

# Scenario Planning

APPLYING A SIX-STEP PROCESS TO YOUR ORGANIZATION

David A.J. Axson

## What is the issue?

Uncertainty, volatility and unpredictability characterize the environment in which most organizations now operate.

## Why is it important?

It challenges how an organization makes key decisions, which reinforces the need to develop and implement a robust decision-making model.

### What can be done?

Scenario planning provides a structured framework for evaluating the links between what is known today and what could happen tomorrow.

MANAGEMENT ACCOUNTING GUIDELINE

**GUIDELINE** 

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# **Applications of Scenario Planning**

Scenario planning has value in any situation where there is significant uncertainty about aspects of the future that could materially change an organization's strategy, plans or decisions. Scenario planning is a means for managers to visualize the future and assess how they will respond in different situations. It is best suited to helping organizations understand how fast-moving and/or complex environments may evolve.

To be effective, scenario planning must be focused—ideally around a material question or issue that needs to be answered or understood. Questions can be very specific ("Should we enter the Chinese market?") or relatively broad ("What are the implications of reducing the reliance on fossil-based fuels?"). In either case, many variables could shape the future and make it difficult to construct a single scenario on which decisions can be made.

Looking back into recent history, there are a number of examples of situations (<u>Table 1</u>) that were ideally suited to the use of scenario planning.

In each of these cases, there was evidence that:

- Past performance was unlikely to be a useful predictor of future performance—traditional trendbased forecasting techniques would be of limited use.
- A number of plausible scenarios could play out based on information known at the time—current
  market participants could benefit from the ability to rapidly adapt strategies and plans to changing
  conditions.

TABLE 1: APPLICATIONS OF SCENARIO PLANNING

INDUSTRY & TIMEFRAME	DRIVERS OF UNCERTAINTY	EXAMPLE: SCENARIO A	EXAMPLE: SCENARIO B
Automotive 2005 and beyond	<ul> <li>Demand growth in emerging markets</li> <li>Carbon emissions legislation</li> <li>Technological advances in hybrids, fuel cells, alternative fuels</li> </ul>	Slow Evolution  Moderate oil prices  Slow adoption of cleaner fuels and hybrid technologies  Improved performance of traditional engine technology  Limited government incentives due to weak economic performance and government debt levels	Disruptive Revolution  Sustained high oil prices  Mandated reduction in emissions over a relatively short time period with penal taxes for non-compliance  Emergence of four global companies (down from eight)  Rapid technological advances in fuel cell technology  Government-funded creation of alternative refueling networks
China 2010 and beyond	<ul> <li>Political stability</li> <li>Tolerance of economic freedom</li> <li>Trade policy</li> <li>Legislative agenda</li> </ul>	<ul> <li>China Leads</li> <li>Leads the development of an Asian economic community modeled on the European Union that embraces Japan, India, Korea and other southeast Asian nations</li> <li>Aggressively invests in U.S. and Europe</li> </ul>	Back to MAO     China restricts all trade inflows and outflows     Dumps U.S. dollar holdings     Closes its economy in a return to hardline communism; dismantles Hong Kong, assumes control of Taipei and Myanmar     Engages in oil war with Russia to secure supply

Scenario-based planning can also be a valuable addition to an organization's risk management process because it helps reinforce the concept of risk management over risk avoidance. Without the ability to test plans across different scenarios, organizations don't know when they are taking too little or, conversely, too much risk. Being able to evaluate a range of outcomes allows an organization to know if it has reached an optimal balance between risk appetite and return. For example, in 2006 it would have been very plausible to develop a scenario for the U.S. housing market that described an environment where the decade-long appreciation in house prices would cease for a time as the pool of creditworthy buyers and the availability of credit became depleted. By early 2007, the early signs that this scenario was becoming increasingly likely were clearly visible and any player who had constructed such a scenario could have acted to avoid the worst of the subsequent crash.

Until recently, scenario planning has typically been used as part of the strategic planning process; however, many organizations today are now applying the technique to tactical and operational decision-making. Examples include:

- Capital investment decisions such as building new plants, opening new retail outlets, and upgrading equipment.
- Market strategy decisions regarding market entry and exit, marketing spend by segment, and channel strategy.
- Financing decisions based on scenarios surrounding credit quality/availability, interest rates, and equity valuations.
- Human resource decisions regarding location, sourcing, pay practices, and benefits costs.

# **Building a Scenario Plan**

Scenarios are a way of understanding the forces at work today (e.g., demographics, globalization, technological change, environmental sustainability, biotechnology) that will shape the future.

There are four broad types of scenario:

- 1. **Social:** For example, what are the implications of increasing obesity?
- 2. **Economic:** For example, how will the rapid economic growth of China and India change global markets?
- 3. **Political:** For example, how will the expansion of the European Union change the political power of sovereign governments within the community?
- 4. **Technological:** For example, what will be the impact of increasing adoption of smartphones on desktop and laptop computer usage?

Like most other management techniques, scenario planning is not just about the quality of the results that accrue from the exercise. Scenario planning should serve as a powerful educational tool for managers who participate in the process by:

- Increasing awareness of the impact on uncertainty, and
- Allowing them to envision how their behaviour and decision-making will change under different conditions.

A technically complete scenario plan is of little value if the learning and implications are not understood, accepted and embraced by an organization's leadership team. Shell Oil was one of the pioneers in the use of scenario planning—the company publishes its scenarios on its website. Shell's view on

the value of scenario planning is: "Good scenarios are ones that explore the possible, not just the probable—providing a relevant challenge to the conventional wisdom of their users and helping them prepare for the major changes ahead. They will provide a useful context for debate, leading to better policy and strategy, and a shared understanding of, and commitment to, actions."

# What is RAISE and How does it Apply to Scenario Planning?

In the current global economy, the business environment is always changing. Some changes are so dramatic that everybody notices them but others may slowly creep up over the years before they can no longer be ignored.

Fortunately, scenario planning is one such tactic (in an arsenal of many) that an organization may employ to address how it will respond to these ever-evolving business challenges. Scenario planning can also ensure an organization focuses on what matters most (versus reactively responding to "fires" or "crises")—its customers or core stakeholders—in an effort to respond to external market forces and focus an organization's efforts.

A useful ideology for showcasing the importance of the scenario planning is CPA Canada's RAISE philosophy (where Resilient + Adaptive + Innovative = Sustainable Enterprises) in the implementation of the scenario planning. The RAISE philosophy can help guide an organization (or enterprise) towards a unique strategy that provides an ongoing sustainable edge. The key drivers are explored next.

Organizations today must demonstrate their **resilience** in the face of constant turmoil and disruption. They need to respond quickly to these constant and unexpected external changes while at the same time sustaining regular business operations. Scenario planning refocuses an organization's efforts back to what is important as these crises arise and enables organizations to isolate such problems proactively so that strategic focus and awareness are maintained.

Organizations more than ever need to be **adaptive** in their ability to adjust to these ongoing market shifts in the competitive landscape. Given this changed environment, they need to be nimble and flexible enough to "proactively" respond to any and all competitive or market changes. Scenario planning employs methods to adapt.

Opportunities to **innovate** are typically a primary contributor to organizational success and longevity. However, it is one area that many fail to adequately explore or execute upon. Scenario planning is one such vehicle that can be leveraged to communicate the importance of innovation in achieve its strategic and operational objectives.

Embracing such drivers as key components of an organization's strategic and operational plans and decisions, ensures an organization's (or enterprise's) **sustainable** competitive edge. Combining the resilient, adaptive and innovative drivers of success results in a unique and robust strategy for adopting and implementing scenario planning as explored throughout the course of this guideline.

# **Getting Started**

There are two prerequisites for embarking on a successful program:

- 1. Securing senior management commitment early in the process; and
- 2. Selecting the right participants in the process.

Senior management support is best achieved when the following conditions are met:

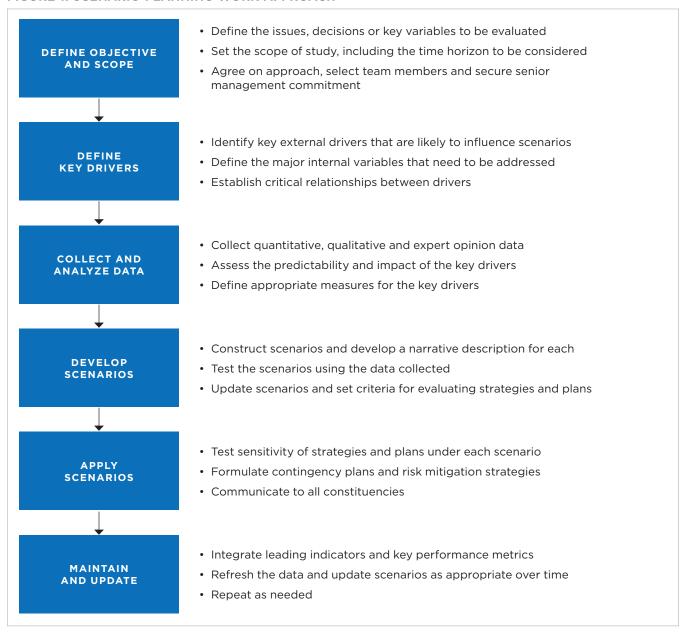
- The program is sponsored by a member of the executive team.
- The objectives and scope of the program are agreed by the executive team.
- The project team keeps senior management informed and engaged throughout the process.

The scenario planning project team should:

- Be comfortable dealing with ambiguity.
- Be aware of the external environment.
- Understand the current operating model.
- Be cross-functional.
- · Combine analytic and creative minds.
- Have excellent communication and facilitation skills.
- Be able to access subject matter expertise as needed.
- Be respected by the senior leadership team.

Having secured senior management commitment and assembled the project team, the steps needed to build a scenario plan are straightforward. Although there are numerous methodologies for building scenario plans, they all follow the same basic approach (Figure 1).

### FIGURE 1: SCENARIO PLANNING WORK APPROACH



# **STEP 1 Define Objectives & Scope**

Traditionally, scenario planning has been used to support strategic planning. The scope has been broad and time horizons have been in the five to twenty-year range. For example, many organizations are developing scenarios around the effects of an aging population in Canada, the U.S., and the U.K., or the likely impact of environmental sustainability on markets.

Today, many organizations are also using scenario planning to evaluate specific plans and decisions over much shorter time horizons in support of prioritizing investments or making tactical market or product decisions. For example, a consumer products company developed a series of scenarios that looked out two to three years and forecasted the likely growth and consumption patterns of the

Chinese middle class in order to evaluate product launch and rollout plans for its products. Another example was a children's charity that developed a series of two-year scenarios that focused on alternative donation patterns as the U.K. economy emerges from recession in 2010.

Before embarking on a scenario planning exercise, be clear about the issue you are seeking to address and then define the appropriate scope and time horizon for the scenarios to be constructed. Answering the following questions will help in determining whether a scenario planning project makes sense and, if it does, then defining the objectives and scope:

- What issues or decisions are we trying to evaluate?
- Is there a high degree of uncertainty about the future environment in which we will face these issues or make decisions?
- What is the time horizon for making decisions and then executing them?

For example, an oil company may have a fifteen-year time horizon from initial exploration to full production of a new oil field; a pharmaceutical company may focus on a twenty-year time horizon that matches the patent protection period for newly approved drugs; a fashion retailer may only focus on a six- to nine-month window, which equates to the next two (spring and fall) selling seasons; and a government-funded agency may look at the next fiscal year.

Time horizons can also vary by the type of decision an organization is trying to make. For example, a semiconductor manufacturer may need to develop three- to five-year scenarios when looking at the economics of building a new semiconductor fabrication plant, while the same company may only need to look out six months to better understand the demand mix for its best products, based on alternative scenarios for adoption of the next generation of mobile devices.

After the organization has agreed on the issue(s) to be studied and defined the scope and time horizon for the project, they should be documented, agreed with senior management, and clearly

communicated to all those to be involved in the project.

At the end of Step 1, the project team should:

- Develop a project charter that clearly states the objectives, scope, issues to be addressed, and deliverables to be produced.
- Secure approval from senior management before moving to <u>Step 2</u>.

Taken together, the objectives fulfilled both the resilient and adaptive drivers in RAISE as the overall objectives were meant to be strategic and long-lasting, able to withstand and adapt to the ever-evolving demands of both customers and the changing dynamic of the market.

### **Examples of Framing Issues**

"What would be the impact on our strategy and business plans for the next three years if oil prices averaged:

- 1. \$55 a barrel?
- 2. \$110 a barrel?
- 3. \$175 a barrel?

"How is the increasing affluence of the Chinese middle class likely to impact demand for our products over the next five years?"

"What implications will a weak dollar and low interest rates have on our plans for next year?"

"How will consolidation in the technology industry affect competition in the 'software as a service' marketplace?"

Below are two examples of framing statements for scenario planning projects:

"We want to better understand how the market for online university degree programs will impact traditional degree programs over the next five years. Specifically, we wish to understand whether online courses will simply increase the total market or siphon off demand from traditional programs."

"Our objective is to understand the drivers of consumer spending over the next 18 months and how they might translate into actual spending, so that we can develop budgets for sourcing, production, and inventory that allow us to capture any growth in spending without significant inventory buildup in the event of another economic downturn."

# **STEP 2 Define Key Drivers**

The heart of an effective scenario plan is to identify the right drivers around which to construct the scenarios. In the context of scenario planning, drivers are external factors that could influence the future environment and impact key internal variables. This definition is very broad, so it is important to develop reasonable criteria for identifying drivers that are material to the organization or issues being addressed. Typically, this means identifying those factors that could materially impact capital requirements, profitability, or risk over the time period being considered.

<u>Figure 2</u> provides examples of external drivers and internal variables that may be integrated into the development of scenario plans.

Simply listing the drivers is the first step. The second step is to organize them around the specific issues that are being addressed in order to be able to test these relationships in **Step 3**.

Typically, the driver models will be more complex than in this example, but they should not be so complex as to lack clarity. Ideally, there will be 10 to 20 drivers that make up the model. Scenario planning is not an exercise in precision; it is a means of explaining how the future may unfold in rational terms; the end result is not that a scenario is either right or wrong, but simply that it provides a credible view of the future to aid in planning and decision-making.

### FIGURE 2: EXTERNAL DRIVERS AND INTERNAL VARIABLES

#### **INTERNAL VARIABLES EXTERNAL DRIVERS** Economic growth · Consumer spending • Mission, vision, Quality strategy Government policy/ · Rate of technological Talent innovation Business model regulation Time to market • Demographic change Inflation Customer Reputation/trust satisfaction/loyalty · Cost of borrowing Market size and · Access to capital growth rate Productivity · Social attitudes Commodity prices · Cost structure

# **STEP 3 Collect & Analyze Data**

In traditional planning processes, much of the data collected is of a historic nature. After all, in most organizations, the only plentiful source of data is the records of past transactions and activities. As a consequence, the majority of plans and budgets are heavily biased towards the future extrapolation of past trends. This works fairly well when the past is a reasonably good predictor of the future; however, as soon as material uncertainties appear, it becomes dangerous to simply assume that the past describes the future. It is not surprising that usage of scenario planning increased significantly after the Arab Oil Crisis in 1973, Black Monday in 1987, and the dot.com bust in 2000. Similarly, the speed and impact of the global credit crisis in late 2008 has caused many organizations to question the value of trend-based plans.

When embarking on the development of scenario plans, the data collection net should be cast widely. Numerous types of data can be collected, including historic trends, future projections and forecasts, insights as to potential sources of disruption, alternative hypotheses of the future, and analyses of the relationships between key drivers.

Having collected the base data, the next step is to identify the relative impact and predictability of the drivers. For example, the supply of hotel rooms is largely predictable in the short-term, whereas fashion trends or exchange rates are far less certain.

Even for drivers where the long-term trend has been reasonably stable, scenario planners should not be afraid to ask the question: "What could materially change this trend?" For example, during decades of relatively low gas prices, the U.S. automotive market was relatively unconcerned with fuel economy; even the Arab oil crisis in the 1970s did not change long-term consumer buying patterns, whereas the arrival of \$4 a gallon of gasoline in the U.S., which happened to coincide with rapidly increasing environmental concerns, led to an upending of the market. Sales of high-profit, gas-guzzling SUVs and pickup trucks collapsed, and both General Motors and Chrysler filed for bankruptcy in 2009.

# **STEP 4 Develop Scenarios**

The starting point for many scenario plans is the traditional planning view of the future, which is based on an extrapolation of current trends. In this context, describing how the key drivers are likely to behave in the future, based on how those drivers behaved in the past, leads to the definition of one scenario. This is a perfectly valid approach, and in many cases will turn out to be a reasonable basis for decision-making. Such an approach:

- Served the automotive industry very well for almost 30 years after World War II.
- Correctly explained consumer adoption of a succession of new electronic devices from televisions to DVD players.
- Described the migration from Main Street to the mall.

The value of scenario planning comes to the fore when the past is not a good predicator for the future, and disruptive change occurs (which demonstrates an organization's need to demonstrate their resilience—a driver in RAISE). For the automotive industry, it was the significant advantage that foreign manufacturers gained by focusing on quality; for consumer electronics, it was the disruption caused by the emergence of low-cost broadband Internet access; and for the retail model, it was the emergence

of the "big box" retailer, such as Walmart, Target, The Home Depot and Best Buy. Organizations that continued to operate under the "business as usual" scenario suffered rapid declines, as exemplified by General Motors, Chrysler, Motorola, Sears and Woolworth.

Crafting scenarios that lay out plausible alternative views of the future based on a change in the behaviour of drivers or the relationship between them is at the heart of effective scenario development.

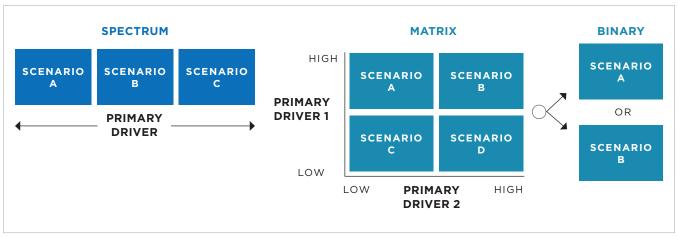
### **Guidelines for Developing Scenarios**

- 1. Scenarios should be organized around the key questions or issues defined in Step 1.
- 2. Develop between two and four scenarios. Developing more than four scenarios can be confusing and counterproductive.
- 3. Each scenario should clearly describe the assumptions or preconditions on which it is based.
- 4. Each scenario must present a credible and logical alternative view of the future.
- 5. Each scenario should have a sufficiently distinct material impact on future plans or decisions.
- 6. The intent is not to develop the perfect scenario, but to provide a mechanism for testing strategy, plans, decisions and behaviours under a range of credible future scenarios.
- 7. Scenarios do not have to be mutually exclusive; however, the differences between each scenario should be clearly documented and understood, and each should represent a different set of challenges across one or more key drivers.
- 8. The completed scenario should include:
  - a. A narrative description that sets out the major elements that describes each scenario.
  - b. A listing of the key drivers that will determine whether the scenario prevails.
  - c. The definition of the leading indicators that will provide early warning that a particular scenario is unfolding.
  - d. Quantifiable metrics that allow the organization to test strategies, plans or decisions for efficacy under each scenario.

There are three common approaches for defining scenarios (Figure 3):

- 1. spectrum
- 2. matrix
- 3. binary

### FIGURE 3: APPROACHES TO DEFINING SCENARIOS



The spectrum approach isolates one major driver that has a spectrum of credible future states. A simple example would be the approach that many organizations used for developing their plans for 2010. During the latter half of 2009, when most plans were being developed, there was considerable uncertainty as to the medium-term economic outlook. Although stock markets were signaling signs of recovery, many other indicators such as unemployment, gold prices, housing, and credit quality were less positive.

A prudent approach was to cast plans for 2010 under two or three different scenarios. <u>Table 2</u> illustrates this approach.

Organizations using this approach would have developed their baseline plan under one of the scenarios—typically this would be called the "plan scenario." They would then test the sensitivity of their plans under the two alternative scenarios, identify the impact on results, and then develop alternative tactics or contingency plans that would be executed in each case.

TABLE 2: EXAMPLES OF THE SPECTRUM APPROACH

			HDSIDE/	DOWNSIDE/
		PLAN SCENARIO	UPSIDE/ STRONG GROWTH	DOWNSIDE/ CONTINUED WEAKNESS
Description		Moderate pickup in eco- nomic growth in second half of 2008 that continues into 2009 with sustained low inflation	Strong growth alternative more typical of a robust economic recovery	Continued weak economic growth with inflation trending toward zero. Results in the longest period of economic weakness since the 1930s
GDP growth	2008	3.4 %	4.3 %	2.6 %
	2009	3.3 %	4.1 %	2.3 %
	2010	3.8 %	4.3 %	2.4 %
Consumer spending		3.0-3.5% growth with pickup due to increases in real disposable income, tax cuts, low interest rates and low inflation. Relatively modest compared to prior economic recoveries	Moderately stronger than the plan scenario	Weak and well below the historical trendline
Business fixe investment a inventory		Rebounds at a slower pace than prior recoveries. Low pace of inventory building following a sustained period of liquidation	Significant pickup in business investment and inventory building. Heightened business confidence with faster growth in both production and employment	Ongoing business uncertainty with limited business investment and low inventory levels
Corporate prability growth		10-12% growth with stronger economic growth and sus- tained productivity gains	Faster profit growth generates greater stock price appreciation and improved credit quality	Weak economic profits adversely affect the stock market and credit quality

The second approach is to organize the scenarios around two drivers in the form of a matrix. The matrix approach isolates two material dimensions that have a high degree of uncertainty associated with them. Figure 4 shows an example for the consumer electronics industry. The two drivers selected are the rate of technology innovation and the level of global GDP growth. This leads to four possible scenarios that are described below.

- "Boredom" stagnation: The lower left quadrant represents an environment of low economic growth and a relatively slow rate of innovation. In short, not much is happening. The period after World War II in Europe is a good example. For a decade, the continent was rebuilding, and innovation in consumer electronics did not really take off until television gained a foothold in the mid-1950s.
- 2. "Dinosaur" dominance of established players: When GDP growth is robust but little innovation takes place, the established players and products tend to dominate. The European and U.S. markets from the mid-1950s to the mid-1970s followed this model when, except for the introduction of color television, not much changed.
- 3. "It's a rich man's world" regionally focused markets: High levels of innovation but low global GDP growth tend to mean that innovations only penetrate already affluent markets. This happened in North America, Japan and Europe from the mid-1970s to the mid-1990s. Despite many inno-vations—transistor radios, videocassette recorders, fax machines, PCs and compact discs—the benefits were largely restricted to the already developed world.
- 4. **"Wild West" disruptive global innovation:** When both innovation and GDP growth are healthy, the market is characterized by lots of growth and lots of innovative new companies with cool products—for example, the period from 2002–2008 as the smartphone, iPod, DVR, Xbox, video-on-demand and flat-screen television emerged.

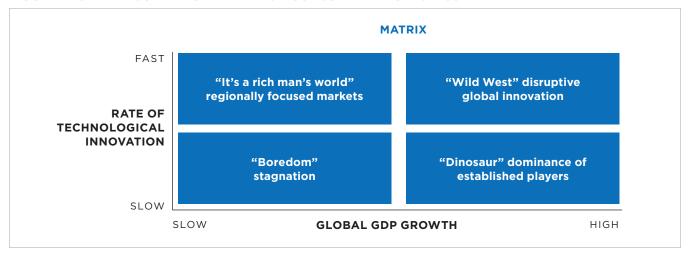


FIGURE 4: SAMPLE SCENARIO MATRIX FOR CONSUMER ELECTRONICS

The third option is the binary approach that focuses on creating two scenarios using a simple structure where one scenario is "good" and the other is "bad." This can be effective for simple yes or no decisions where it is possible to define clear criteria for the key drivers that determine whether they can support a decision. However, most situations are not so clear-cut, and the binary approach may provide insufficient choices.

Having constructed a set of plausible and interesting scenarios, many organizations mistakenly think they are done—they're not! Although creating plausible scenarios that resonate with management is satisfying, the real value comes by using the scenarios in a structured manner to test and adjust strategies, plans and decisions.

# **STEP 5 Apply Scenarios**

The first step after completing the scenario development is to test the sensitivity of strategies, plans, and budgets under different scenarios by asking, "What will be the impact?" Developing an understanding of the validity of different strategies and plans under different scenarios gives management a much clearer understanding of the risk factors and the appropriate risk mitigation and management techniques that may need to be employed.

For example, the effects of the global economic downturn during 2008-2009 were not uniform. Many global businesses adjusted their investment priorities and reset their performance expectations as economies in China, Australia and Brazil out-performed those in Western Europe and North America by a wide margin. Figure 5 provides an example of the type of scorecard one global business uses to assess the relative attractiveness of investing in different markets. During their planning process, they develop scenarios around each major region and then develop alternative investment portfolios based on the attractiveness of the regions relative to each other.

One of the criticisms of scenario planning is that it can become a largely conceptual exercise with little practical application. It is a valid criticism, not of the technique itself, but more of how the results are used (or, more accurately, not used). Too often, organizations pour a lot of effort into developing rich scenarios, but fail to apply them in the planning and decision-making process.

Risk/Attractiveness: L - Low Risk/Attractive **M** — Some Concerns H - High Risk/ Unattractive В Е Weak recovery, rising **Strong government** Strong growth, unemployment, Patchy growth, fueled growth, China driven growth significant new softening demand rapidly rising due to commodities flat demand local oil finds for oil demand GDP growth GDP growth Μ GDP growth L GDP growth GDP growth Μ L L Political risk Political risk Political risk Н Political risk Political risk L М Μ L Market size Market size L Market size Market size Market size Н

FIGURE 5: SAMPLE SCENARIO MATRIX FOR CONSUMER ELECTRONICS

# **STEP 6 Maintain & Update**

Some organizations treat scenario planning as a one-off exercise or project. There is certainly merit in using scenario planning in this way, particularly as the effort required can be significant. However, in today's increasingly volatile world the future is rarely predictable and so many organizations are adding scenario planning to their management toolbox. A well-maintained set of scenarios would allow an organization to quickly:

- Identify changes in the underlying assumptions on which their strategies and plans are built.
- Change course.

This can be translated into specific abandonment criteria that clearly set out the circumstances in which a particular strategy or project no longer makes sense because the underlying assumptions that were made when the investment was approved have changed. Professional accountants can use the developed scenarios to identify leading indicators that show whether the market is moving towards one of the scenarios and then re-evaluate the mix of projects and investments that the organization is pursuing and determine what adjustments to make. Updating scenarios in response to material changes in the internal or external environment serves two purposes:

- 1. It forces managers to revisit the original scenarios and develop an understanding of what worked and what didn't, which provides valuable input to future iterations.
- 2. It will help flush out new opportunities and threats that have been created since the original scenarios were developed.

Updating scenarios can be a simple process of revisiting <u>Step 2</u>, <u>Step 3</u> and <u>Step 4</u> by refreshing the data and then assessing the impact of any material changes in the scenarios on current operations and future plans. The most critical element is to avoid assuming that the relationships between key drivers and results remain the same. One of the most frequent causes of discontinuity in any market is a change in a long-established cause and effect relationship. Recent examples include the breakdown between low interest rates and real estate prices; the reducing dependence of Chinese economic growth on U.S. consumer spending; and one that is likely to emerge in the near future—that economic growth is directly correlated with an increase in carbon emissions.

Adapting planning and management processes to reflect increased volatility and uncertainty makes sense. Successfully navigating an uncertain world requires flexibility to adjust tactics and, sometimes, strategies in response to trends in the marketplace. Scenario planning offers a powerful tool for envisioning alternative futures and testing different plans and strategies; however, it is not a substitute for ongoing risk monitoring or management. Employed appropriately, the regular updating of scenarios is both educational and impactful.

# **Risk Factors Associated With Scenario Planning**

Like any management tool, there are risks in implementing and using scenario planning. Successful scenario plans demand careful planning and clear communication. <u>Table 3</u> lists some of the more typical risks and proven approaches to mitigate each risk.

**TABLE 3: RISKS AND MITIGATION STRATEGIES** 

RISKS	MITIGATION STRATEGIES
Poorly defined issues or decisions make it difficult to identify key drivers and construct scenarios	<ul> <li>Take enough time to frame the issues or decisions</li> <li>Up front, ask the question: "Can we define the decisions that will need to be made, and who will need to make them as a result of completing this process?"</li> <li>Always ask the "So what? Who cares?" questions to ensure relevance and ownership of issues and decisions</li> </ul>
Too many scenarios are defined	<ul> <li>Limit scenarios to no more than four by mapping all potential scenarios against each key dimension, and combining those that have the most similarity. If you still have too many, let the senior management team vote on their top four</li> <li>Emphasize that the goal is not to define the perfect scenario</li> <li>Focus on material differences between scenarios</li> </ul>
Scenario definition and refinement becomes a neverending process	<ul> <li>Establish a clear timeline</li> <li>Frequently step back and ask the question: "Have we defined a logical and consistent scenario yet?"</li> <li>Remember that with respect to the future, more detail does not equal more accuracy</li> </ul>
Scenarios are perceived as being too subjective	<ul> <li>Ensure an appropriate balance of quantitative and qualitative data</li> <li>Each scenario needs to be perceived as credible. One way to do this is to show how each scenario can realistically evolve from the current state</li> </ul>
Management becomes fixated on a single scenario or continues to rely on a single scenario long after it has ceased to be relevant	<ul> <li>Restate the objectives</li> <li>Offer real-world examples of situations where fixation on a single scenario proved dangerous</li> <li>Periodically refresh the scenarios and update assumptions used in strategies and plans as appropriate</li> </ul>
Little changes as a result of developing scenario plans	<ul> <li>Clearly set expectations up front and secure senior management commitment through participation in the process</li> <li>Illustrate the impact, in both operational and financial terms, on current plans and strategies of different scenarios</li> </ul>
Development of scenario plans is outsourced to third-party consultants	<ul> <li>Ownership of the process must remain in-house; outside consultants can provide valuable facilitation or subject matter expertise but must not own the whole program</li> </ul>
The explicit definition of multiple plausible scenarios makes it difficult to secure commitment to the chosen strategy or plan	Emphasize that uncertainty is a fact of life, but that does not invalidate commitment to a common plan of action. In fact, the existence of scenario plans increases the likelihood that a chosen strategy or plan can adapt to changing circumstances by providing managers with a road map to respond to variability
Confusion exists between fore- casts of future performance that offer a singular view of the future and scenarios that offer multiple views	<ul> <li>Forecasting is predicated on the assumption that the future is predictable, based on information and relationships known at the time of creation. Scenario planning assumes that the future is not predictable with any degree of con- fidence. Both techniques have value; however, it can be dangerous to apply scenario planning to factors that are reasonably predictable and, conversely, develop forecasts for inherently unpredictable factors</li> </ul>

Scenario planning is a powerful tool to help management think about future risks and uncertainties and how they will influence strategies, plans and decisions. However, it is not a silver bullet—no management tool is.

### Scenario planning:

- creates awareness that the future will not always mirror the past
- helps ensure that managers take uncertainty into account in their planning and decision-making
- assists in understanding the implications of alternative future scenarios to be able to make fast, confident decisions on the actions that need to be taken

Specifically, scenario planning can help in the following ways:

- By building sets of scenarios, organizations can develop several different versions of the future at the same time. This helps managers to keep thinking of the future as full of opportunities (and threats).
- It is a collaborative process that can accommodate multiple points of view.
- Different types of data and fields of expertise can be combined to develop a rich picture of what the future may look like and how it could evolve.
- Developing a few plausible scenarios can simplify planning by taking a huge volume of data and organizing it into a manageable number of alternative future states.
- The process of developing scenarios can be as valuable as the end result, by allowing managers
  to begin to understand the drivers of the future and their interrelationships. Scenario planning
  is focused on developing alternatives rather than the fruitless task of coming up with "the right
  answer."
- Scenarios do not demand consensus; opposing views can be equally valid (and useful).
- Scenarios address blind spots by challenging assumptions, expanding vision, and combining information from many different disciplines to increase awareness of future possibilities.

For the professional accountant in business, scenario planning offers a number of specific benefits:

- It helps put financial plans and budgets into the context of an uncertain future.
- It provides a foundation for explaining variations in performance by reference back to the drivers described in the scenarios.
- It can provide an early warning of potential opportunities and threats that can be incorporated into performance analysis.
- It identifies the risks of relying on the simple extrapolation of past performance as a basis for planning and budgeting.
- It increases awareness of the external drivers of future performance.

As organizations across the world struggle to deal with an increasingly uncertain world, they are looking to their finance teams (and the professional accountant in business) to assist in helping them understand the choices, opportunities, and implications that uncertainty presents. Applied judiciously, scenario planning can provide valuable insights into how the future may unfold, thereby equipping organizations to react with speed, agility and confidence.

# **In Summary**

Scenario planning, as a concept, provides a structured method for the professional accountant in business to evaluate alternative views of what may happen in the future as an aid to strategic, operational and financial planning. It represents a cohesive set of assumptions that describes a view of the future that is then used to develop a forecast or to test a strategy, plan or strategy. Such future foresight

ultimately represents an operating philosophy that governs the mindset, decisions and actions of an entire organization. All organizations have an opportunity to leverage such a philosophy in their organizations to mitigate some of the uncertainty, volatility and unpredictability they face and in turn, derive unprecedented and ongoing value.

Scenario planning has applications in all sectors (i.e., private, public, not-for-profit, and government) and at all levels of the organization and across all departments.

Professional accountants in business by their very nature can leverage their know-how and expertise in guiding organizations towards implementing such a unique customer-centric and competitive strategy. The ability of scenario planning to drive alignment and focus across an organization demonstrates how powerful a tool (or program) it can be (if implemented correctly).

This facilitates the ability for an organization to maintain and sustain itself as a resilient, adaptive, innovative and sustainable enterprise (per the RAISE philosophy) in competitive marketplaces. Ultimately these drivers will aid both the professional accountant and organizations in ensuring successful adoption while equipping themselves to engage in the Canadian ideal of good business.

# **Additional Sources of Information**

Axson, David A.J., *Best Practices in Planning & Performance Management*. New York: John Wiley & Sons, 2007.

Axson, David A.J., The Management Mythbuster. New York: John Wiley & Sons, 2010.

Bergstrom, Robert, Sarah Batchelor and George Marcotte. "The Future Used to be Easier: Planning for Success in Dynamic Environments," *Accenture*, 2011.

Bood, Robert, and Theo Postma. "Strategic Learning with Scenarios." *European Management Journal*, December 1997, 633–647.

Fahey, Liam, and Robert M. Randall (eds.). *Learning from the Future: Competitive Foresight Scenarios*. New York: John Wiley & Sons, 1998.

Lindgren, Mats, and Hans Bandhold. *Scenario Planning: The Link Between Future and Strategy.* 2nd ed. London: Palgrave MacMillan, 2009.

Ramirez, Rafael, John W. Selsky, and Kees van der Heijden. *Business Planning in Turbulent Times: New Methods for Applying Scenarios*. London: Earthscan Publications, 2008.

Ringland, Gill. Scenario Planning: Managing for the Future. 2nd ed. Chichester: John Wiley & Sons, 2006.

Schwartz, Peter. *The Art of the Long View: Paths to Strategic Insight for Yourself and Your Company.* New York: Currency/Doubleday, 1996.

Schoemaker, Paul J.H. "Scenario Planning: A Tool for Strategic Thinking." *Sloan Management Review*, Winter 1995.

Taleb, Nassim. The Black Swan: The Impact of the Highly Improbable, New York: Random House 2007.

van der Heijden, Kees. *Scenarios: The Art of Strategic Conversation*. 2nd ed. Chichester, UK: John Wiley & Sons, 2005.

### **About the Author**

**David A. J. Axson** is an acknowledged expert in the field of business performance management. Over the last 25 years, he has advised more than 250 public and private sector organizations in Europe, Asia, Australasia and North America. For further information, visit **www.davidaxson.com**.



This publication is one in a series on *Scenario Planning*. The entire series of <u>overview</u>, <u>guideline</u> and <u>case study</u> are available on our <u>website</u>. For additional information or for general inquiries, please contact us at <u>mags@cpacanada.ca</u>.

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