Exploring the arts of crafting and delivering scenarios

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Abstract: This article explores the arts of crafting and delivering scenarios. Scenario literature is quite clear about the general scenario development process, but little guidance is offered when it comes to actually sitting down and writing scenario narratives. In addition, even less guidance is available for those learning how to deliver scenarios to an audience. In other words, writing and delivering scenarios are two key practical activities, for which there is little assistance to the novice. The goal of this article was to review any available published literature on these two topics, and add to it our expertise in hopes of providing the novice scenario facilitator with some detailed information about how to accomplish these two critical pieces of scenario planning. Implications for human resource development research, theory, and practice are described and outlined, as well as implications for much needed additional research.

Keywords: writing scenarios; facilitating scenario planning; delivering scenarios.

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1 Exploring the arts of crafting and delivering scenarios

Scenario planning literature is clear on the scenario development process (Chermack 2011; Georgantzas and Acar, 1995; Ringland, 1998, 2005; Schwartz, 1991; van der Heijden, 1997, 2005). In fact, the scenario development process is the most thoroughly documented aspect of scenario planning (Schwartz, 1991; van der Heijden, 1997, 2005).

While scenario planning is positioned as a useful learning process, without further extension, the scenarios will not reach beyond the minds of those who participated in their creation, and as such, fall short of their intended purpose (Chermack, 2003). Scenario planning efforts that conclude when a set of scenarios is finished will not be useful, are generally irresponsible, and ensure that scenario planning's contribution to long term organisational change will remain debatable. Scenarios must be used, or "they will be like water on stone" [Wack, (1984), p.17]. Indeed, creating scenarios is less than half of the story. The activity of using scenarios to lead change in organisations, make decisions, and entertain a variety of possible futures is less clear, and little guidance is offered in the growing number of publications to help practitioners make the most of their own scenario work.

While scenario literature is clear about the general scenario development process, there is little guidance on specifically how to write the scenario stories, and further, how to facilitate and deliver scenarios to clients or participants in organisations seeking change. This article intends to recognise the art and craft of creating scenario stories, but also that there is a process, or general framework that may guide scenario novices in constructing the scenario stories. Likewise, there are some facilitation strategies that will aid in communicating the scenarios to a group of participants who may not have been involved in their generation.

1.1   Purposes of the article and research questions

This article explores guiding frameworks for crafting and delivering scenarios. The scenario literature is vague on the research and practice, though both of these elements are found to be critical in any scenario exercise.

> Thus, the purposes of this paper are to articulate an approach to creating the scenario stories that are the basis of scenario planning, and to provide a strategy for delivering the scenarios to a set of participants who may not have been involved in their creation.

There are two research questions that frame this article:

1   How are the actual scenario stories created and written in scenario planning exercises?

2   How are the stories delivered to a group of scenario planning participants?

1.2   Importance of the research for scenario planning and strategy professionals

Scenario planning has been positioned as a key strategic learning tool (Chermack and Swanson, 2008). The transition from financially-driven strategy to learning-driven strategy was first conceptualised by de Geus (1988), and it seems clear that modern strategy professionals have the requisite philosophy and skill set to advance the research and practice of scenario planning (Korte, 2008). Therefore, the contributions of this article are of interest to scenario and strategy scholars and practitioners because they open up new areas for scenario research and provide details that practitioners can put to use.

Planning professionals and consultants are likely candidates to facilitate large-scale learning exercises such as scenario planning, if they can gain the credibility to be seen as change management experts. This article is intended to provide structure and guidance for planning consultants and professionals to facilitate two key pieces of scenario planning, namely

1   writing the scenarios

2   facilitating the strategic conversation that arises in considering major organisation decisions in light of the scenario contexts.

It is also useful to note that there are minimal publications that can aid the practitioner in writing scenarios, and none exist that help in the structuring of scenario communication and facilitation. Therefore the contribution of this article is largely focused on practice, and there are natural opportunities for research that result from the implications of what is proposed here.

2   Art, craft, science, process

Scenario planning is part art, part craft, part science, and part process (Burt, 2006; de Geus, 1998; Godet, 2000; Schwartz, 1991). Scenario planning terrain is wide open for adding creativity, clarity, and direction to its research, practice, and literature. This article assumes a basic, working knowledge of scenario planning, and a brief snapshot of the major phases of scenario planning is provided here.

2.1   The performance-based scenario system

The performance-based scenario system is shown in Figure 1 to outline how scenarios are created and used, and also to locate the content of this article within that scenario system. An increasing amount of literature is gathering around scenario planning, and numerous variant guides are offered (Chermack 2011; Georgantzas and Acar, 1995; Ringland, 1998, 2005; Schwartz, 1991; van der Heijden, 1997, 2005). Figure 1 represents a comprehensive approach to scenario planning, and incorporates many of the other existing scenario planning processes.

2.2   Where the content of this article fits

The purpose of introducing Figure 1 is simply to make it clear that scenario planning is a long-term activity, with many different parts to the planning system. Scenario projects typically take anywhere from two to four months, or longer, and involve many different aspects of the organisation. The content of this article focuses on the last three bullets of the scenario development phase, and the first bullet of the scenario implementation phase. These points are highlighted in Figure 1.

Figure 1   The performance-based scenario system (see online version for colours)
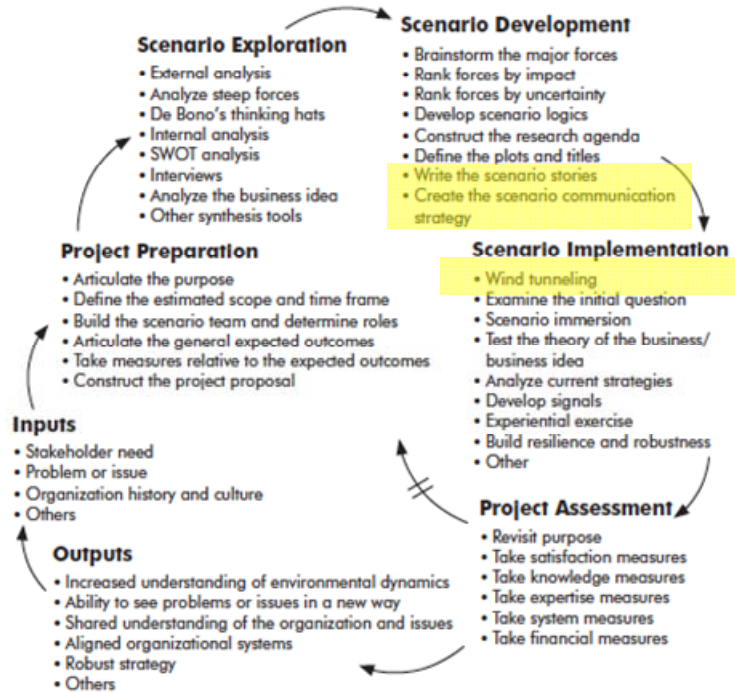
Source: Chermack (2011)

Many scenario users follow the 'scenario matrix' approach, which is achieved by asking the scenario team to

a   brainstorm any possible variables relevant to a strategic issue

b   rank those variables by relative impact

c   rank those variables by relative uncertainty

d   choose two that classify as 'high' impact and 'high uncertainty.

From here, the two chosen variables can be plotted on a 2 × 2 matrix, thus generating four scenario structures. The work is typically done using sticky notes on a large piece of paper covering most of an office wall. This is the most rote approach to scenario development; thus, it is the most common. There are other methods (e.g., simply brainstorm as many alternate scenarios as possible, then reduce to two or three). For a full description of the varying approaches to scenarios, see Huss and Honton (1987).

No matter which approach to scenario planning is used, this article is targeted at providing more detail about

a   How to write the scenario stories?

b   How to facilitate their delivery to an audience?

In any case, this article is intended to be useful for scenario planners once they have developed the basic structural ideas for the scenarios and want to start writing them, and then how to deliver those stories effectively.

3 Methodology

This article is a review, analysis, and synthesis of published work relating to how to create and disseminate scenarios. Because there is little clear guidance offered in the published scenario literature, this article is truly an exploration of crafting and delivering scenarios, with the intention of providing a general structure for practicing these two critical aspects of scenario planning, and generating specific research questions for deeper scholarly pursuit.

3.1 Literature search

A literature search through a research university's library system using keywords 'writing scenarios' in databases 'LexisNexis', 'Business Source Premier', 'Web of Science', 'Google Scholar', and multiple database search engine 'MetaLib' yielded five results. Three of the five results related to software development for games and computer systems engineering.

All five results were reviewed, and the three articles related to computer software were eliminated because they did not inform the stated research questions. Since only two articles were directly relevant to the study, they were examined in detail and are summarised. Those two articles were:

a   Flowers (2003) 'The art and strategy of scenario writing'

b   Schnaars and Ziamou (2001) 'The essentials of scenario writing'.

Both offer basic guidelines for productive scenario development but leave much in the abstract domain. Neither offers a structure intended for novice scenario writers. The purpose of this article is, in part, to build on these two works and enable a novice to construct and write scenarios that will be effective with their clients.

A second literature search was conducted through the same university library system using keywords 'delivering scenarios', 'delivering scenarios to clients', and 'facilitating scenario delivery', which yielded zero results.

3.1.1 Reviews of the two relevant articles for 'writing scenarios'

Flowers wrote generally and with less prescriptive methods for writing scenarios. She presented a list of 'best practices' for creating the most impactful scenarios, highlighting the importance of later steps in the writing process – specifically, revisiting the scenarios once they are drafted to look at them closely for fine tuning. Once scenarios are assembled, a writer should go back for a process of 'distillation' [Flowers, (2003), p.30]. The outcome of distillation is more tightly constructed key elements around which better, more meaningful stories can be crafted. Distilling the concepts is not merely an exercise in summary; rather, it is a means of highlighting the pivotal components, drilling down onto the most significant points of information. She referred to these points as 'story

seeds'; they are base elements from which scenarios can be re-grown or refined to become more meaningful [Flowers, (2003), p.30].

Flowers also recommended that managers' input be capitalised upon as best as possible by scenario writers (Flowers, 2003). In order to maximise the output of managers' available involvement time, scenario writers must quickly recognise and effectively play up the memorable, or 'sticky', images that come from the managers and upon which they can eventually reflect [Flowers, (2003), p.31]. A scenario writer does not invent these concepts; rather, she sees them within the confines of the developing stories [Flowers, (2003), p.32]. While scenarios share literary elements with other writing forms, they stand apart because they must be more interactive. Instead of being consumed through reading or listening, scenarios should be participatory exercises in which managers and decisions makers engage in an experience. Hence, the literary type to which scenarios are most closely related is plays: or, "more precisely, a stage set created by words" [Flowers, (2003), p.30]. The set is animated by the actors – the managers – who participate in the various versions of their future world. Writers who build play-like scenarios will be more effective.

The best scenarios are written in such a way that each piece reflects the larger body of the work. Flowers (2003) noted that her "continuing attempts to give scenario writing the intense, imagistic brevity of poetry has become a quest with an elusive goal – to make each aspect of the scenario a facet that reflects the whole" (p.32). To achieve this symmetry, a 'system of geographical perspectives' can be introduced, for example, in the 2001 Shell scenarios, Flowers used what she referred to as 'geographies of connection'. These were frames for different perspectives through which the stories could be experienced. In this particular example, the frames were: "how people are connected globally; how nations are connected; how the globally connected edges of nations are connected to their own heartlands; and how we are connected to the earth through our environmental policies and practices" [Flowers, (2003), p.32]. Perspective frames of this kind help guide managers to experience the tale from points of view other than their own immediate and comfortable one, leading to greater learning and deeper impact.

Schnaars and Ziamou (2001) described a more structured process for developing scenarios. They took issue with the idiosyncratic nature of scenario writing. The fact that there are no explicit processes or steps to follow, coupled with the overblown and overly stylised language in many scenarios, led them to create a set of scenario-writing principles that would be useful for business scenarios [Schnaars and Ziamou, (2001), p.25]. For them, applicability and practicality make a scenario the most useful (Schnaars and Ziamou, (2001), p.25].

First, they believed in the importance of understanding what a scenario truly is. Scenarios can be defined according to three characteristics:

a   that they are stylised narratives

b   that they are produced in sets

c   that they seek to trace the progress of events from the present into the future
     [Schnaars and Ziamou, (2001), p.25].

It is essential that scenario writers keep in mind the storybook nature of scenarios. These are not statistical analyses or forecasts. Instead, they are tales of possibility [Schnaars and Ziamou, (2001), p.25]. To craft these tales, there are four basic steps:

a   listing trends or key variables

b   combining those factors into groups

c   drafting

d   developing strategies [Schnaars and Ziamou, (2001), p.26].

The drafting phase generates the most discord among scenario authors. Areas of disagreement are the number of scenarios to write and whether to emphasise one or multiple themes. The authors seek to help scenario writers by coming to meaningful conclusions on these points [Schnaars and Ziamou, (2001), p.26].

A major sticking point for scenarists is how to isolate or develop themes within the storylines. In some scenarios, it makes the most sense to focus intently on one major theme. Scenarios with this focus typically arrange story elements along a spectrum of possibility for that particular theme throughout the set of stories [Schnaars and Ziamou, (2001), p.28]. Conversely, other scenarios require a group of themes, resulting in three stories that may not be conceptually linked to each other. The outcome is often that these stories all appear to have a stronger basis in reality, whereas single-theme sets may come across as overly idealised [Schnaars and Ziamou, (2001), p.28].

The true art of scenario writing is in limiting "the span of outcomes as much as possible without excluding the true future state that ultimately occurs" [Schnaars and Ziamou, (2001), p.28]. The trick is reducing the number of factors down to a meaningful and still significant batch without losing important insights or story elements. The authors have three techniques for achieving this: start out with a smaller number of factors, combine these into logical groups, and choose the starting point that works best for a particular author [Schnaars and Ziamou, (2001), pp.28–29]. Last in the set, the starting point idea is linked to a writer's style and preference. Some scenario writers prefer to begin in the future and work backwards. Starting with the logics, they design a 'working title', then populate the stories with details from the finish toward the start [Schnaars and Ziamou, (2001), p.29]. Others work in the opposite direction. Starting from the list of trends, these writers project the concepts into the future, allowing themes and titles to emerge as the story generates [Schnaars and Ziamou, (2001), p.29]. Both of these strategies are common, and many writers combine them or use both in different contexts depending on their needs.

3.2   Summary

While both the Flowers (2003) and Shnaars and Ziamou (2001) articles provided advice and suggestions for composing effective scenarios, neither provides a level of detail that would enable a novice scenario planner to perform the task of writing scenarios. The goal of this article is to incorporate the advice of these two works into a framework that gives the novice a set of handrails for writing scenarios, while also leaving enough room for the freedom of the creative process to work as any scenario writer may see fit.

4   Crafting scenarios

The process for developing a scenario can, at least in some small way, be described in terms of some general procedural steps. It is tempting, certainly, to understand the creative writing process as ephemeral and evasive. But in order to develop meaningful and significant scenarios, the myth of the writer and any chosen process should be addressed and deconstructed. The prevailing idea still tends to be that creative "literary production [is] a sort of involuntary secretion, which … escapes human determinations: to speak more decorously, the writer is the prey of an inner god who speaks at all times…" [Barthes, (1972), p.30]. If such 'divine inspiration' is truly at the heart of good writing capacity, then a set of guidelines for scenario story development seems moot. In reality, though, the process itself has clearly identifiable components that can help novices tap into their creative potential.

A Google search for that phrase returns 965,000,000 results. Whole curricula are designed around the notion that creative writing and story composition can be taught and learned. This minimal exploration of explaining a general process for drafting scenarios should be taken as a small contribution in a much broader context. While steps are described, they require further development, study, practice, and of course, room for artistic deviation.

Given minimal guidance in the scenario planning literature, the proposed general approach to crafting scenarios is in Figure 2.

Figure 2   A general approach to crafting scenarios (see online version for colours)
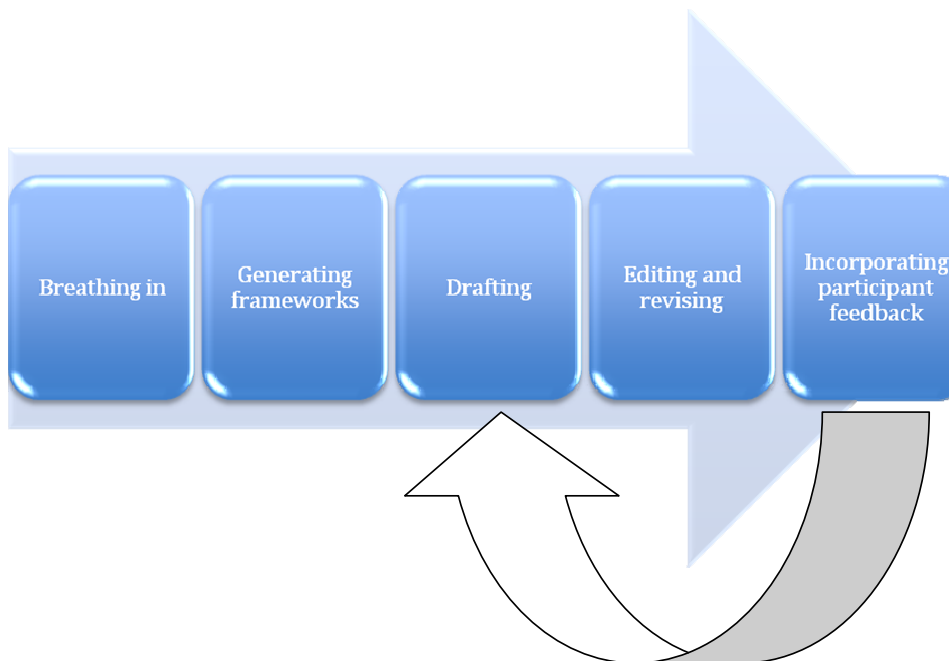
As with any writing project, some steps are repeated in order to achieve the most precise version of the finished product. Because scenario narratives must be reviewed and, as Betty Flowers remarked – "the team [will] tear them apart – they [will] argue over it – over the story, not so much the writing, but the story" [Davis-Floyd, (1998), p.14] – the revision process is more intense and collaborative than for many other forms of writing. Each part of the process is described with essential steps for completion.

4.1 Breathing in

The first stage in the process, 'breathing in', is language borrowed from Pierre Wack. It is particularly important for the writer because it offers an opportunity to try to see the whole system. A good place to start is simply looking over the paper on the wall, covered with the sticky notes from the scenario development workshops. It is helpful to try to let the mind 'see' the elements at play, to let the critical uncertainties, the contents from the stickies, the matrix that has been developed all hang together for a while through deep contemplation and thought. This part of the process is depicted in Figure 3.

Figure 3 Breathing in (see online version for colours)
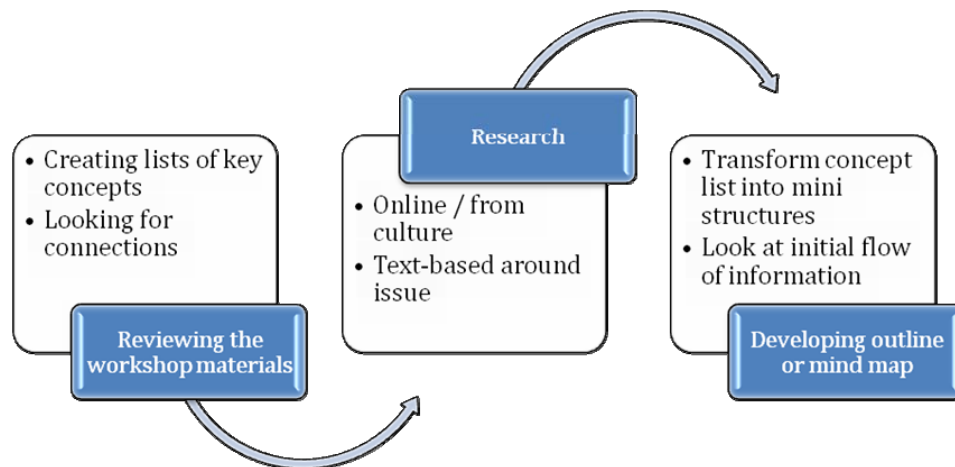
The timing of this part of the process depends on several factors. First, the conditions of the contract impact how long the writing process can take. However, this part of the process typically accounts for approximately 50% of the work time. It is a recursive procedure, so it requires multiple iterations of each subcomponent.

Scenario writers will most likely find that continuously returning to the mental space of the project is helpful. Research for the stories branches out beyond the time specifically dedicated to this step. As with any writing project, it is useful to draw inspiration from numerous sources. Watching the news, hearing random conversations in a coffee shop, or reading completely unrelated materials can all be sources of ideas that make scenarios insightful. Breathing in is an effort to create a landscape for the story in one's mind. Everything, anything may pertain to the narratives, and bits and pieces of data and information are constantly filtering through the lens of the impending drafts.

Of the utmost importance is maintaining a frame of mind in which no concept is shunned as inapplicable: "it is essential to try to put as much light on … uncertain elements as on the predetermined elements. They should not be swept under the carpet" [Wack, (1984), p.28]. The writer should tease out as many ideas as possible from the workshops – pursuing additional information and substance related to these items. To breathe in well, the writer must be open to detecting underlying potential connections, tangentially related ideas, and peripheral thoughts.

4.1.1   Outlining and mind mapping

An outline is a crucial step at this point, because analysis paralysis is a risk when dealing with such volumes of information. Once materials have been reviewed and both formal and informal research have been conducted, a mass of content begins to build up around the key concepts. Putting thoughts and ideas down on paper will help cultivate a kind of 50,000 foot view of the growing stories. An overwhelming temptation as concepts begin to fuse into story elements is jumping into drafting. Potentially, for more advanced authors, it is achievable to begin drafting parts of the story at this stage without losing sight of the broader possibilities. For a stronger overall process, it seems better to refrain from drafting until the breathing in phase is more thoroughly complete.

This compulsion to start writing is best addressed through outlining and/or mind mapping. An author's thinking patterns – linear or non-linear – will have bearing on whether an outline or a mind map is the most appropriate pre-writing tool. Yet both also seem useful in different storyline contexts.

For authors who think in a linear way, a challenge may be succumbing to a particular timeline too early in the writing process. A scenario's effectiveness depends partly on its innovative approach to structure: "Scenarios can be successful in structuring uncertainty … when they change the decision maker's assumptions about how the world works and compel him to change his image of reality" [Wack, (1984), p.26]. Mental models are more easily exposed or shifted when readers are struck deeply by some element of the story, and one of these elements undoubtedly can be the sequencing of events. Authors who tend toward linear progression of ideas would be well served by mind mapping. This process permits ideas to be set down without being linked to a progression that may be difficult to remove later in the process.

After breathing in, a writer should have a deep understanding of the information available, as well as the early ingredients of the drafts. As she moves into the generation of frameworks, it may be necessary to step back periodically into breathing in so that ideas can be fleshed out more completely. It is essential that the steps throughout this process remain fluid and interrelated.

4.2   Generating frameworks

Frameworks are a form of more advanced outline. These come together typically from the matrix the participants have developed, though sometimes different structural elements will need to be added based on the results of the breathing in phase. Scenarios logics are the basis for the frameworks, and it is helpful to generate subheadings or titles from the logics. Once those sorting structures are created, content from the outline or mind map can be linked to them. The subcomponents in this step might be illustrated as follows:

Figure 4 Generating frameworks (see online version for colours)
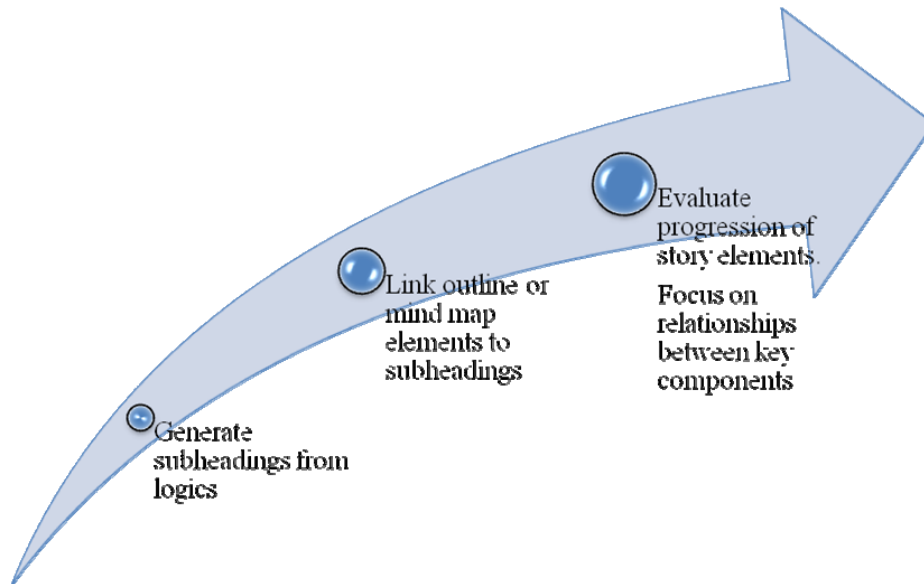
At this point, the basic foundation for the drafts has been generated, so it is important to evaluate placement of ideas and flow. A potentially confounding element of scenarios is their future tense, so organisation is key in ensuring the stories can be drafted without major impasses in the timing of story elements. It is easier to move story parts around at this stage of development. Once the draft starts to come together, linkages, however small they may be, are crafted around the arrangement of the events. Disassembling these once the narrative is drafted is difficult.

Seeing the logics, outline elements, and structure of the narratives in this form may give the writer cause to go back to breathing in temporarily to gather more information. It is a good practice to give oneself time before moving into the drafting stage; again, the ideas and their alignment need time to settle – to shape themselves in the writer's mind around the pattern that has been designed.

4.2.1 Sources of inspiration

A few helpful sources can provide guidance and support for the writer during the framework process. Notably, Pink's (2006) work *A Whole New Mind* provokes different thinking about developing a story. In particular, the notion of design is advantageous material to spark the writer's thought process. Though the topic under discussion is graphic design, some of the elements are extremely useful for story crafting: contrast, repetition, alignment, proximity [Williams as cited in Pink, (2006), p.97]. These techniques, when applied to story design, work extremely well to create drama and meaning in the narratives.

Not surprisingly, science fiction literature can be another reliable guide during the pre-drafting and drafting process. Since one of the ambitions of scenarios is "not fortune telling or crystal-ball gazing[,]" but instead is to recognise "the future implications of" events that have already occurred [Wack, (1984), p.27], a writer is wise to look to other

forms of literature that work toward that same purpose. Inspiration for plot elements, as well as examples of effective syntax using future tense can be found in works of science fiction, as well as in analyses of them.

4.3   Drafting – round one

If the breathing in process takes up 50% of a narrative writer's time, the drafting process would constitute approximately 15% to 20% of the total time. Because the frameworks are extensive, well developed outlines of the story, and because the writer has spent additional time deeply contemplating how the narratives will come together, the drafts themselves tend to come together quickly. The frameworks act like writing prompts, sparking the writer's ideas on each point, reminding her about the important elements from the workshops, and tying the story together as she wraps it around the frames she has already created.

Up to this point, there has been no discussion of whether the writer works on the scenarios all at once or in sequence. The order of the process may be different in each project. Some writers may find it useful to write each scenario in the set one by one. This creates a sense of fluidity within that story, and it helps generate ideas for the other narratives. Conversely, others may wish to draft sections of all the stories simultaneously. This technique ensures a stronger connection between the narratives in the set. It also helps the writer prevent repetitious storytelling in similar logics areas.

An essential element of drafting is language choice. The stories are structured in the future, so tense consistency is of paramount importance. Additionally, interesting word use, varied vocabulary, and dynamic syntax are required to create strong drafts. Naturally, this is true of all writing, but the nature and purpose of scenarios puts emphasis on these design aspects of the stories. Drafting is arguably the most potentially creative part of scenario writing, and if there were a specific formula, there may be far more *New York Times* bestsellers. However, some recommended activities are to find inspiration anywhere it can be found. Some suggest creating a routine, or pattern (Csikszentmihalyi, 1998), using timers, taking frequent breaks, watching television, or particularly inspiring movies (which is entirely subjective), or other helpful behaviours. It is likely that any scenario writer will develop a unique approach, though continued experimentation will keep the scenarios fresh from project to project.

4.3.1   Editing and revising – round one

The first editing and revisions process is similar to editing and revising any written work. The writer should take at least 24, though preferably 48 or 72 hours, away from the drafts. Returning to the narratives, the writer will then edit for clarity, symmetry, grammar, mechanics, and overall appeal. Scenarios are best considered as a collected work at this point, not independently of each other. It is helpful to think about how the stories should occur in sequence with each other. Once the edits and revisions are complete, the project is returned to the participants for review and feedback.

4.4   Integrating feedback from participants

Participants (and here we mean the smaller group of individuals on the scenario team) will provide reactions and insights into the drafts that shape the final product. The best

possible situation is that the group reacts with extreme apprehension about the likelihood of some element of the story. This seems to be an indicator that a true critical uncertainty is at play in the narrative. However, this response also means the writer must develop that storyline more explicitly, giving details that make it more believable without sacrificing its capacity to jolt the readers. In essence, these reactions indicate a need for more research and data to lay out the story in a plausible way.

During the integration of feedback stage, the writer will also build the drafts out more completely, adding length and depth to the stories. Interestingly, the time the writer is away from the narratives – while they are with the group for the next workshop – aids in developing the ideas beyond their current draft state. This down time from writing is effective, because it gives the mind time to play with the ideas a bit more. Additional research can also be conducted, bolstering the materials that can be added when the narratives come back for final drafting.

4.4.1 *Editing and revising – round two*

Again, the drafts should be edited and revised for content, grammar, and symmetry. Since portions are being added, the editing process should be just as rigorous at this stage as in the first round. Unlike a final proofread, this editing process is to ensure that the drafts are thematically consistent, that they interrelate to each other and to their own internal sections, and that the language is varied, engaging, and accurate.

5 Risks and pitfalls – development opportunities in crafting scenarios

As with any process, scenario writing stands to be improved upon by further study. There are some particular issues that stand out, deserving dedicated attention during the process including

a   awareness of the writers' own mental models

b   generating believable ideas about things that have not happened

c   the transition from Wack's (1984) learning scenarios to decision scenarios

d   how many scenarios to write.

5.1 *Writer's mental models*

Writers must be conscientious that their own mental models, their own assumptions about the topic, do not overpower the information being presented. Similar to biases in decision making, this is an extremely difficult tendency to manage, and potentially there is no way to avoid it all together (Korte, 2003). The feedback from participants is beneficial in guarding against imposition from the writer's assumptions, and may be the single best way to maintain awareness of these tendencies.

5.2   Generating believable ideas

Another obstacle for the writer of any future story is generating believable ideas about things that have not yet happened and may be considered unlikely. One critic of science fiction literature explained this difficulty:

> "Yet such [future-based] narrative[s] are themselves fraught with contradiction: in order for narrative to project some sense of a totality of experience in space and time, it must surely know some closure (a narrative must have an ending, even if it ingeniously organized around the structural repression of endings as such). At the same time, however, closure or the narrative ending is the mark of that boundary or limit beyond which thought cannot go." [Jameson, (1982), p.148]

It seems much harder for people to see beyond things for which they already have a model. The writer must find a way to envision an event, a thing, or a person beyond that which already is. Napier Collyns outlined this difficulty as "making the implausible become plausible," and it is truly an art not well understood in scenario writing.

5.3   Moving from learning scenarios to decision scenarios

Another worthy contribution would be to clarify the transition between learning and decision scenarios. Scenarios in the first draft stage are technically learning scenarios:

> "…first generation scenarios are always learning scenarios; their purpose is not action, but to gain understanding and insight. The first-generation scenarios map out the future context. With that done and some of the predetermined elements identified, you then push to find others not obviously predetermined. The aim is to perceive more clearly the connections between various forces and events driving the system, and this understanding of the interrelatedness of the system shows that some apparent 'uncertainties' are really 'predetermined'." [Wack, (1984), p.39]

To attain true decision scenarios, another full iteration of the process would be necessary, as well as ongoing consideration of the scenarios by the organisation for extended time. It would be interesting if, after extensive practice drafting scenarios, specific structures could be determined for setting in motion the second-generation scenarios embedded within the first. Surely this question of the link between first and second generation scenarios is ripe for longitudinal study.

5.4   The number of scenarios to write

Schnaars and Ziamou advocated for writing three scenarios. The first type of scenario in the three-scenario model is the best guess. This is considered to be the most likely future, and all available information is employed in the storyline [Schnaars and Ziamou, (2001), p.27]. Secondly, a best case, also known as a 'surprise free' or 'optimistic' scenario, tells the story of a future in which no major changes happen; it stays the course [Schnaars and Ziamou, (2001), p.27]. Third, a middle ground story combines elements of the first two, straddling both versions of the future [Schnaars and Ziamou, (2001), p.27].

However, the structure of using three scenarios is highly debated. There is a clear tendency (as is evident in Schnaars and Ziamou's writing) that using three scenarios is a temptation to have a 'best-case', 'worst case', and 'status quo' structure to the scenario

set. This approach requires little thought, and is not likely to generate novel insights (Chermack, 2011). Further, the 'best-case', 'worst case', and 'status quo' structure can be generated in about a half an hour, and does not constitute deep thinking (Wack, 1985). Thus, the three scenario approach only works when there are three genuine alternatives that present relevant variables in interesting and provocative ways (Wack, 1985).

Many scenario users have followed the 'scenario matrix' approach, which is achieved by asking the scenario team to

a   brainstorm any possible variables relevant to a strategic issue

b   rank those variables by relative impact

c   rank those variables by relative uncertainty

d   choose two that classify as 'high' impact, and 'high' uncertainty.

From here, the two chosen variables can be plotted on a 2×2 matrix, thus generating four scenario structures. This is the most rote approach to scenario development, and leaves a great deal of creativity out of the process, but is best with organisations new to scenario thinking.

In any approach to scenario development, great care must be taken to avoid a knee jerk reaction of 'best-case', 'worst case', and 'status quo'. Even if these are the natural outcomes, there are numerous variables that can be manipulated to introduce difficult elements into an optimistic scenario, and pleasant elements into a difficult scenario. This is hard work, and constitutes another aspect of scenario development for further inquiry.

6   Delivering scenarios

Scenario literature discusses the idea of wind tunnelling as the primary means for implementing scenarios (Ralston and Wilson, 2006; Lindgren and Bandhold, 2003; van der Heijden, 1997, 2005). However, this kind of facilitation is explicitly with the scenario team – those who were involved in the scenario development (Ralston and Wilson, 2006; Lindgren and Bandhold, 2003) and is not described in detail in the literature. At some point, decision makers will want to communicate the scenario work to the rest of the organisation and there are no resources to guide the novice here.
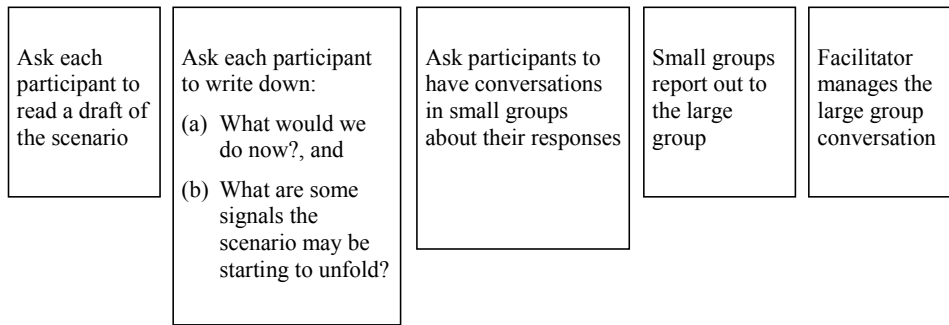
In order to create the kind of large-scale awareness and culture shift that scenarios can generate (Korte and Chermack, 2007), a dissemination strategy is required. Participants who may be exposed to the scenarios for the first time will have an adjustment gap, and there are a few strategies for maximising the likelihood that they will seriously consider the scenarios. This section provides some suggestions about the delivery and facilitation of scenarios inside the organisation. Since the literature search returned zero results for this section, the article turns to a more practical approach. The proposed structure is based on considerable experience with delivering scenarios to a variety of audiences, and will require empirical research to determine its effectiveness.

6.1   Scenario facilitation: a proposed framework for practice

There is a natural progression that will ensure participants are neither immediately scared away from the scenario experience, nor convinced that it is another version of visioning,

or appreciative inquiry that denies problematic aspects of organisational functionality. The following scenario delivery framework should be repeated for the number of scenarios that are developed. In the case of four scenarios, it is likely that this simple framework will fill at least a full day of work.

Figure 5   A general framework for delivering scenarios

Ask each participant to read a draft of the scenario	Ask each participant to write down: (a) What would we do now?, and (b) What are some signals the scenario may be starting to unfold?	Ask participants to have conversations in small groups about their responses	Small groups report out to the large group	Facilitator manages the large group conversation

The simple facilitation structure outline in Figure 5 is a way to get participants engaged. The assumption underlying this structure is that participants have been briefed on scenario planning and its purpose in the organisation. If this is not the case, it is highly recommended that some kind of explanation for what scenario planning is, and why organisation leaders have undertaken the project be presented – preferably by the internal project sponsor (Cummings and Worley, 2008; Schwartz, 1991). Each component of the delivery strategy is briefly summarised with a rationale.

6.2   Reading the scenario drafts

It may seem counterintuitive to ask participants to spend time reading documents in a scenario planning workshop. However, experience has taught that sending the scenarios ahead of time is not effective – most participants do not read them (Bradfield, 2008). Using a shortened version of the scenarios (e.g., a two page version of each scenario) is one strategy if any are concerned about time. Dedicating a specific time for all participants to read through the scenarios ensures that they will, indeed, read them, be ready to engage in conversations about them, and provides opportunities for the facilitator to observe reactions while the scenarios are being read.

6.3   Reactions, strategies, and signals

Asking participants to give their reactions, talk about what they think should be done next, and what events might indicate certain elements of the scenario are starting to unfold is an intentional strategy, allowing facilitators to leverage the creative thinking of the entire group (Chermack, 2011). The various replies to these questions should be recorded by someone in each small group, and are recorded again by the facilitator during the large group conversation (Vansina and Vansina-Cobbaert, 2008). It can be insightful also simply to ask participants to write down their immediate reactions upon reading the scenario. It is not a standard practice, but at times, it has been a fruitful strategy for cultivating diverse thinking throughout the room (Senge et al., 1994). The "what do we

do now?" question is aimed at gaining a variety of perspectives from inside the organisation, about what actions might be taken. Asking individuals to answer this question can be compelling – many enjoy the task of being hypothetically put into the decision maker role, and sometimes participants can gain insights into the complexities that organisation leaders face (Senge et al., 1994). When this question moves to the group, participants can converse about a variety of options in this comfortable format. When it moves to the large group conversation, a compelling exchange usually occurs, and participants commonly remark that they experience an 'aha' moment here, as they become exposed to a variety of possible actions that many have not considered. The same is true for the 'signals' question. The purpose is to take a wide angle first and gain a variety of different events that could become markers to watch for the unfolding of a given scenario.

6.4   Small group conversation

Small group conversations encourage participants to get involved and contribute their ideas. It is far less threatening for more introverted people to express their ideas among a few colleagues, rather than to a large group (Vansina and Vansina-Cobbaert, 2008). The purpose here is to offer a few different forums and formats to increase the opportunities for all personality types to feel comfortable in the strategic conversation (van der Heijden, 1997, 2005). Explicit rules are generally not necessary here, though it is always helpful to have the group select a note-taker and someone to report on the conversation to the larger group.

6.5   Large group conversation

The large group conversation is focused on a hearing insights and responses to the strategies and signals questions. An additional purpose here is to open up the conversation to the entire group, and genuinely begin the strategic conversation. As groups report on their insights, the facilitator should again note the responses on flip chart paper. Disagreement should be expected; therefore, it is helpful to have defined ground rules at this time (Vansina and Vansina-Cobbaert, 2008). Some facilitators write the ground rules for the group, and some let the group build them from scratch. The latter tends to encourage a greater degree of ownership and buy-in.

6.6   Summary and practitioner tips

This section of this paper has laid out a general structure for delivering scenarios to an audience within the organisation. An assumption framing this structure is that participants have been briefed on the scenario planning exercise and its purpose within the organisation. If this is not the case, the structure should be adjusted to include the briefing, or it should be scheduled to occur prior to this delivery meeting. The structure here is merely a map for beginning the strategic conversation (van der Heijden, 1997, 2005). van der Heijden (1997) wrote that an effective strategic conversation requires

a   a common language

b   alignment of ideas

c   willingness to engage in rational argumentation

d   the evolutions of ideas inside the organisation.

These elements cannot happen until members of the organisation are given an opportunity to engage in the conversation and be a part of the culture change toward understanding and attuning to uncertainty in the business environment.

Some additional facilitation tips may be useful when applying the structure outlined here. Some may be familiar, and some may be new contributions. First, common organisation development practice has taught that if participants are asked to provide information, it must be fed back to them (Cummings and Worley, 2008; McLean, 2005; Swanson, 1997). It is therefore highly recommended that the facilitator compile the responses from small and large groups into a simple document to send back to the participants. This gesture reinforces the relationship between facilitator and participant, and increases the likelihood that participants will continue to engage.

Specific to scenarios, the order in which narratives are reviewed is critical. Do not begin with an optimistic or pessimistic scenario (Chermack, 2011). Always start with the moderate scenarios, then the difficult scenario, followed finally by the more positive scenario. If an optimistic scenario is presented first, participants tend to behave as though it's all downhill from there. Beginning with a pessimistic scenario often crushes the sense of excitement and willingness to consider innovative ideas and opportunity. While a seemingly simple issue, making a mistake in the order of the scenarios can make or break the exercise.

7   Implications for research and theory

This article has explored two critical components of scenario planning that are not well documented: crafting scenarios and delivering scenarios. The purpose of this article was to articulate an approach to creating the scenario stories that are the basis of scenario planning, and to provide a strategy for delivering the scenarios to a set of participants whom may not have been involved in their creation. To that end, the article has described a framework for writing scenarios that novices may use as a guide. In addition, the article has provided another framework for delivering scenarios to a client.

7.1   Further research questions

Given the lack of published material related to both of these activities, the article seems to break new ground, and this exploration suggests numerous general research questions. These questions generally settle around further strategies for crafting scenarios stories and bridging research and creativity to design a compelling, though surprising story. Another key question has arisen around the role of the facilitator, and other nuances of the scenario delivery and strategic conversation process. For example, if the simple order of the scenarios can drastically influence the exercise, surely there are other, more critical aspects to consider such as the role of personalities, prior experience with scenarios, and tenure in the organisation. Basic studies of participant differences are a clear next step, as well as further clarity on the scenario writing process, and facilitator roles.

7.2   Implications for theory

There has been some theorising about scenario planning (Chermack, 2004, 2005), and existing theorising does not specifically include the importance of scenario writing or scenario facilitation. A core argument of this article is that both scenario writing and facilitation are critical aspects of successful scenario planning, and therefore existing theorising may need to be modified if indeed future research shows these elements to be as critical as the claim.

In the broader context of strategic learning and scenario planning, there are lessons that can transfer. It seems critical for planning professionals to be effective facilitators if they are to engage in any form of organisation strategy, and the processes and tools explored in this article may be a useful resource to practicing strategy professionals. In any case, it is difficult to imagine a strategic effort achieving successful outcomes without well-planned and carefully facilitated problem-exploring and problem-solving exercises.

8   Conclusions

This article is intended to aid the novice scenario planner in crafting and delivering scenarios. While some scenario authors give hints or points in a direction, their efforts are not structured enough to guide someone engaged in the discipline of scenario planning for the first time. It is generally agreed that scenario planning is best learned in an apprenticeship model; however, the addition of tools and suggestions based on reflective practice will only aid in increasing the rigor and effectiveness of scenario work.

The purpose of this article was to provide structure for novice scenario planners to aid in writing scenario stories, and facilitating scenario exercises. While the content here may provoke more additional questions than answers, it seems we have at least provided elementary guidance where none had existed before in published form. Clearly, there is extensive research required to explore a variety of approaches to scenario writing and facilitation, at which time outcomes can be analysed with an eye toward best practice.

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