a list of conventional organizational assumptions (internal or external) that you would like to break.
- Explore ways to structure the pilot (e.g. team size, length of time, tools, rewards).
- Define your metrics and how you plan to communicate both positive and negative results to leadership.
- Consider ways to have fun with these rules to ensure that the experiments are viewed positively as an effort to be more innovative and collaborative.
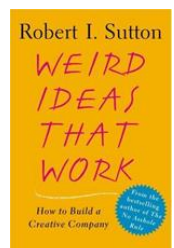
Foresight Tools, Techniques, and Frameworks

Quantitative
- Trend Extrapolation
- Benchmarking
- Patent Analysis
- Systems Dynamics
- Probability Forecasting
- Monte Carlo Models

Qualitative
- Scenarios
- Backcasting
- Simulations and Games
- Genius Forecasting
- Morphological Analysis
- Role-playing
- Ambient Futures
- Casual Layered Analysis
- Futures Wheel
- Relevance Tree
- Appreciative Inquiry

Qualitative-Quantitative Hybrid
- S-Curve Era-based Analysis
- Scanning
- Delphi Survey
- Cross Impact Analysis
- Road-mapping
- Survey/Focus Group
- Agent Decision Modeling
- Data/Text Mining
- Field Anomaly Relaxation (FAR)
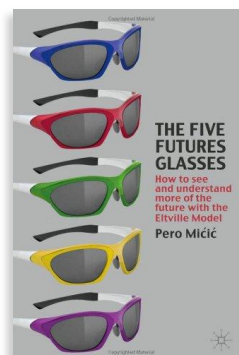- Fisher-Pry Analysis

Learn more
You can find more about these techniques through a general Web search or via foresight guide books. An oldie but goodie is: *Principles of Forecasting* By Scott Armstrong
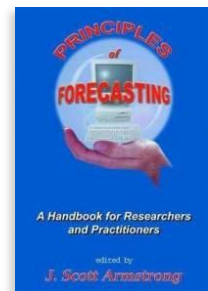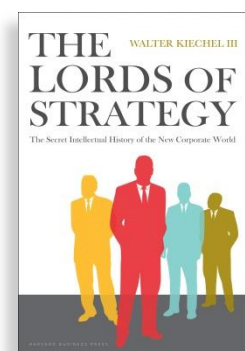
Books We Recommend
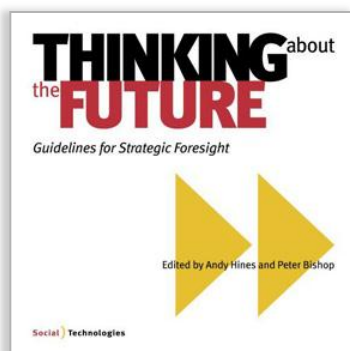
Thinking about the Future
By Andy Hines and Peter Bishop

The Five Futures Glasses
By Pero Micic

The Lords of Strategy
By *Walter Kiechel*

If man begins with certainties, he will end in doubts; but if he will be content to begin with doubts, he will end in certainties. – Sir Francis Bacon

Notes

Doodles