Making Sense of an Uncertain Future

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The future is uncertain . . .

. . . and humans are bad at predicting,

. . . so what can we do?

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. . . and humans are bad at predicting,

. . . so what can we do?

Answer poll question at slido.com #G907

Sources of Uncertainty (beyond your control or influence)

Social
Demographics
Religion
Lifestyles
Values

Technological
Innovations
Communication
R&D
Patents

Economic
Interest rates
Global trade
Taxes/Fees/Fines
Inflation

Environmental
Availability of resource
Air & Water quality
Food safety
Pollution

Political
Regulatory stance
Government stability
Tax policies
Trade unions

Sources of Uncertainty (beyond your control or influence)

Technological | Economic | Environmental

Social

Demographics
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Lifestyles
Values

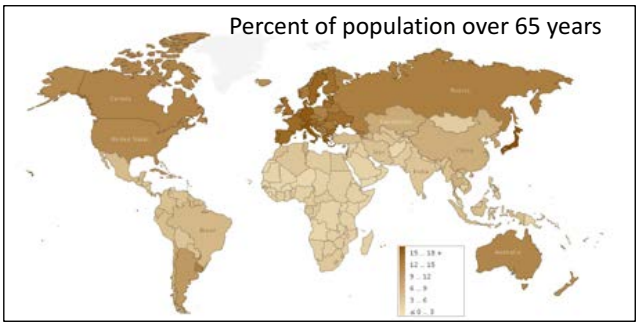
Spotify

zipcar

Political

EaaS
Everything as a Service

Percent of population over 65 years



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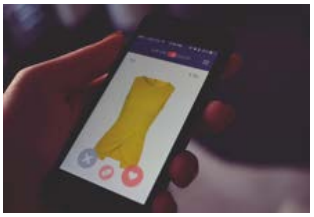

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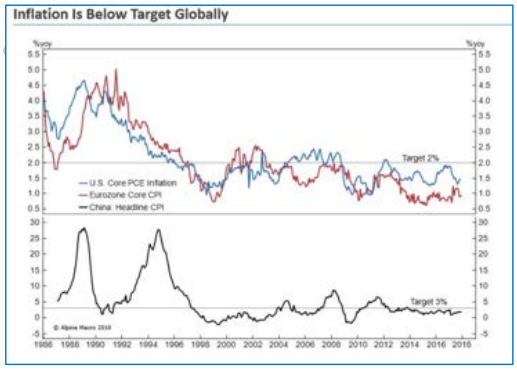

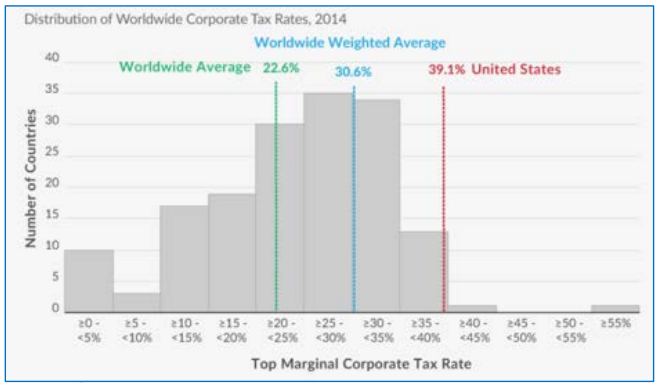

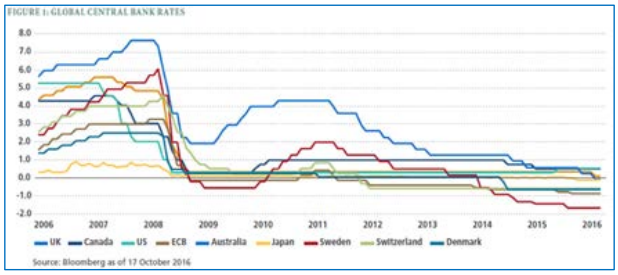

Sources of Uncertainty (beyond your control or influence)

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Environmental

Availability of resources
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Political

8

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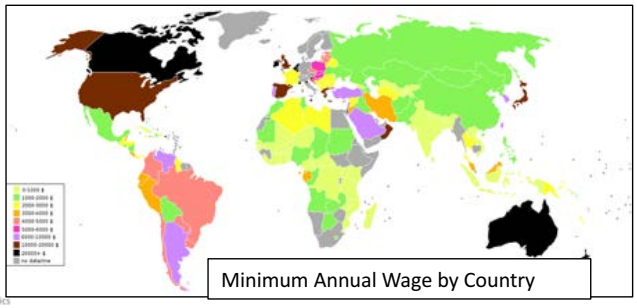

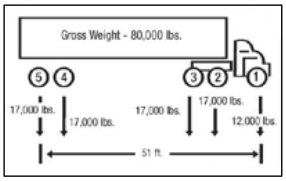

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Larger Trend: Migration from Social to Regulation

Technological

Innovations
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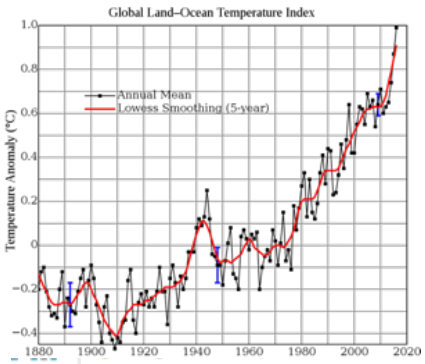

Source: http://www.wri.org/

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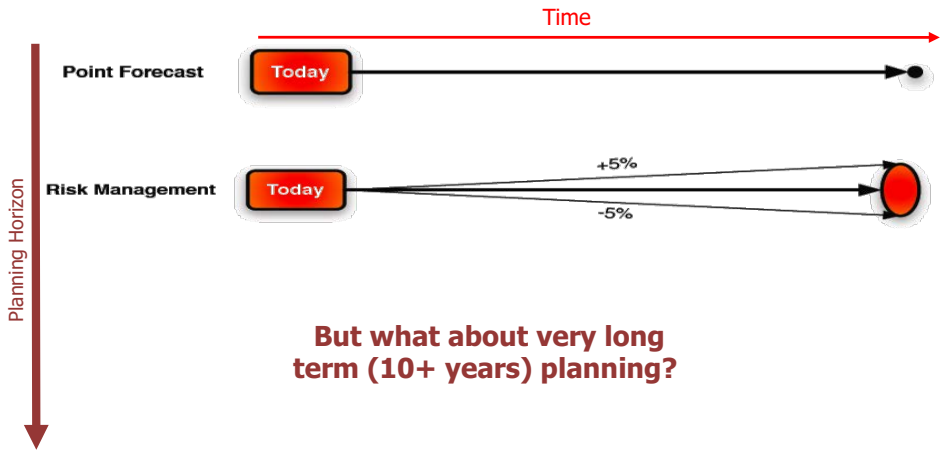
The future is uncertain . . .

. . . and humans are bad at predicting,

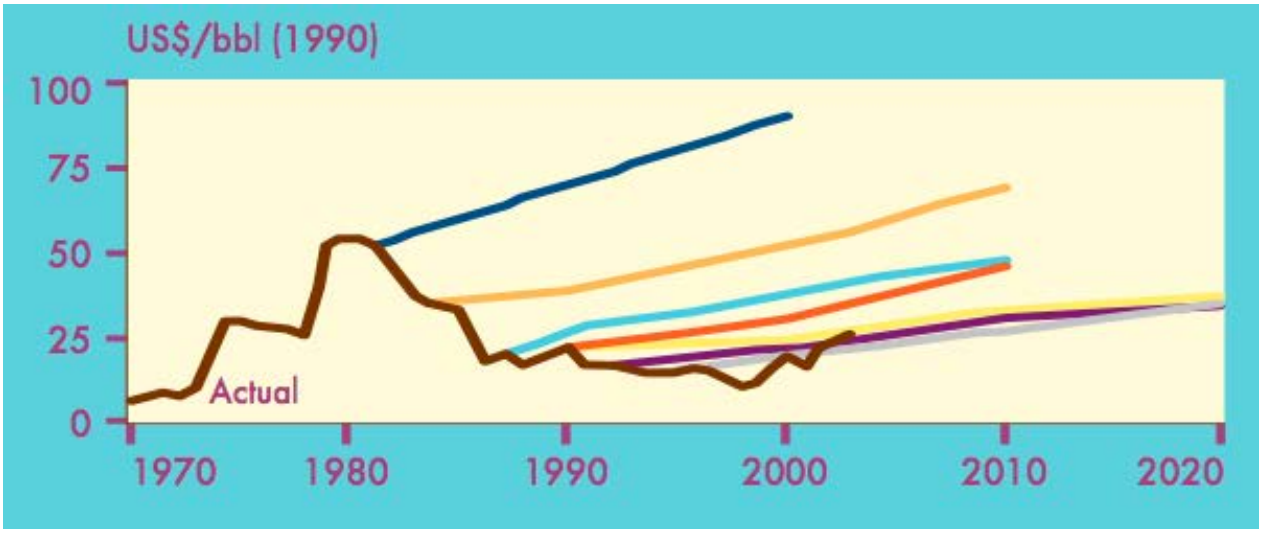
. . . so what can we do?

How do we plan for the future?



But what about very long term (10+ years) planning?

Longer term planning is impacted by events

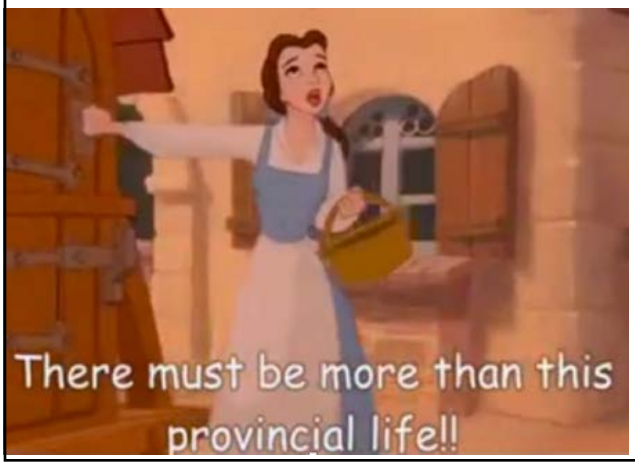


Source: Scenarios: An Explorer's Guide, Shell International 2003.

Why are we so bad at planning for the future?

Because we try to predict the future – and humans are horrible at that!

We are all "Provincials in Time"



Provincial – a person with a narrow point of view or outlook, countrified in the sense of being limited.

Recency Bias – the tendency to weigh the latest information more heavily than older data.

Historical Myopia - the closer an era is to our vantage point in the present, the more details we can make out.

Availability Heuristic - the easier it is to recall examples of an event, the more probable people think it is

Provincials in Time

1. We look to the future through today's lenses,
2. We think today will go on for forever
   – that change happens slowly, and
3. We forget how we got to today
   – it seems pre-ordained.

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Great Horse Manure Crisis of 1894

The situation was dire!

- >150,000 horses in NYC producing >2,000 tons of manure per day
- Estimates of manure reaching 3rd floors by 1930 & nine feet in London by 1950
- 1st International Urban Planning Conference held in NYC in 1894 – cut short!

Source: "From Horse Power to Horsepower," Eric Morris, ACCESS no. 30, Spring 2007.

Interestingly, though . . .

- >4,000 cars sold in US in 1900
- By 1916 more cars than horses registered in NYC.
- The first subway in NYC was operating by Oct 1904.

5th Avenue on Easter Morning 1900

Where are the cars?

Source: National Archives. American Cities series (specimen #30-N-18827) features an aerial view of Fifth Avenue in Manhattan bustling with horse-drawn carriages and pedestrians on Easter Morning, 1900.

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5th Avenue on Easter Morning 1913

Where are the ~~cars~~ horses?

Source: George Grantham Bain Collection Fifth Avenue in Manhattan Easter Morning, 1913

Herald Square NYC 1907 – Transitioning . . .

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Some Changes Can Happen Rather Quickly
. . . Mobile Communications

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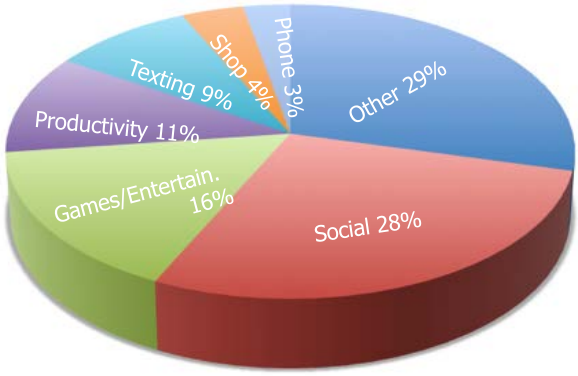
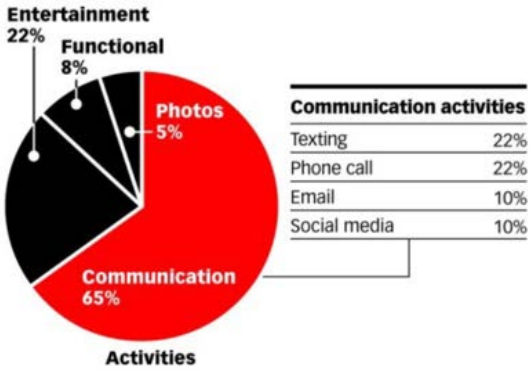
Some Changes Can Happen Rather Quickly . . . Mobile Communications

How many Smartphones do you have with you right now?

How much time do you use your Smartphone as a phone?



Source: Nielsen 2013



Source: GfK MRI, "Mobile Now" 2016

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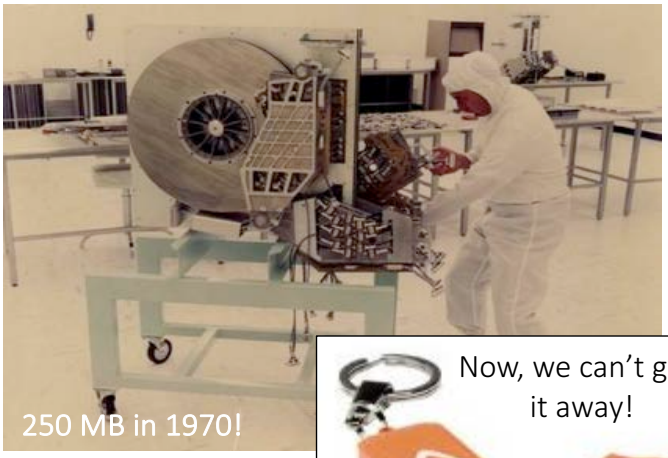
Rapid Changes in . . . Data Storage



250 MB in 1990s
~175 3.5" Floppies (1.44 MB)
Stack 2 feet high & ~3 lbs

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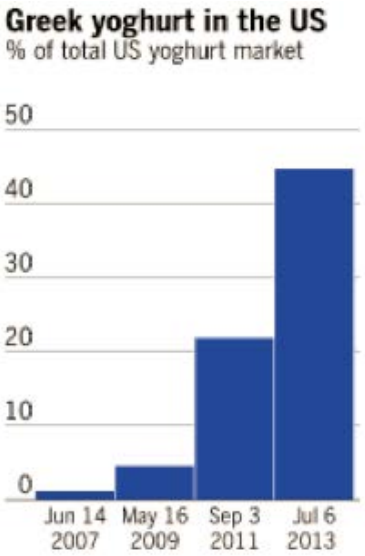
Rapid Changes in . . . Consumer Taste



Provincials in Time

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Today was pre-ordained . . . or was it?

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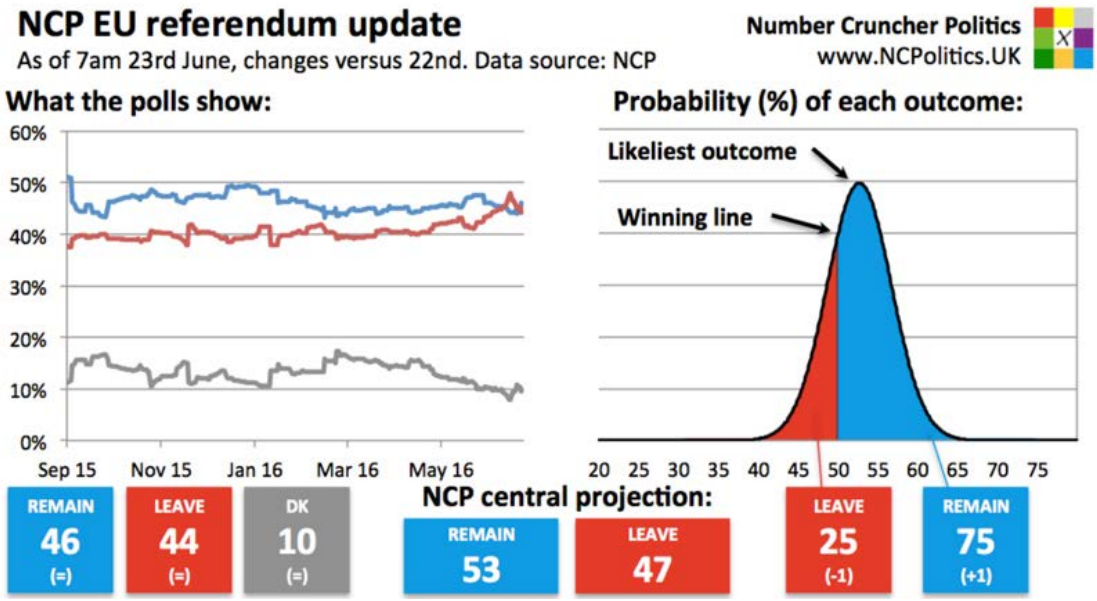
Future is pre-ordained . . . or was it?



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Provincials in Time

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We get lulled into the current Dominant Design!

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. . . and humans are bad at predicting,

. . . so what can we do?

3 Tools for Navigating the Future in Your Organization

1. Change your thinking from events to effects
2. Try scenario planning (@ large & small scales)
3. Select & monitor sensors in the ground

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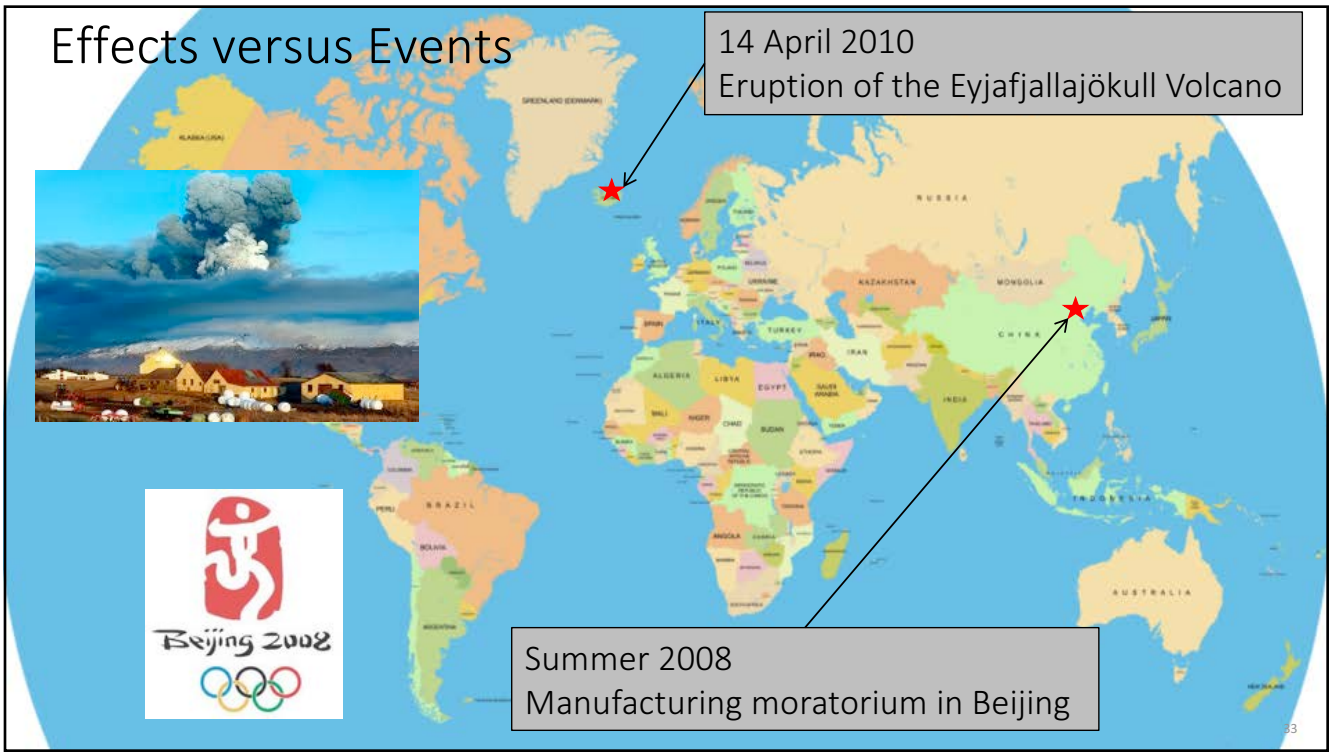
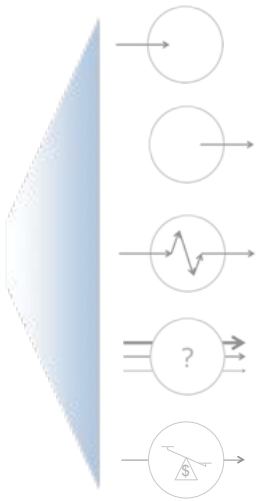
Effects versus Events



Translating *Events* into *Effects*

How can an event impact freight flows?



Impact on sourcing patterns
Where are raw products and WIP sourced from?
Are materials sourced in or out of the region?

Impact on flow destination
Where is the demand located?
How are final destination locations distributed?

Impact on routing
How is freight moved within the region?
Are there intermediate shipment points or mode switches?

Impact on flow volume
How will the total volume of freight shipped in and through the region change?

Impact on value density
How will the product characteristics change?
How does the value density change?

Answer poll question at slido.com #G907

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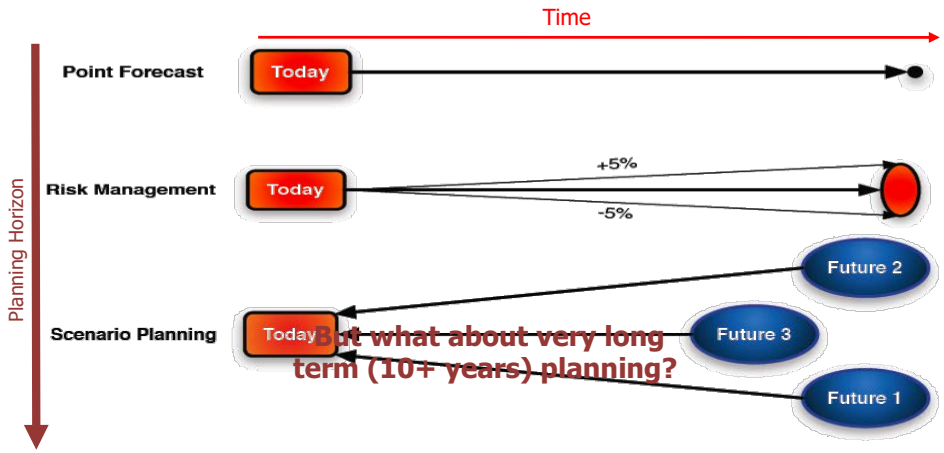
Planning for the Future



Shift focus from prediction to preparation

So many potential futures, so little time . . .

- A potential future or scenario is a set of driving forces you can neither control nor influence.
- Scenarios should be plausible, consistent, differentiated, memorable, challenging, but not necessarily accurate!
- In scenario planning we need to create a handful of alternative futures that together contain the most relevant uncertainty dimensions.

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Future Freight Flows Scenarios

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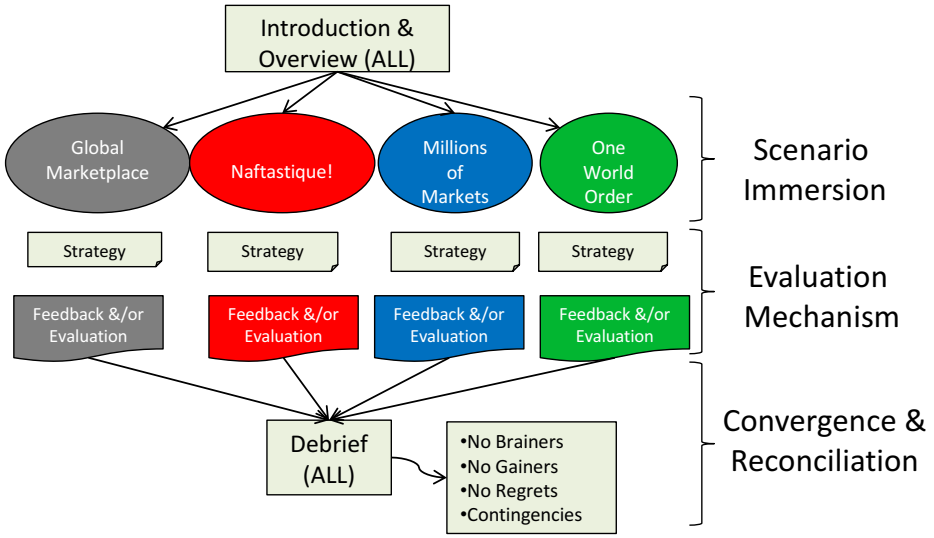
Scenario Planning Workshop Structure



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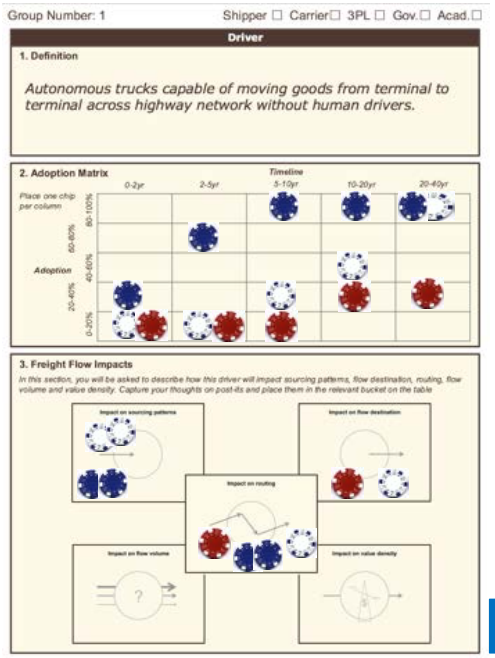
Snapshot Scenarios – Scenario Planning on a Budget!



- Invite a diverse slice of your firm/supply chain to a brainstorming session.
- Select one trend, uncertainty, or driver at a time.
- Have participants use poker chips to:
  - Estimate the adoption rate
  - Assess the impact or effect
- Use sticky notes to capture insights and opinions

Answer poll question at slido.com #G907

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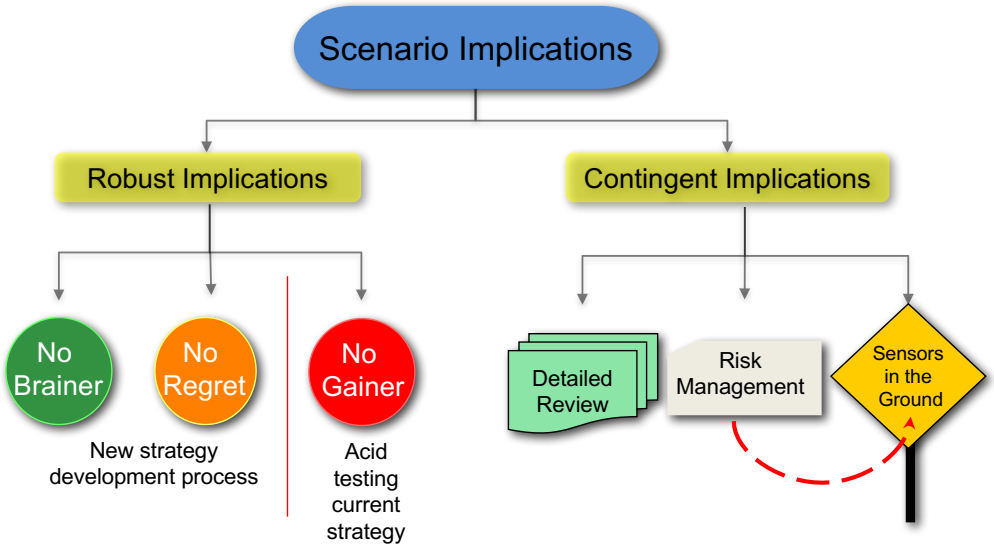
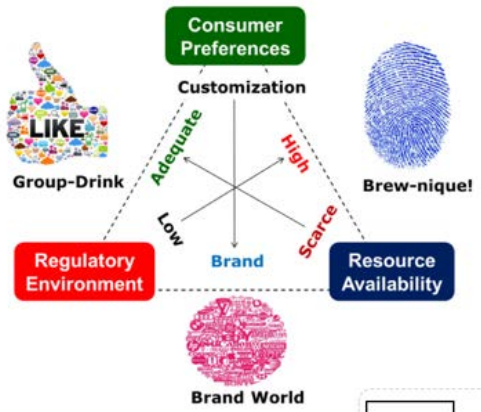
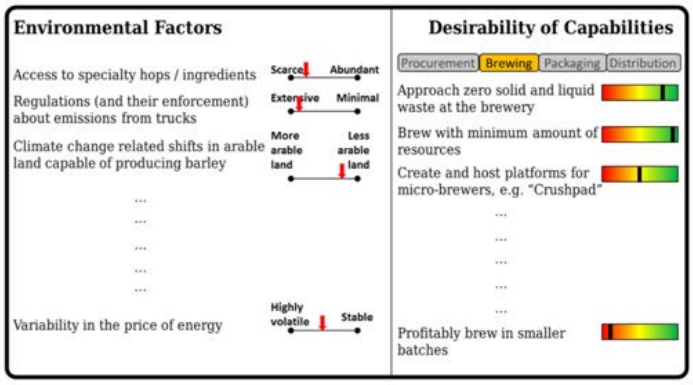
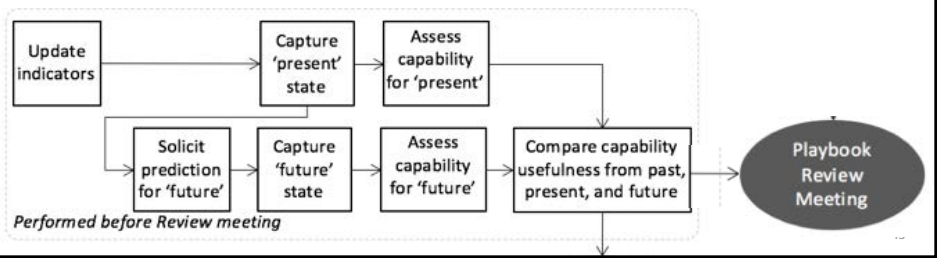
Cross-Scenario Comparisons



Tying Sensors to Actions/Investments







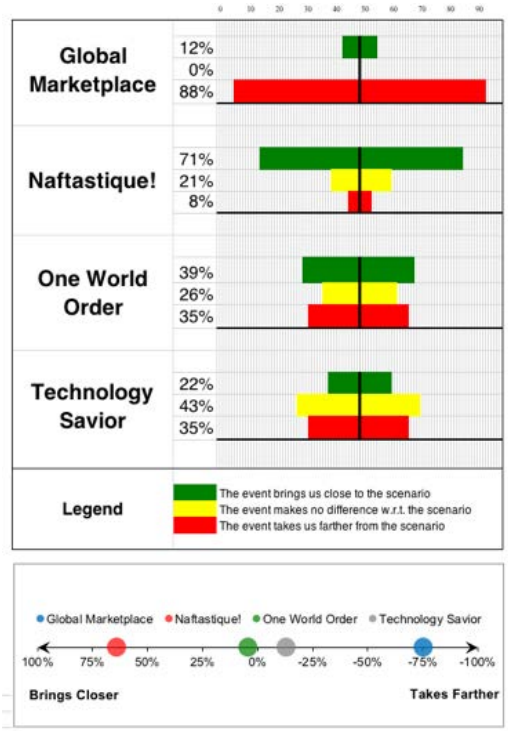
Sensor in the Ground Polls

Example:

China has begun severely limiting the export of rare earth metals. These metals are used in the manufacturing of many products to include batteries, catalytic converters, and computer display screens. China currently mines over 90 percent of the the world's rare earth minerals

Participants indicate if this event:

- brings us closer to Scenario X
- makes no difference to Scenario X
- takes us farther from Scenario X



The future is uncertain . . .

Uncertainty dimensions include Social, Technological, Economic, Environmental, and Political.

. . . and humans are bad at predicting,

We are all provincials in time who look to the future through today's lenses, think that change happens slowly, and believe that today's status is pre-ordained.

. . . so what can we do?

1. Think of **effects** rather than **events**
2. Use Scenario Planning to mine for **insights**
3. Select and **monitor** key driving factors

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Questions, Comments, Suggestions?

Wilson wondering if there is food in any of the scenarios.

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