

Beyond Forecasting: Scenario Planning as a Tool for Managing Uncertainty

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WHAT'S THE ISSUE?

- Recent Executive Surveys:
 - Two-thirds said they had been surprised by at least three high-impact events in the last five years.
 - 97% said their organization lacked an adequate early-warning system.
 - 81% felt that their present organizational capacity for strategic vision is less than their future need.
- The SEI Center and *Knowledge at Wharton* found what CEOs felt were keys to success over the next decade....

Concept or Tool	Knowledge @ Wharton	SEI Center
Meaningful performance metrics: Adaptive dashboards that include strategic concerns	71%	100%
Scanning and Scenario Planning: Improved concepts and tools for monitoring the business environment	59%	60%
Enterprise Risk Management: Better concepts and tools to identify and assess and manage risks that could endanger the enterprise	50%	40%

IMPAIRING OUR ABILITY TO TRULY SEE THE MARKET

Behavioral and Organizational Challenges

Overconfidence –

People are far too certain that the current view they hold is correct.

Groupthink – Members of organizations learn to see the world in the same way.

Org. Structure / Rewards

– Departmentalization and incentives places boundaries on thinking.

Confirmation Bias –

People have a penchant for evidence that confirms rather than disconfirms.

Dislike of Ambiguity –

People prefer simple answers and prefer to ignore uncertainty rather than embrace it.

Process and Tool Challenges

Short Term Focus – Most tools provide a short term or just a historical view

Process – Missing structured process for incorporating all data and performing consistent review and adjustments

Disconnected Data – Key indicators are often tracked individually – leaving it to the mind for synthesis

Overload – Tools can provide large quantities of data but little “sense making”

Collaboration – One way information feeds often lack the needed team collaboration for the best decision making



Opportunities in Weak Signals

Domain	Opportunities in the Periphery	Who Saw It	Who Missed It
Technological	Digital revolution	Apple and iPod	Music industry
	White LED lighting	LED companies	Light bulb manufacturers
	Open-source software	Linux, IBM	Microsoft and Sun Microsystems
	CD-ROM encyclopedias	Microsoft	Encyclopedia Britannica
	Rapid spread of GSM	Nokia	Iridium
Economic	Overnight package delivery	FedEx, UPS	USPS, United Airlines
	Search engine potential	Google	Microsoft
	Discount point-to-point airlines	Southwest, Ryanair and EasyJet	United, Delta, Lufthansa
Societal	Sports and New Age drinks	Snapple, Gatorade	Coke, Pepsi (initially)
	Popularity of reality shows	Reality show producers	Game shows
	Age compression and demand for more sophisticated dolls	Bratz	Mattel (Barbie)
Political	Generic AIDS drugs in Africa	Indian pharmaceutical companies	Major global pharma companies
	Social discontent in Venezuela	Hugo Chavez	Establishment (PDVSA)
	Role of "exurbs" in changing US voter patterns	George Bush and Karl Rove	John Kerry

UNDERSTANDING THE SYSTEMIC EFFECTS

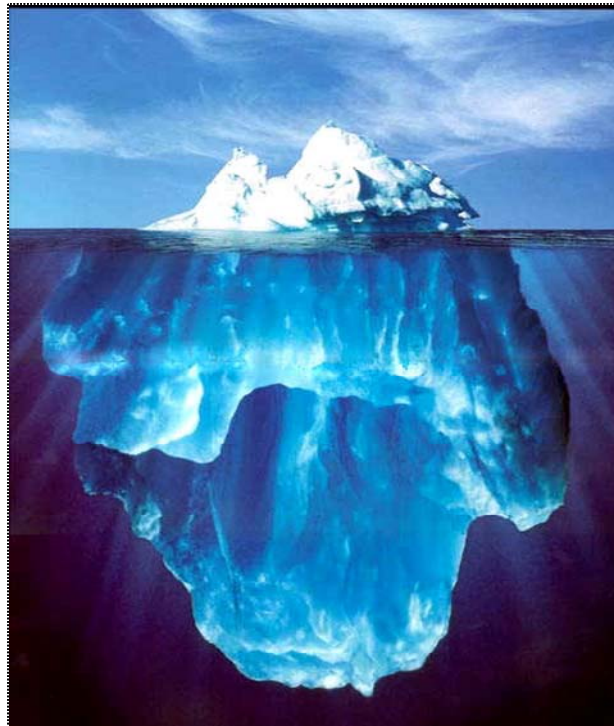
Systems thinking

Events, issues,
ideas
----->

Patterns and
trends
----->

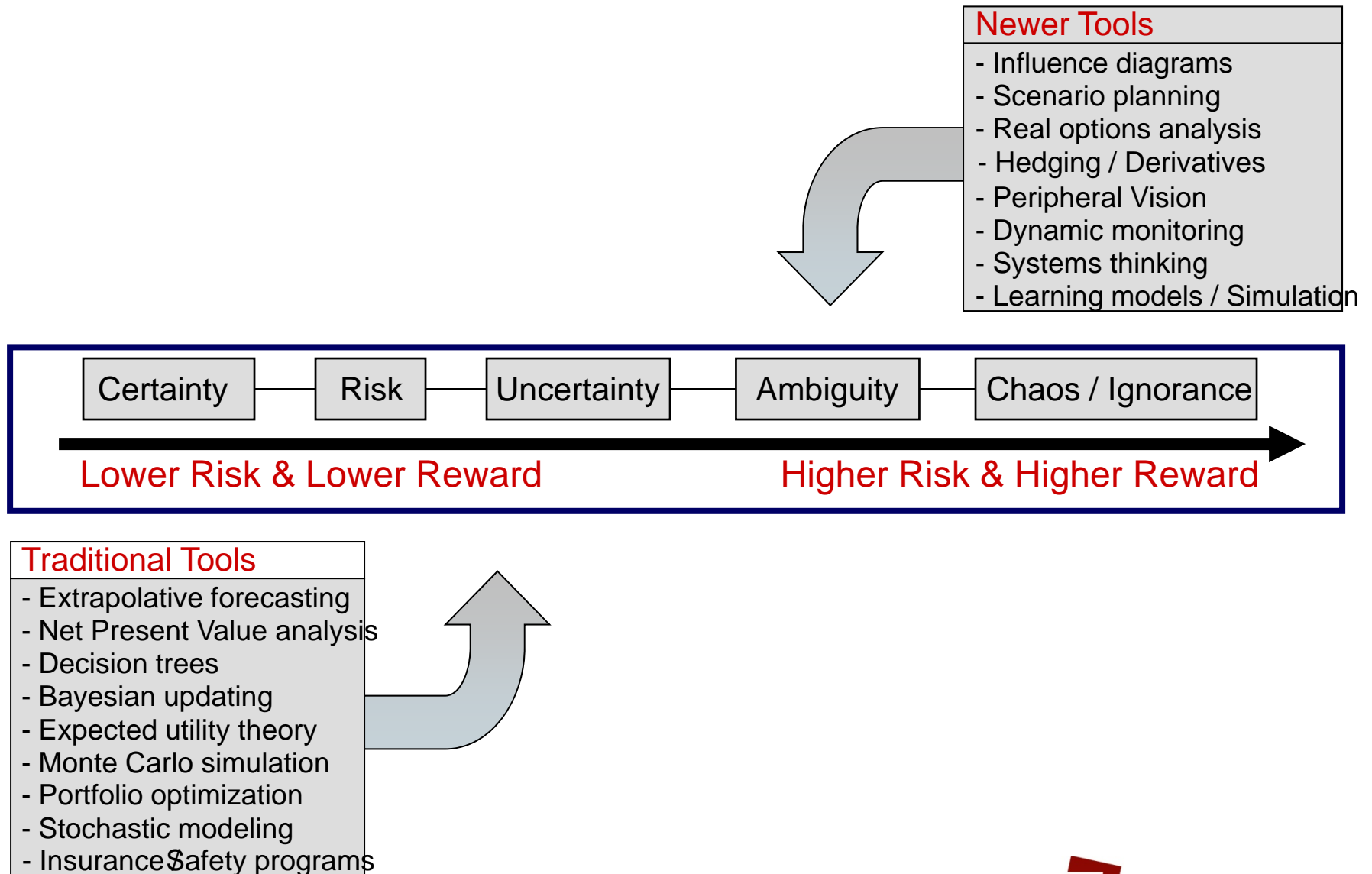
Systemic structures
& dynamics
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Worldviews

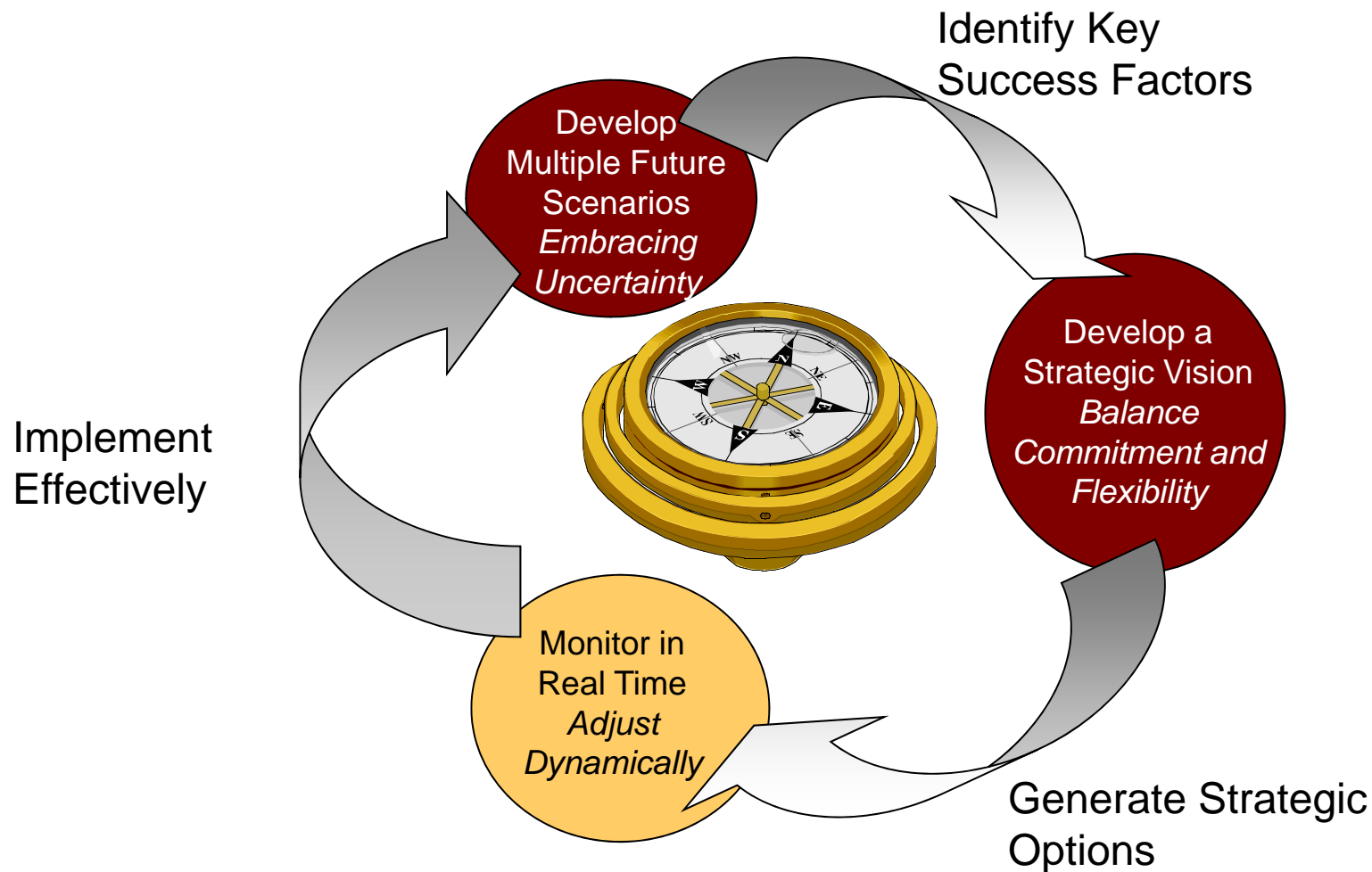


Source: Decision Strategies International, Inc.

WE MUST CHANGE OUR TOOLS AND FOCUS

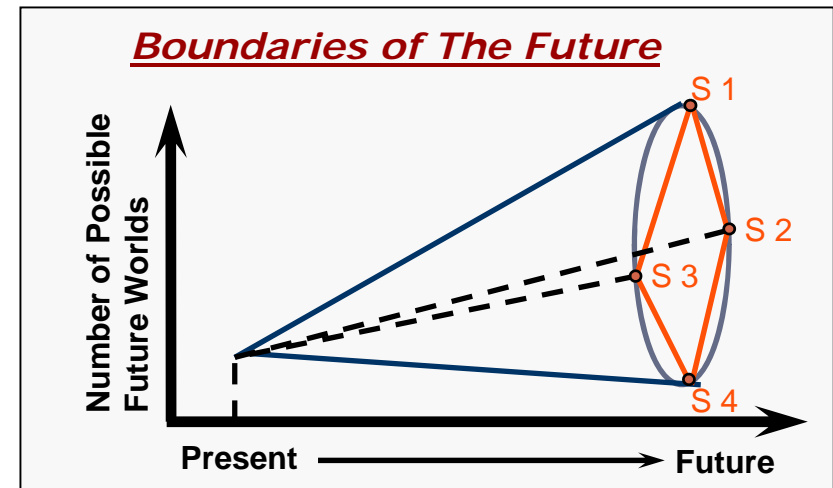
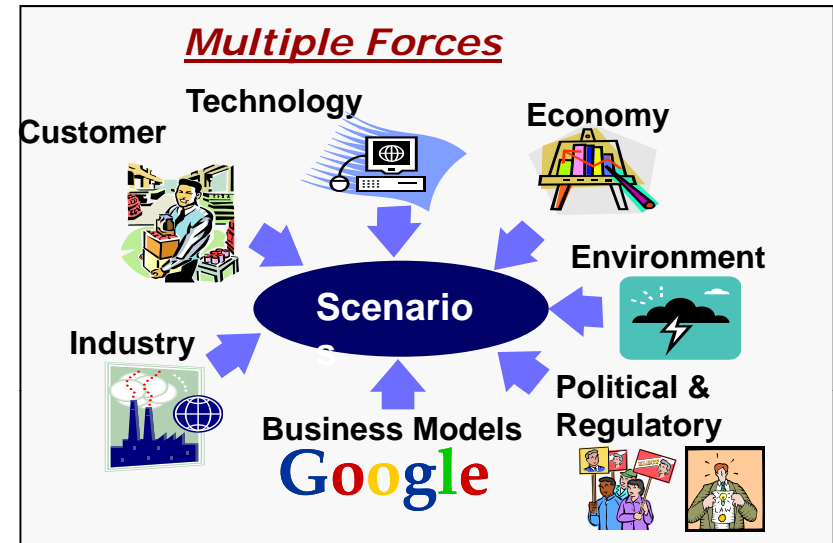


FRAMEWORK FOR NAVIGATING UNCERTAINTY



WHAT ARE SCENARIOS

- Scenarios bound the realm of future possibilities
- Scenarios are shaped by the confluence of diverse forces
- Scenarios draw attention to possibilities we may otherwise not have taken seriously
- Scenarios create “memories of the future”, allowing us to recognize “weak signals” as the future unfolds



EXAMPLE: FUTURE OF THE U.S. ELECTRICITY GRID 2025 – REPORT OVERVIEW

Goal: Understand the factors that are likely going to shape the future of the U.S. Electricity Grid and create strategies for its management

This Study:

- Presents scenarios to bound the future of the U.S. Electricity Grid that challenge current models within the energy industry;
- Identifies opportunities and challenges created by potential emerging environmental conditions and business models;
- Answers strategic questions to help key stakeholders identify winning strategies for future success and add flexibility to current strategies



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REPORT

FORCES AT PLAY



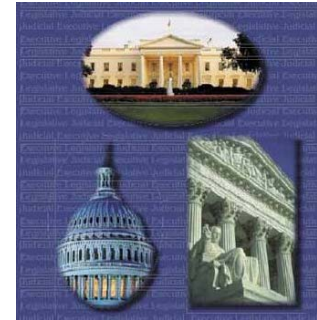
Workforce
availability



Health of the
US Economy



Attack on the grid



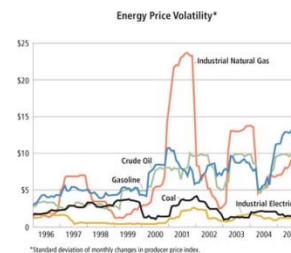
Who has
authority over the
grid?



Consumption
behavior



Technology



Commodities
price levels
(coal, oil, NG)?







Carbon regulation



Level of
infrastructure
investments

U.S. ENERGY GRID 2025: 4 SCENARIOS

Green is Green	The New Power Deal	Boiled Frogs	Department of Homeland Energy
			
A “green micro-grid” world	A “clean energy efficient” world	A “business as usual” world	An “energy security” world
<p>“Green is Green” sees a world of rapid technological advances and adoption of green technologies and local generation, encouraged by high prices and regulation, leading to high defection from the grid.</p>	<p>“The New Power Deal” is a world in which a severe environmental crisis leads to government intervention in the electrical grid, with an emphasis on non-carbon alternatives, but centralized distribution.</p>	<p>“Boiled Frogs” sees little action by industry or government in a weak economy, despite growing environmental concerns.</p>	<p>“Department of Homeland Energy” is a world in which terrorist attacks shut down smart grids and local distribution, leading to a case-hardened, centrally controlled grid.</p>

STRATEGIC IMPLICATIONS- THE NEW POWER DEAL

□ Situation- The happy few

- Regulatory
 - Centralized decision making on generation, transmission and price
- Technology
 - Carbon neutral and zero emission technologies most likely to be selected
- Market Customers
 - Demanding clean energy solutions and actively managing individual footprint
- Industry/ Competition
 - Players with expertise in building and managing complex infrastructure are selected
 - Government moves to integrated resource planning solution
 - Margins are dictated by the government

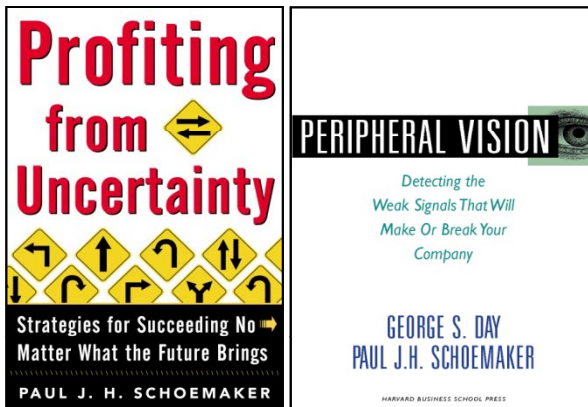
□ Strategic Implications

- The scale challenge
 - Expertise and ability to manage very large and complex infrastructure will define the entities being selected to operate in this scenario
 - Ability to integrate and operate inside a large and complex system will be a differentiating factor
 - Operational efficiencies will be the way to extract superior margin

■ Strategic Responses

- *Must have experience with larger scale projects using green solutions*
- *Must have demonstrated ability to scale rapidly and efficiently*
- *Relationship with the government and regulatory agencies will be keys*

DYNAMIC MONITORING: CONCEPTUAL FRAMEWORK



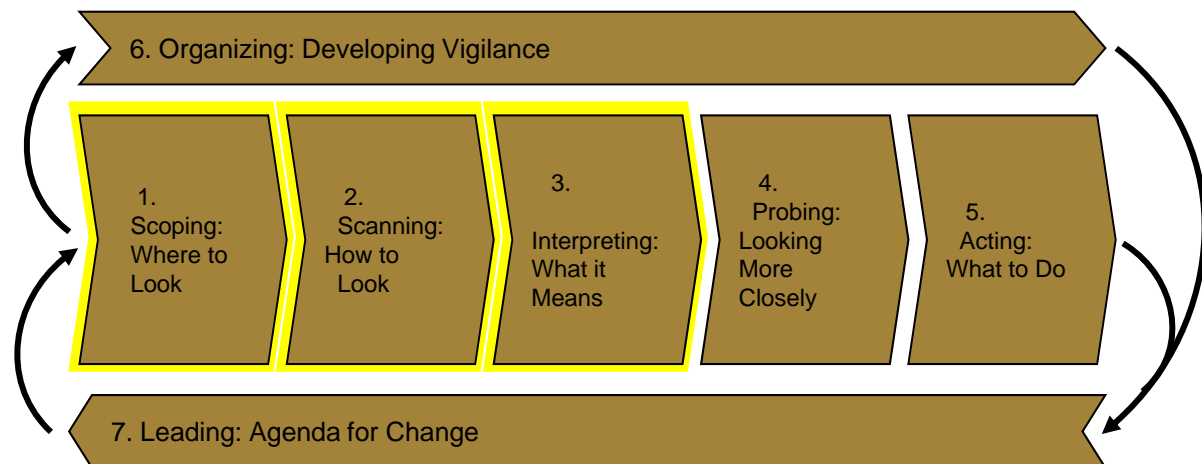
➤ Peripheral Vision is an essential best practice learning and monitoring process that enables clients to develop an organizational capability to recognize and capture the key weak signals.

➤ To see opportunities and risks sooner, and most importantly, act before the competition

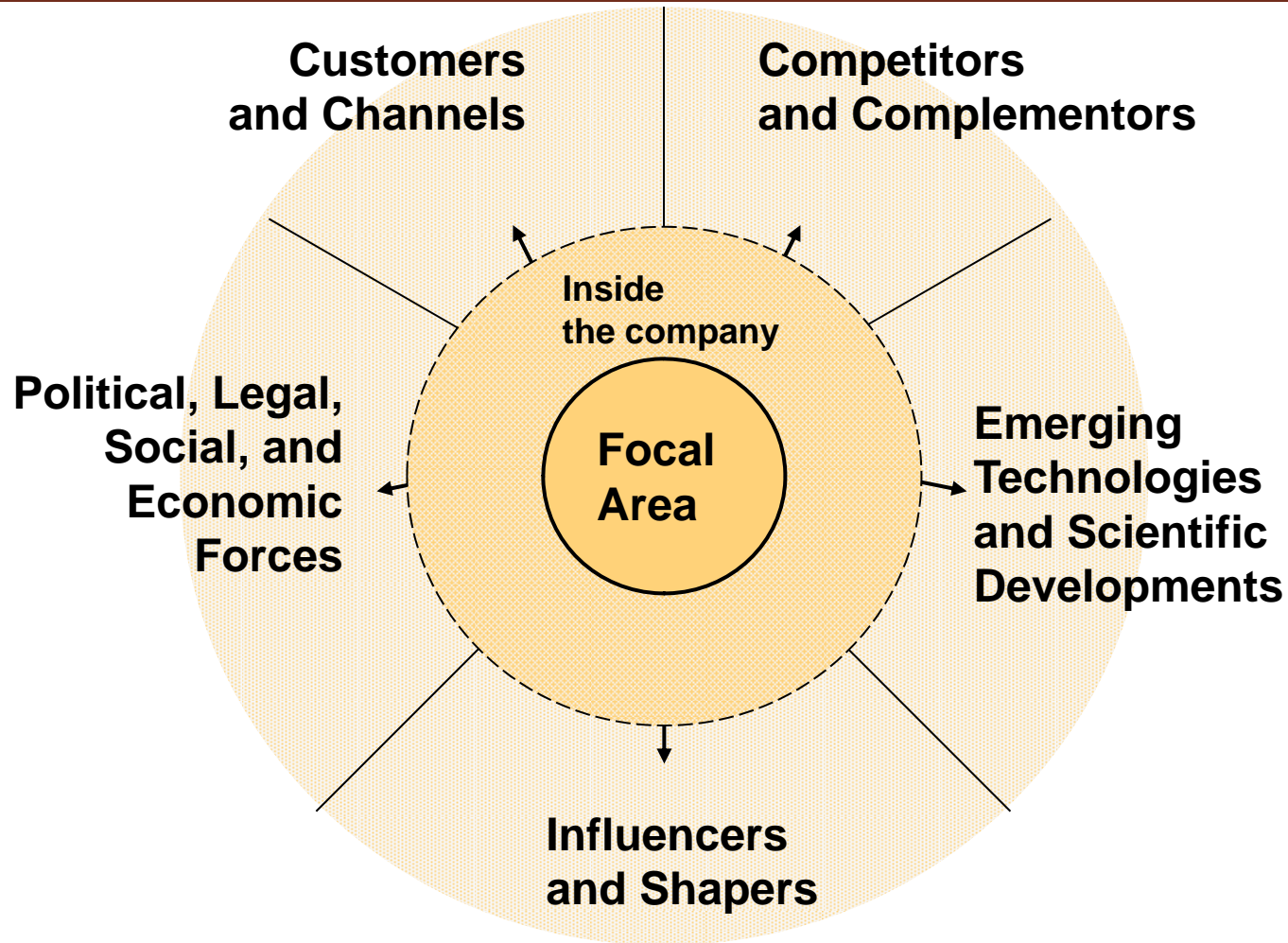
➤ Our offering is based on the conceptual framework in *Peripheral Vision: Detecting the Weak Signals That Will Make Or Break Your Company* (HBS Press, 2006)

➤ The Peripheral Vision Consulting and Executive Education process and methodologies are developed by Strategic Radar, DSI, and CEO Paul J.H. Schoemaker

Seven Steps to Peripheral Vision



CAPTURING WEAK SIGNALS FROM THE PERIPHERY



DYNAMIC MONITORING PROCESS

- Track signals (“known unknowns”)
- Scan for weak signals (“unknown unknowns”) in the external environment
- Interpret Relevance
- Map potential impacts to strategy & portfolio (“Wiring”)
- Allow for strategy adjustments in response to change
- Manage cycles for continuous monitoring



ESTIMATING MARKET INDICATORS

Strategic Radar utilizes multiple methods for estimating market indicators:

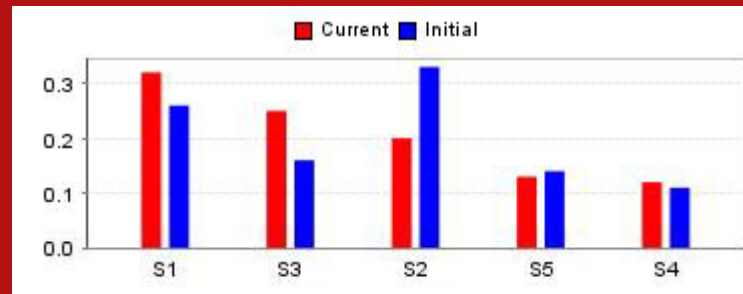
Targeted Expert Panels
(Physician)
Panels

Broad Expert
Panels

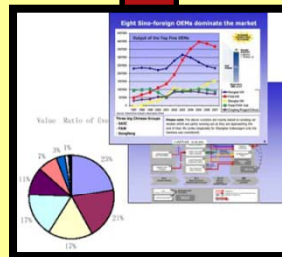
Quant/Analytical
Models

Public
Panels

Synthetic Markets
[coming soon]



Strategic Radar provides
an open platform for
incorporation of
existing/ongoing market
research:



Existing/ongoing
market research:



Monitoring in practice



Changes in **Scenario** weights from initial weights

Changes to the **external forces** as a % move from the starting values are identified

Candidates from **Scanning** are highlighted as potential new forces

option Portfolio elements attractiveness is shown to guide when to act

Weak Signal scanning highlights show the most popular and recent items in the library

Opportunity to Apply to the Antitrust Area

- Increasing Uncertainty and Complexity require a newer set of tools beyond forecasting
- Scenario Planning and Dynamic Monitoring provide a foundation for anticipating market shifts and structural changes
 - Alternative views of the future challenge existing mental models and assumptions
 - Can project industry structure/competitive intensity (HHI, etc.) under different scenarios
 - Early detection of signals can support proactive strategies that diffuse or mitigate potential risks