

Scenarios: Worth the Effort?

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As a practitioner and teacher of forecasting engaged for some 50 years in the futures field, I can't recall any personal experience with scenario exercises that was worth the time and effort spent. Among major companies, business groups, and government offices I never saw scenarios make any major contribution or breakthrough. Scenarios presented to practical minded senior managers tended to be regarded as "paper bluster," typically not worthy of the time to consider. I can't recall any great success – despite what some colleagues may brag about. There are, of course, exceptions.

Scenario planning can be an interesting and engaging but sometimes idle exercise. Rarely do such efforts discover mind-blowing or mind-altering results. At best, most scenarios merely reinforce what participants already basically knew. Such efforts may amount to little more than a time-consuming "parlor game" in my estimation.

One saving value is that the process gets some participants thinking in uninhibited and creative ways. Scenarios may be invoked to jog thinking, well aware that results may not be particularly useful. In short, it is hard to find much practical value in hashing and haranguing one's way through scenario development exercises. Of course, there always is some value in surveying and studying matters. The vital questions include whether scenario dynamics added anything of significant value to forecasting efforts and whether the output was worth the effort expended.

Among the growing panoply of techniques to define future developments and trends, some technique will "click" with one person, yet fail to connect with others. No single way appears to be the best for everybody. I remain skeptical of gimmicks that probe the future. Obviously, this practitioner is not the most unbiased person to seriously assess the value and use of scenarios. Despite my obvious biases, skepticism, and limited personal successes with scenarios I encourage – not discourage – any technique that may advance forecasting capabilities. The following remarks may seem obstructionist, be viewed as nit-picking, or otherwise rankle readers. I hope not. My deep and abiding interest is in advancing careful appraisal of a potentially useful tool in the forecasting arsenal. In fact, at the close of these comments, some thoughts are posed concerning how to enhance scenario exercises – should such deliberations be pursued.

Fundamental "Down to Earth" Forecasting

After a lifelong career of serious research, I remain a "pick and shovel" researcher. I've always focused on digging deeply and broadly to gather a panorama of past, present and prospective facts and then couple that with what acknowledged experts have to say. The "handwriting" always is on

the walls of history. We all build upon significant advances and stand on the shoulders of the Greats. The entire history of civilization and humanity is gripped by change as a certainty. The big problem is how to deal with it, how to accommodate it, and how best to capitalize on its potentials for doing things better, going one step further.

Comprehensive chronologies and trend-lines of history – to which I am currently dedicated – clearly reveal past and present perspectives. Carefully tabulated and paced they also delineate impending changes. Precursive events, pressures and trends always describe a long – and usually incredibly well detailed trail – from which on-going and oncoming change can be surmised. If one can't spot oncoming developments from such research, there's a simple explanation: the essential "homework" and research simply hasn't been done.

From this standpoint, the status quo isn't so much altered by impressions and techniques as it is by the steady and relentless incremental advance of scientific and social inventions. A book I have been plugging away at for decades – "The Chronology of Civilization" – vividly reveals that all hard and social sciences have very early basic roots that progress (and rarely regress) in a step-by-step continuity. Abrupt breaks with the past on careful analysis invariably amount to incremental extensions of past events (albeit at a more rapid than usual rate).

Almost without exception, every study I ever conducted (whether involving hard or soft sciences) easily traces back in time and cross-culturally at least 100 years or longer. The resulting timeline reveals the ongoing direction and pace of oncoming developments. Decades of such research reveals that roots trace back much further – in some cases millions, even billions of years, depending on the topic.

Is Scenario Planning Something New?

There is a tendency to ascribe a uniqueness and coin new terms that repackage and reintroduce timeless techniques. In practice, group deliberations and conference approaches – the crux of scenario generation – always have been a vital element in planning. Actually, bringing together a variety of outlooks and melding them into the most probable construct – which, when all is said and done, is what scenarios are all about – dates far back into ancient history.

Reduced to its most basic principle, strategic conversation of scenarios comes down to rational discussion targeting specific oncoming change(s). Hallmarks entail purposefully directed discussion embracing a rational give and take in the exchanging and challenging of ideas to help describe and define potential changes and their effects. Call it what you might – strategic conversation, scenario building, discussion, dialogue, review, study, examination – all these terms of art, despite different shades of meaning and nuance, are "birds of a feather." Each of these terms expresses ways of targeting and developing useful intellectual conclusions. Scenarios, from this perspective, amount to little more than an approach with obvious overtones and underpinnings that accompany informed rational deliberation of possibilities associated with most any topic.

Words of art describing almost anything often are quite numerous. The crux of the object or matter remains the same, but with variations in the jargon and shades of

measuring. It seems self-evident that discussions – including scenarios – that challenge, elaborate, refine, review, extend, inject, update, and so on, all fundamentally amount to the same thing. Common sense concludes that serious and informed discussion adds to understanding. Reaching back in time, I can't help imagining that the reported 10,000 court "astrologers" that Kublai Khan maintained to sort out and guide his empire's fate didn't include something approximating scenario building or strategic conversation, as some currently term the process.

Zealous pursuit of pet concepts requires care in avoiding sweeping assumptions and overstatements. When someone is on to something – whatever it may be – there is a tendency to feel that new ground is being broken, that something new is being discovered that nobody ever thought of. Tracing back through time reveals phenomena dating back hundreds, thousands of years and even much longer time spans, that involve – at least in basic principle and concept – very much the same fundamentals as scenarios. Luminaries simply learn to go one step further, do the job just a little better or somewhat differently. In the spirit of this mindset, I laud researcher enthusiasm for "breaking new ground," discovering something nobody has seen or heard of before. Sometimes, however, it turns out that the researcher is merely re-discovering or repackaging the "same old, same old."

Compiling a "Universe" of "Story-building" Approaches

Techniques that help develop and shape strategic conversations/scenarios are numerous. Story telling as a guide to the future in overall perspective, doubtless, could be traced back to the very beginnings of civilization. There is very little that is truly new – it's more likely "new wine in the same old bottle." Exercises and devices, techniques and methods that seek to draw out serious consideration of the future play a vital role in easing the way into tomorrow's possibilities. Following are a number of words that suggest some diverse aspects of "creativity" – innovating, inventing, assessing, deliberating, pondering, generating, concocting, speculating, dreaming up, spawning, envisioning, considering, proposing, and so on.

To compile a complete compilation, encompassing all the many and myriad forecasting methods that might be construed, in the broadest sense, as "story telling" (or deliberation), would provide a most useful forecaster's "toolbox." Creation of a comprehensive listing of historic antecedents to full-fledged scenario planning, as we now know it, would put many and diverse permutations and enhancements of this important technique into a useful overall context.

Disciplines ranging from psychology to business management have studied decision making in all its many and myriad details. Methodologies such as operations research and systems analysis, for example, fit within this purview. Noted author, Clayton M. Christensen, describes thinking embracing strategic management and innovation concepts. Some more precise attribution of creative thinking – including myths, legends, stories and tales of all kinds – might also be likened to scenarios as a generic class of speculative story telling. Spelling out how science fiction themes fit into stimulating thinking about distant future(s) – theoretical and theatrical – shaping the future provides further speculative dimensions to scenario building. Mining that

treasure trove and grouping the widest possible agglomeration of techniques into context embracing the full gamut of techniques would seem to be a worthy undertaking.

Just to cite a technique widely hailed just 50 years ago, serious creative exploratory thinking – termed "brainstorming" – was championed by Batten, Barton, Durston & Osborne (a prominent U.S. public relations firm). This "blunderbuss" free-association approach designed to spontaneously stir creative thinking allowed anything and everything related to the topic to be tossed onto the table. Critiquing or deliberating merits, probabilities, and the like was postponed to close of considerations when all ideas were exhausted or a time limit was reached. Akin to scenario generating techniques, this approach requires narrowly focusing on a specific topic; accumulating any and all ideas as presented; denying rebuttal or critique – at that point; and restraining explorations of implications raised by any submitted thoughts to the concluding evaluation(s).

Serious consideration of weighty matters entails give and take, presentation of various viewpoints and biases, and appropriate consideration of expectations, elaborations and refinements associated with various posed alternatives. Another important champion of exploring multiple possibilities and approaches is Edward de Bono. He characterized his methods as "lateral thinking" – what now is termed "thinking outside the box" The point here is that "many rivers all lead to the same seas."

Scenarios – and deliberative techniques of all kinds – open up competing perspectives on change. The collective wisdom and viewpoints derived from drawing together hordes of gifted experts to cast light on what lays ahead and how to contend with it is a time-proven approach. Institutions of all kinds depend on such dialogue. The missions of advisory boards, commissions and the like all can be grouped into the same genre.

In short, the essential elements of strategic conversation have always been an indispensable and integral part of projection and surmises leading to informed decision making. Chronologies and summations of myriad techniques and practices akin to scenario planning would provide practitioners with a wide range of forecasting techniques from which to choose.

As long as we're discussing and acknowledging how scenarios fit in an overarching array of similar methods, it's worth mentioning in passing, who is credited with "discovering" (or popularizing) scenarios as we have come to term the process.

A doctoral thesis written by Dennis List, an Australian futurist, warrants attention (List, 2005), warrants attention. List's nearly 500-page thesis provides a treasure trove of background and thinking about scenarios in all their varied forms and permutations. As Santayana observed, "There is very little that is new under the sun." One just needs to know where to look.

List, incidentally, aptly ascribes contemporary scenario development to legendary futurist, Herman Kahn: "*Herman Kahn is credited by Ringland (1998) and Rubin (2001) with being the inventor of scenario planning, the first of the multiplistic methods to be developed – though in principle is much older... The earliest reference I could find to multiple scenarios was by Kahn (1961)... By the end of the 20th century, scenario work had become the most widely used method for multiplistic foresight – to judge from the number of references in the OECD Future Trends data base (OECD,*

2001)"; A fitting tribute to one of the greatest futurists in our times.

Kahn's scenario techniques were developed in response to U.S. Air Force efforts to anticipate military preparedness options. Kahn founded the Hudson Institute in 1961 where he applied those – and other innovative forecasting techniques – to projects for private and public sector clients. From the outset he attributed development of scenario techniques to methodologies derived from systems analysis and operations research.

Secondary Benefits Resulting from Scenario Exercises

Many scenario planning projects wind up not being used. That, however, may not have been the point of such undertakings. Working through such exercises gird understanding and makes participants more fully aware of what needs to be done to survive and thrive. Cautionary flags as well as beacons of new opportunities help appraise carefully described arrays of alternatives and evaluate differing driving forces that shape eventual outcomes.

The planning value of scenarios may not be pursued so much for precise depiction of future developments, but rather to delineate the suggested outcomes they illuminate. Alternative scenarios developed can be likened to roadmaps for assisting the selection of better paths into the future. Anticipatory clues and signals, deep insights and varying probabilities provide a more solid (albeit conjectural) basis for responding in advantageous manner to oncoming change.

Secondary benefits of scenario deliberations inherently entail learning. Strategic discussions of deliberation, after all is said and done, provide a learning experience for participants. All things considered, strategic conversations can be as much a learning process as a problem solving device. Specific quantitative and qualitative projections of planners, decision makers, marketers, and the like reinforce the foundation for speeding up or slowing down the steady onslaught of change.

Entertainment is another aspect of scenario "intellectual" games worth mentioning. Flippant as it may sound, there is entertainment value in pursuing scenario development. Serious though the mission of fleshing out scenarios may be, the spirited fun of delving into the great unknown poses intellectual challenges that task the mind. The open and free-swinging tug and pull of ideas conjured up by the participants adds to the sheer exhilaration of engaging and striving to solve difficult problems.

Using an "almost anything goes" approach provides free-ranging discussion that is part and parcel of dynamic "strategic conversations." The "give and take" of free-wheeling "what if?" discussion goads participant thinking. The thrust and parry of ideas can help ablate the periphery and hone the core. That's what exploratory deliberation – after all and no matter how pursued – entails.

Change can be disconcerting and dislocating. As a consequence, unknowns – like the future – often tend to be put off and ignored. Inertia and institutional perpetuation grip the immediate time and place. Everyday thinking tends to be moderated by accepting the familiar. Forcing review and reconsideration of untouchables using techniques such as scenarios helps illuminate potentials for change.

The objective of strategic conversational scenario building is not always to find

consensus. Just the contrary. The objective very well might be for the explicit purpose of providing differing conclusions, ones that are odds with one another concerning the self-same matter being examined. The thrust of differing viewpoints, challenges and tempers the credibility and probability of variant conclusions.

Scenario Output Basically Limited to Input Quality

Competency of participants engaging in strategic conversation varies. Unless individuals involved are "up to speed" on topics under discussion, the results are likely to be marginal. Assembling the right cast of participants is a crucial matter. One person or a small group of persons may have sufficient understanding to range through the gamut of implications inherent in radical departures from the status quo. But not often. The obvious approach is to enlist participation with the most knowledgeable persons familiar with the discussion topic(s).

Practitioners steeped in and familiar with all the facets of scenarios may assume that everybody is "on the same page." Some participants may not be so positioned. To overcome such limitations, preparatory documents and discussions explaining the ins and outs to the less informed helps bring them "up to speed."

When successes involving scenarios are achieved, it often wasn't so much the technique and methodology employed, but rather the expertise and competence of the participants that made a difference. The adage of GIGO (garbage in – garbage out) applies.

An acknowledged authority on scenarios, Peter Schwartz (1996), is quick to point out a fundamental requirement for truly meaningful and useful scenario planning efforts: "...planning efforts on balance, he has admitted that success in planning may have more to do with senior management's exceptional capabilities as managers than with any 'magic' from a new technique." Acknowledging the importance of savvy participants and decision makers in scenario planning deserves underscoring.

Expert input will greatly enhance outcomes. Expert insights and spirited comments invariably tend to "rev up" and get the creative energies of other less informed participants flowing. "Elitism," competency or knowledgeability – at least among a few key participants – helps assure successful outcomes. Dialogue among experts leads to different perspectives and better output than dialogue among fools. Not everyone is up to the task of being a valuable contributor to strategic conversations.

Selecting scenario discussants/developers may require engaging various levels of expertise involving a given matter. Participants must be "on the same page" or have an equal footing regarding knowledgeability. R&D scientists are on one wave length. The engineers responsible for building a new production plant are on another. The marketing professionals are on yet another page. The sales force and consumer experts bring other echelons of experience to the table. Participation need not be limited only to those responsible for outcomes, although most results oriented efforts will be structured that way.

There is no one way of addressing matters when the "future of" is under consideration. The value of conflicting views is most useful for zoning in on the realm of the possible and sorting out the most probable outcomes. Results and conclusions gather

texture by varied perspectives that contribute to the overall collaborative effort. Different slants and perspectives may be essential to hammering out the best possible conclusions.

Coming in "cold" to strategic conversation shortchanges potential results. Impromptu scenario building exercises typically fall short of hopes and expectations. Scenarios are not "spur of the moment" efforts. Useful scenario exercises tend to be quite time-consuming. Rarely have they been effectively used to set specific goals coupled with action plans involving how to implement "desired" outcomes.

Enticing as it may seem to invite participants to engage in a "free for all" discussion, serious and careful preparation of participants is imperative; some previous preparation, including written notes, commentaries and lines of discussion to be pursued, help to fortify and gird serious contemplative efforts. If the preparation is thorough and well grounded results are more likely to be useful.

Setting Timeframes and Limitations

Timeframes of consideration(s) encompassing the subject(s) under discussion involve other important considerations. Defining the horizon involves setting time limits pertinent to the task at hand. How long a timeframe is required to focus on "strategic" aspects of decision making? Rarely would it be the next quarter or year. Time spans vary accordingly with the nature of targeted topic(s). Most institutions, whether business or government, public or private sectors, tend to be quite conservative (short term) in their "long-range" planning. For many organizations two years is considered a long range plan. Plans looking out 5-10 years sometimes are developed. Long range efforts may be fated to gather dust. Immediate results are what tend to loom large.

Certain enterprises or undertakings, however, do require long range perspectives. Forest management (and allied products) typically requires planning ahead 100 years or more. Nuclear power plant planning, approval, construction and start up (in the U.S.) entail 25 years or more. Pharmaceutical development from R&D to market launch requires a 10 year minimum, often considerably more. Mining and prospecting perspectives entail resource depletion estimates sometimes spanning hundreds to thousands of years. Astronomers and cosmologists project many developments billions of years into the future. Geologists also ponder timeframes spanning millions and billions of years. The list could go on. The point is that "long range" planning does have timeframes. For practical purposes most foresight efforts rarely entail seriously thinking ahead as much as 10 years. Stretching time horizons, the Foundation For the Future audaciously focuses on the next 1000 years. Vast scale undertakings, especially those involving emerging state of art technological and scientific efforts, fit nicely into such long-term speculation(s).

Keeping scenarios within bounds: the number may be limited to best vs. worst case, high-medium and low estimates, capping alternatives to a manageable few (3-5, for example), and so on. Limiting the scope helps to simplify the task. Limiting consideration also helps to keep deliberations within manageable bounds. It also reduces considering other broad-ranging textures of potential developments. In some situa-

tions, maximizing output and texture of intellectual jousts is a vital objective. Setting goals requires many carefully balanced considerations.

"Ironclad givens" may be set to keep the discussion within manageable bounds. Scenario planners often insist upon the necessity of "ironclad givens." Important as that limitation may be, it does smack of overly confident determinism. Years ago, the popular nomenclature for "setting the stage" with a fixed set of constructs describing existing/forthcoming parameters of any system was termed a "paradigm." Such frameworks set a mindset for contemplating and fundamental foundation for exploring a situation/context. In short, a defined model, a lens for restricting or confining viewing a given environment or situation.

Limiting truly relevant benchmark developments may actually assist rather than constrict and confound deliberations. Capping the number of alternative scenarios is one solution, albeit a poor one. The major difficulty of speculative tilting on most any topic is the sheer enormity of possible inputs. Virtually every thing can impose itself and impact a given set of conditions and circumstances. The trick is paring the number down to the essential or domineering forces that figure pivotally into the calculus of change.

Some intellectual jousting is good. Too much of it can impair the mission. Intellectual exercises sometimes get carried away. When discussions are "hot and heavy" thoughts often cascade in ad hoc, random and wandering ways. Thoughts may skitter and scatter all over a boundless setting. Without such a limitation, extemporaneous diatribes detracting from fruitful consideration may interfere with constructive deliberations. Outputs also may become excessively conjectural, hypothetical, tangential, non germane and unrealistic. Moderating discussion by utilizing leaders/facilitators may be used to keep commentary and conclusions within manageable bounds.

Scenarios involve a tendency to overstatement and a failure to constrain words and hone them to exacting meanings. As with any widely ranging overviews, simple qualification, tempering, constraining and limiting words and phrases may be required to polish and enhance the finished effort.

Inhibiting effects of overbearing superiors, disapproving bosses or other overshadowing figures may stifle and stymie free association deliberations. Discouraging or suppressing open discussion requires careful management lest marks of disapproval deter open and free discussion. The "no holds barred" kind of exchange helps encourage the free flow of points of view in all their myriad nuances.

Limiting or cutting back the size of the final report to make results manageable may detract from the overall value of the process. At another level – reporting results – minimizing results into a condensed version renders it readable/useful. "Readable size," however, can adversely restrict the texture of answers and eliminate valuable details.

Summarizing findings and comments can be decisive in determining the utility and value of inputs. Persons selected to transcribe or record the summary and synthesis of what has been generated by the participants also may consciously or unconsciously intrude personal biases into the team results. Neutrality (or acknowledged advocacy) provides differing approaches. Providing opportunities for individual participant review and edit of final results helps assure balanced consideration.

Facilitating Deliberations

If participants are bound and determined to take the time and effort to generate useful scenario conclusions and reports, guiding discussion may help enhance outputs.

Groups engaged in scenario development vary enormously. Sometimes it takes a great amount of prodding and pulling to get the group going. In other situations there may be a domineering few that will hog the forum as timid participants remain passive. Facilitators leading and moderating "free flowing" inputs help overcome these situations. Gifted facilitators draw out recalcitrants and subdue overwrought enthusiasm (without stifling it). Facilitators play a deft role crucial to guiding discussions and keeping comments within reasonable bounds. As in "brainstorming" (technique in vogue during the 1950s), the touch must be deft so as not to intimidate and squelch useful wild cards. All of this is easier saying than doing.

Techniques for recording the torrent of ideas (at least the pith of them) as they come streaming along are worth emphasizing. The process of recording concepts as they emerge can be daunting. Capturing participant's contributions before they slip away and memory fails requires an adept reporting system.

Spirited scenario deliberation may occur so rapidly that it may become difficult to capture the often overwhelming pace of ideas likely to pour forth. Skilled chart makers may be enlisted to post results on large poster-paper plastered on walls or easels positioned around the discussion area. Organizing these lists into relevant categories serves to isolate and aggregate items that help prompt additional participant thoughts. As discussion progresses, blocs of charts can be rearranged to link them with related concepts to help portray cross impacts and integration of results.

Graphic rendering of "trains of thought" as they are presented may help enhance the quality of deliberative efforts. A particularly useful approach enlists artistic talents of accomplished graphic artists. Instead of merely jotting down long "laundry lists" of matters to be considered, the concepts, as adduced, are graphically portrayed in fanciful artistic sketches. Created on the spot in response to commentaries, panoramic pictures are stylistically created that depict interactions, relative importance of principles, and so on. Symbolizing the turbulent pathways to an end goal, for example, might utilize a river with many branches, rapids, waterfalls, quiet pools, meandering twists and turns. Each graphic feature in such an exercise symbolizes the flow or blockage/side-tracking of concepts as they move along to the sea (the end goal). Visual features of these "works in progress" are tagged with a few words that help to "visualize" how component concepts fit into the overarching whole. This approach also reinforces the evolutionary nature of fashioning projected futures.

Scenario: Origin and Successes

There are a few notable exceptions to purportedly successful scenario based forecasts. One or a few successes do not make a compelling case for the value of engaging in scenario deliberations. Perhaps, there are numerous success stories, and maybe many never get openly revealed or discussed.

Pierre Wack's scenarios reportedly anticipating impending oil shock during the early-1970s provided Royal Dutch/Shell a decisive adaptive lead over other competi-

tors. His following commentary is worthy of noting: "Scenario planning is a discipline for rediscovering the original entrepreneurial power of creative foresight context of accelerated change, greater complexity, and genuine uncertainty." The operative inducement for scenarios involves more fully understanding "uncertainty." If nothing else, Wack's terse observations clearly highlight the extraordinary importance of increasing complexity and accelerating change that perturb ability to judge the future with certainty.

Several other practitioners are prominently mentioned in connection with this acclaimed success story. Among them is Peter Schwartz. After working five years at Shell in developing and applying scenario planning, Schwartz went on to popularize and to advance the art of scenario strategic planning to a new high. Schwartz's *Art of the Long View* reviews the following key elements to successful scenario efforts: Uncovering the decision; Information-hunting and information – gathering; Identifying the driving forces of a scenario; Uncovering the predetermined elements; Identifying critical uncertainties; Composing scenarios; Analysis of implication of the decisions according to scenarios; Selection of leading indicators and signposts (Schwartz, pp.VII, 241-48).

Shell's successes during the 1970s also benefited from Ian I. Mitroff's uncertainty-importance grid. "Weighting" of variable factors, of course, typically is a key feature of speculative contemplation. This tool assists in assessing the validity of generated scenarios. Ladder scales or relative weighting of probabilities, relative quality of input sources also can dramatically influence assessing inputs. Most important, the calibrated results add immensely to the value of conclusions and output. Likelihoods or possibilities, trend patterns – including their verve, momentum and timing – are, of course, critical to output accuracy.

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