Theory-Driven Scenario Development

Using theories of change and stability to anchor alternative futures

Scenario 2015: Improving Scenario Methodology: Theory and Practice Warwick Business School, December 14, 2015



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Preferred/ Aspirational Futures

Expanding the range of possible futures

Forecasted Futures

Using different models, discontinuities, and complexity

The Projected Future

The reference scenario; straight projection of all trends

Trajectory of uncritical expectations

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"Reframing the future." www.visionforesightstrategy.com

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A Theory-Driven Method for Scenarios

$$TOCS + TEI + Ins + Int = futures_{alt}$$

- TOCS = theories of change and stability
- TEI = trends and emerging issues
- Ins = inspiration from historical precedents and minor models
- Int = human intuition and creativity

Scenario Outputs

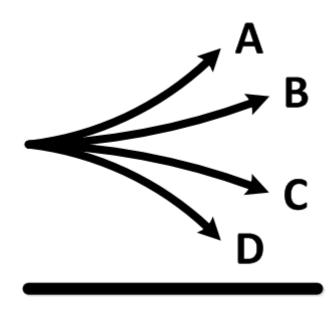
Qualitative scenarios

Framed by explicit theories

Inherently divergent forecasts

Require futures research

Future histories rather than just the scenario end states





Origins and Rationale

Mānoa Futures Program

- Founded in 1976
- James Dator, PhD
- All futures work should be based on a theory of change
- "If you're not using a theory of change and stability, then you're just making things up."

RAND: Long-Term Policy Analysis

- Shaping the Next 100 Years:
 New Methods for
 Quantitative, Long-Term
 Policy Analysis
- Based on software support
- Large "ensembles of scenarios" rather than a single model





Lum's Formula for Futures

$$TOCS + TEI + Ins + Int = futures_{alt}$$



TOCS: Theories of Change and Stability

- Anchor the scenario and focus user attention on certain types of trends, emerging issues, and actors
- Theories that identify the variables and relationships that explain why things do and do not change
- From grand macrohistorical theories to models of individual behavior

TEI: Trends and Emerging Issues

- The "building blocks" of the scenarios
- Trends: historical changes over time; carry us to the present
- Emerging issues: new technologies, policy issues, and concepts that are not yet mainstream but which may shape the future

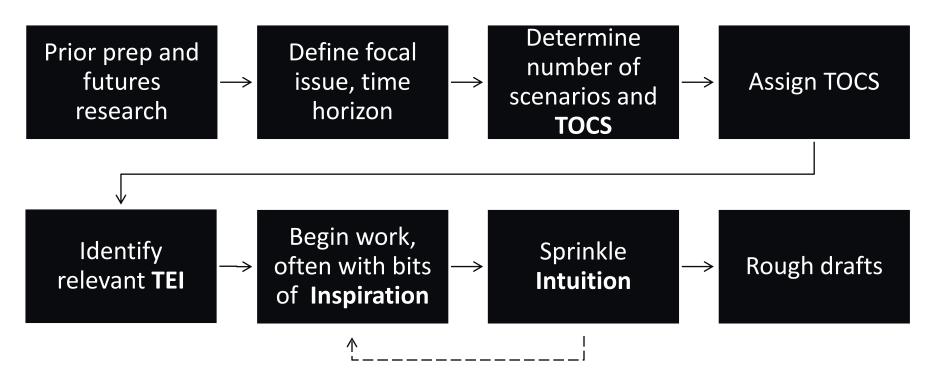
Ins: Inspiration

- Additional patterns to help structure a scenario, based on observed historical experience
- Historical precedents
- "Minor" models of change
 - Meso or micro level models
 - Systems dynamics

Int: Intuition

- The necessary creative element
- Using human intuition to make innovative leaps
- Using human story-telling ability to weave together a compelling narrative

Using the Method as Process

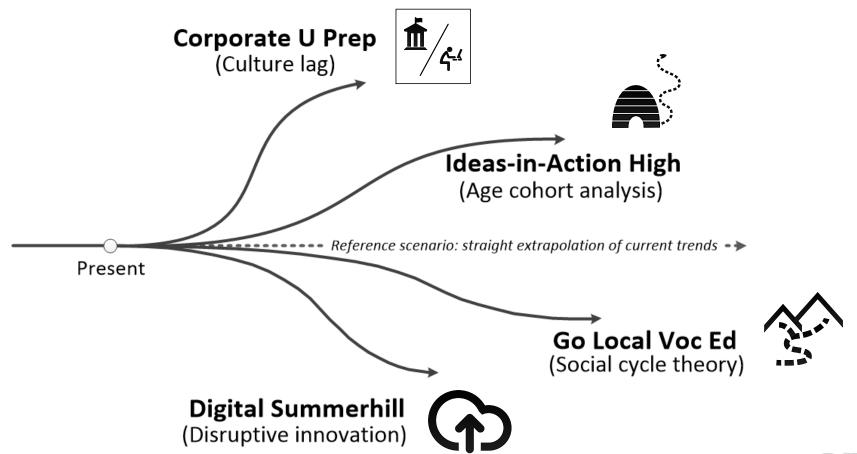


Innovation to Match Our Biases





Sample: Futures of Learning in Hawai'i







Critique of the Method

Advantages

- Focused on the dynamics of change (not end states)
- Grounded, yet requires futures research and creativity
- Generates fundamentally divergent scenarios

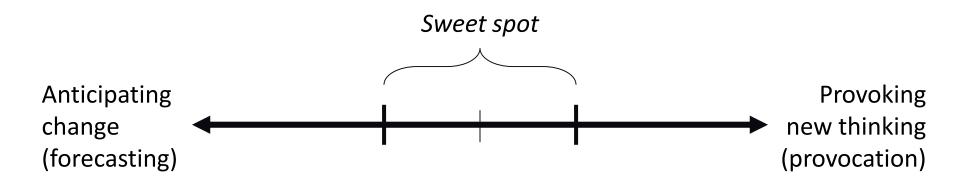
Challenges

- Selecting and using TOCS
- Works best with a lot of preparatory research
- High cognitive load on participants
- Demands a lot of iterative, causal thinking



Selecting This Method as an Option

- When scenarios need to be grounded and diverse
- When participants need to focus on how and why change happens
- When you have more time



Mahalo.

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