

# Let's Talk about Success: A Proposed Foresight Outcomes Framework for Organizational Futurists

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## Abstract

*A Foresight Outcomes Framework is proposed as mechanism for organizational futurists to stimulate and frame dialogue about successful outcomes for the integration of foresight. It builds the framework upon a key assumption that the goal of the organizational futurist is to influence the decision-making process. It explores different levels of outcomes and identifies examples of evaluating outcomes and how they relate to decision-making. Social constructionism is recommended as a guiding perspective informing the use of the framework. With these pieces in place, the framework itself is described and explained, following by implications, conclusions, and recommendations for further research.*

**Keywords:** foresight, futurists, outcomes, evaluation, integration

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## Introduction

This paper proposes a Foresight Outcomes Framework to help organizational futurists discuss and set expectations for what their role can deliver in terms of integrating foresight into the organization, or more simple, to help frame a discussion around success. The framework is intended to provide organizational futurists with a mechanism for initiating and framing a discussion of outcomes and success. It is hoped that better discussions and greater clarity on that success will in turn help to improve the prospects for integration.

Previous work explored the challenges for organizational futurists in integrating foresight into organizations (Hines & Gold, 2014). One reason it has been difficult to integrate foresight is that “futurists have a hard time defining success” (Hines, 2003b, p. 35). Given that futurists have a hard time defining success, their clients are either left to define it for them or it is left vague. Of course, it is not easy to define and there is not a single right answer. Context is

important—it's been suggested that foresight cannot be fully evaluated independently from its context (Georghiou, 2006; Waehrens, 2010).

The previous work noted four specific challenges or barriers to integrating foresight that confront the organizational futurist: (1) foresight competes for attention (2) foresight is perceived as threatening (3) foresight is viewed as intangible and (4) foresight capacity is lacking. The proposed Foresight Outcomes Framework is not a panacea for resolving all these barriers, but it can bring some clarity to what can be expected from foresight in terms of outcomes, as well as helping to address each of the barriers. If it is not clear what foresight can deliver, for example, it is less likely to prevail for attention in competition with projects that can produce recognized results. It can lessen the perceived threat of foresight in clarifying what it can and cannot deliver. It brings greater tangibility to foresight work in not only suggesting broad outcomes, but linking those broad outcomes to specific project-level deliverables. Finally, it suggests the capacities the organization will need to cultivate and develop in order to achieve better outcomes.

The Foresight Outcomes Framework could be used to generally discuss outcomes at the project level, but it is not primarily intended for the detailed evaluation of individual projects. As van der Steen and van Twist (2012) point out, potential project evaluation criteria such as impact and use or adoption are problematic and depend on many factors—readers seeking such a framework are advised to see their excellent work on that topic. It could also be used for similar discussions within the foresight field—it could help the field build a more consistent discourse on successful outcomes, which in turn could inform and benefit future futurists.

### **Outline of the approach**

This paper is a conceptual exploration of ways for organizational futurists to frame dialogue on how they and their clients and stakeholders might evaluate outcomes. It begins by describing how the conceptual framework was built. First, it describes how outcomes can be viewed as operating at four different levels. Second, it is suggested that the key purpose of organizational futurists is to influence the decision-making process regarding the future. In turn, this purpose is the primary outcome. A simple three-dimensional view of decision-making process is described and forms the core of the Foresight Outcomes Framework. Third, a literature review explores prior efforts at evaluating outcomes, which are sorted and synthesized into the three components of the decision-making process. Finally, social constructionism is recommended as a guiding perspective in using the framework. With these pieces in place, the framework itself is described and explained. The paper closes with implications, conclusions, and recommendations for further research.

### **Building the Framework**

Four activities in building the Foresight Outcomes Framework are described below: crafting the levels of outcomes, selecting a decision-making process, reviewing prior efforts, and using social constructionism as a guiding perspective.

### **Levels of outcomes**

It might be most useful for the organizational futurist to think in terms of what they want to be held accountable for, evaluated on, or possibly measured against. It

could range from evaluating performance at the individual, project, organizational, and field level. The separation into four levels is a simplification and it is recognized that they are inter-related and often operating simultaneously.

### *Practitioner level*

At the practitioner level, one might evaluate the performance of the individual and how well they carry out their job. Beyond standard job evaluations--including tools like the 360 Degree Feedback--how do organizational futurists evaluate their foresight work? In foresight education, efforts are being made to help the practitioner be more self-aware in how they approach their work from an ontological and epistemological perspective, and being more aware of their biases (Slaughter, 2004). Evaluation would also include proficiency in specific techniques, methods, or activities, and perhaps the quality and quantity of their tool kit.

A frequently asked question of individual futurist performance is how well their forecasts have fared. This presents a conundrum. Answering it reinforces the tendency toward seeking predictions or single-point forecast. It runs counter to the key foresight principle of embracing a range of plausible futures (Bishop & Hines, 2012). Van der Duin (2012, p. 415) called this the “retrospectivity trap: looking back to futures research in the past gives those studies of the future unintentionally an undesirable and unproductive accuracy perspective which hurts the profession of looking to the future.” Nonetheless, refusing to answer suggests defensiveness. It may be useful to refer such inquiries to the occasions where futurists have presented best-guess forecasts and evaluated their accuracy (Albright, 2002; Cornish, 1997; Hines, 2009; Kurzweil, 2010).

The view suggested here is that the organizational futurist ought to strive for continuous improvement as a practitioner, but not make that the focus of evaluating outcomes.

### *Project level*

As noted above with practitioners being evaluated in part by standard performance reviews, there are also tools for helping to frame and evaluate projects, such as PDMA project charters (Belliveau et al, 2002). The relevant question here is what is unique to foresight projects. The simplest factor to pinpoint is their timeframe, which makes immediate evaluation problematic, as the outcome of a future-based decision may not be apparent for several years. Rohrbeck (2012, pp. 448-449), reflecting on twenty foresight case studies, noted that while he was able to find multiple examples of value contribution, there were several managers originally involved that were not there to “enjoy the fruit of their investment.” And even when the time passes and evaluation is made, “there are always alternative explanations possible” (Horton, 1999, p. 8).

There have been piecemeal efforts to evaluate the success of foresight projects (Chermack, 2006; Georghiou & Keenan, 2006; Popper et al., 2010). Backer (1984) highlighted a frequent and ongoing complaint that futurist's work frequently wasn't connected to the real world or useful. Slaughter (1999) observed that while all fields of study must eventually confront the issue of professional standards, foresight has yet to do so in any systematic fashion. Ten years later, he complained that “...quality control in the field remains problematic. There appear to be remarkably few attempts at oversight and evaluation of futures work worldwide” (2009, p. 1). More recently,

a special issue of the journal *Futures* on evaluation emphasized that “all papers agree on the inherent difficulty of evaluating foresight studies.” The editors suggested that quality, success and impact are important elements of evaluating projects, but they are not necessarily connected, making a comprehensive evaluation problematic (Van der Steen & Van der Duin, 2012).

Probably the most common current position among futurists has been to rely on the marketplace--being asked back by clients--as an indicator of success (Coates, 2000). Although another school of thought suggests that not being asked back is a measure of success! It argues that futurists ought to challenge their clients’ fundamental assumptions in a way that makes them uncomfortable to the point where they don’t want the futurist to come back (Buchen, 2005). Given these difficulties, some suggest an alternative route, such as Bishop’s (2001) suggestion to highlight the top performers. The challenge with this approach, however, is deciding who the “top performers” are.

### *Organizational level*

Hines (2003a) developed the Organizational Futurist Audit to help assess the organizational climate for foresight. It included diagnostic questions around uses and purposes, but did not explicitly address success or outcomes. Subsequent research (Hines, 2012) revealed that this failure to explicitly address outcomes was a gap, and that evaluating outcomes ought to become a standard activity for organizational futurists in planning their approach.

Two principal paths to measure organizational outcomes are currently being tried: measuring the practice and measuring the “bottom-line” outcomes. An example of measuring the practice is Grim’s (2009) Foresight Maturity Model, which defines best practices in foresight and provides a guide to measuring an organization’s competency with those practices. It is based on previous work that has been done to assess software development and more directly in Grim’s experience in developing a Strategy Maturity Model for IBM. The development of the foresight model included providing insight on five levels of the practices involved in the six activities of foresight adapted from Hines & Bishop (2007), which are then used to assess the maturity of an organization’s foresight practices.

Grim believes that the inherent difficulties in measuring outcomes make it more practical to measure how well the work is carried out--measure the practices rather than outcomes. A challenge so far, however, is that clients have not generally been willing to invest in measuring their foresight practices, likely because their use of foresight is not mature enough yet, and scarce resources for investing in foresight get directed to project work rather than evaluation.

An example of measuring outcomes is Rohrbeck’s (2011) maturity framework, which devised a different approach that aims more broadly than Grim’s--beyond just foresight. His framework has three components:

- Context: assesses the companies’ needs for corporate foresight by: size of company; nature of strategy; corporate culture; source of competitive advantage; complexity of environment; and industry clock-speed (the pace of change in the industry).
- Capabilities: assesses the corporate foresight system concerning its strength in identifying, interpreting, and responding to discontinuous change along

five dimensions: information usage; method sophistication; communicating foresight information and insights; organization; and culture.

- Impact: assesses the value contribution of foresight activities by: reduction of uncertainty; triggering actions; influencing others to action; and secondary benefits.

The capabilities component covers similar ground to Grim, but characterizes the activities much differently. Rohrbeck also casts a wider net in combining the foresight perspective with those of strategic management and innovation management. The impact component covers some of the ground of deciding and acting in the decision-making process (covered in the next section).

These models offer a promising start in providing a means to evaluate outcomes. A challenge for the organizational futurist is that both of these approaches assume a level of development or maturity in the practice that may not be there yet. So, how does the organizational futurist set or manage expectations? There is often no practice to evaluate and boosting the bottom-line is a complex, difficult, and time-consuming case to make.

### *Field level*

It is worth noting that one might also think of a field level outcome--how foresight is being applied across business, government, education and non-profits. Slaughter's (2009) approach to doing this is by identifying what "interests" that the foresight work is serving:

- Pragmatic interests, that carry out today's business, but perhaps doing it better
- Progressive interests, going beyond today's practices to invent and encourage new ways of doing things
- Civilizational interests, looking beyond what currently exists and consciously working to create the foundations of the next level of world civilization and culture.

Another approach to consider is looking at best practices or competencies across the field. Foresight has yet to develop either on a widespread basis, although the Association of Professional Futurists is currently working on a competency model.

The field level provides context for the organizational futurist in terms of thinking about what kind of interests their work is serving, and how that aligns with organizational, project or their individual interests.

### **Decision-making as focus**

A critical assumption informed the literature review for this work: the outcomes of foresight work should ultimately bear on decision-making in the organization. It draws on the view of Pierre Wack that scenario work is ultimately aimed at influencing the mental model of decision-makers. He suggested that effective scenarios "...change the decision-makers' assumptions about how the world works and compel them to reorganize their mental framework of reality" (Wack, 1985, p. 74). Indeed, the introductory piece of a 2012 special issue of *Foresight* covering "foresight impacts" flatly states that "this issue's conceptual underpinning is that foresight must impact decisions" (Caloff and Smith, 2014, p. 5). In fact the entire

special issue focuses on how foresight impacts decisions, focusing on governments and policy-making.

So, foresight work should inform decisions relating to the future of the organization--sometimes directly and sometimes indirectly. A foresight project might directly address an organizational question--should we invest in an overseas expansion? Or, a foresight project might explore the ten- or twenty-year landscape of the organization without a specific decision in mind. It might uncover information or insights that will later lead to a decision. Ultimately these decisions will be tied to some action--or a decision not to act. Rohrbeck's (2012, p. 445) excellent study of value creation from foresight noted that action can be triggered:

*“the direct way, with foresight results directly feeding into the innovation process, or the indirect way, in which information about the market opportunity and technological realization potential is communicated to internal stakeholders without forcing them to start a new project.”*

Thus, the decision-making process is defined here as the process of making a decision that involves:

- (1) gathering and discovering information/knowledge (learning);
- (2) making choices among options (deciding); and
- (3) taking action, since without acting it's not really a decision in operational terms (acting).

The literature search identified an existing model developed by Burt and van der Heijden (2008) based on Vicker's Appreciative System which suggests that decision-making involves three areas of judgment--reality judgments, value judgments, and instrumental judgments. In that model they made a connection to Don Michael's (1995) view of decision-making as learning. Table 1. Illustrates the connections between the view proposed in the paper with those two views.

Table 1. *Three views on decision-making*

Proposed decision-making approach	Vickers Appreciative System	Michaels' view of decision-making as learning
<i>Learning</i> : gathering and discovering information/knowledge	Reality judgements are about sense-making or learning; an understanding of reality	Learning to re-perceive or re-interpret a situation
<i>Deciding</i> : making choices among options	Values judgements are an appreciation of what constitutes desirable and undesirable outcomes.	Learning how to apply that re-perception to the formulation of policy and the specification of action (including evaluation of policy and action)
<i>Acting</i> : taking action	Instrumental judgements are of what ought to be done, what can potentially be done and making a strategic choice between options.	Learning how to implement those policies and intended actions

The three components are part of what Hendry (2000, p. 956) calls a strategic discourse that is “complex, iterative and multi-layered.” It is not a simple linear progression from information to decision to action. For example, sometimes “decisions” are legitimations of actions already taken. The process is one of collective sense-making involving iterations between the components.

Bootz (2010) suggest how the three components might work together. Scenarios, for example, promote learning by helping to create a common language by facilitating exchanges among individuals and developing an institutional consciousness, which in turn accelerates the decision-making process and its implementation when changes do occur.

### **Prior efforts**

It may be useful to first distinguish the Foresight Outcomes Framework from other frameworks that may look similar or touch on some common aspects, but have different aims. A key distinction is that the Foresight Outcomes Framework is not intended as a process map. Several process approaches--such as Framework Foresight (Hines & Bishop, 2013) the Generic Foresight Process Framework (Voros, 2003), Six Pillars (Inayatullah, 2007), the Foresight Fan (Schultz, 1997), and the former Global Business Network’s Scenario Planning Approach (Schwartz, 1991)--indicate a flow but note that moving through the process is iterative rather than strictly sequential. The approaches suggest outcomes in the form of deliverables but they are aimed principally at the project level. The Foresight Outcomes Framework is focused primarily at the organizational level, in particular for organizational futurists and their clients to negotiate. That said, the Foresight Outcomes Framework can be related to or mapped onto process approaches. In the next section, it is mapped onto the six activities of Framework Foresight (Hines & Bishop, 2007, 2013) to suggest how organizational and project outcomes can be related.

Two special issues in foresight journals relating to outcomes were published in 2012. *Futures* (van der Duin, 2012) did a special issue on evaluation and *Foresight* (Caloff and Smith, 2012) did one on impacts. The *Futures* issue on evaluation examined the quality, success, and impact of foresight project. It differs from the focus in this paper in that it focused primarily at the project level, while the Foresight Outcomes Framework focuses primarily at the organization level. The closest overlap is in “impact,” which they focus on decision-making, specifically “by the extent to which it [the foresight study] has helped an organization make a good decision” (van der Duin, 2012, p. 415). The *Foresight* issue on impacts focuses primarily on decision-making. That is of course relevant to the purposes here, but the Foresight Outcomes Framework also focuses on learning and action as key outcomes, and views them from the perspective of the organizational futurist.

Forty sources were identified in Hines’ (2012) dissertation research as touching on outcomes [see Appendix A1], including a mix of purposes, goals, and benefits. The list was sorted into three components of decision-making, providing support that the approach chosen was a robust one. Table 2 synthesizes some key outcomes for each component based on the literature review that identified potential success criteria mentioned by forty sources. It is intended as illustrative rather than comprehensive.

Table 2. *Examples of outcomes in the decision-making process*

Learning (anticipate and understand what the future looks like)	<ul style="list-style-type: none"> <li>• Preparing/rehearsing/thinking through options and implications as related to specific decisions or continuous learning</li> <li>• Reframing, transforming, and consciousness-raising</li> <li>• Creating new ideas that could inspire new decisions.....and actions</li> <li>• Avoiding surprises/threats</li> <li>• Identifying future possibilities, and opportunities, especially discontinuous change</li> </ul>
Deciding (improving decisions and the decision-making process)	<ul style="list-style-type: none"> <li>• Guiding strategic conversation and influencing individual mental frameworks</li> <li>• Extending traditional planning horizons to longer, broader, and deeper view</li> <li>• Multiplying the range of perspectives</li> <li>• Opening up the organization to the outside world</li> <li>• Increasing sophistication in dealing with complexity</li> <li>• Countering systematic biases that affect our ability to think about and act upon the future</li> </ul>
Acting (provide a stimulus to action)	<ul style="list-style-type: none"> <li>• Acting more skilfully based on the learning and improving the decision-making process to mobilize the organization to “shape the future”</li> </ul>

Specific approaches for measuring foresight outcomes are highlighted in Table 3 below.

### **Social constructionism as guiding perspective**

Hines’s dissertation (2012) made a case that organizational futurists adopt a social constructionist perspective to guide the process of foresight integration. The particular value of having a futurist on the inside is that they are a direct part of the cultural mix, such as the ongoing “water cooler,” staff meetings, and strategic conversations. Success, too, it is suggested here, is negotiated as part of ongoing dialogue in the mix.

The social constructionist perspective suggests that dialogue with its accompanying creation of texts and narratives and building of discourses, is vital to creating the shared meaning that would underpin any notion of “success.” Dialogue is distinguished from discussion in its intent to generate new understanding. Bohm (1996, p. 2) observed that in dialogue, “there is no attempt to gain points, or to make your particular view prevail,” where in discussion “people are batting the ideas back and forth and the object of the game is to win or to get points for yourself.” Nonetheless, organizational members will employ all sorts of rhetorical devices to persuade others, such as metaphor, simile, euphemism, irony, personification, rhetorical questions, but with the aim of generating new understanding rather than seeking to “win” (Watson, 1995).

Social constructionism suggests that success is “what we agree it is.” What’s needed, however, is to provide a framework for negotiating that process toward

agreement. It is suggested that the organizational futurist have a vision, goals and strategies for their work (Hines, 2014). The nature of the role suggests a need for flexibility; an ability to hear where the organization wants to go and to make the necessary adjustments. There is perhaps a bit of opportunism in the role, looking for individuals, groups, or functions that want to engage. Thus, outcomes are likely to be somewhat flexible as well. Any proposed framework ought not be overly restrictive, but more in the spirit of providing a guiding orientation. The intent is having a more informed discussion about success or in social constructionist terms: “changing the style of future argumentation” (Shotter, 1993, p. 18).

### Putting it All Together: The Foresight Outcomes Framework

The ideas in the previous section are brought together in a conceptual framework.

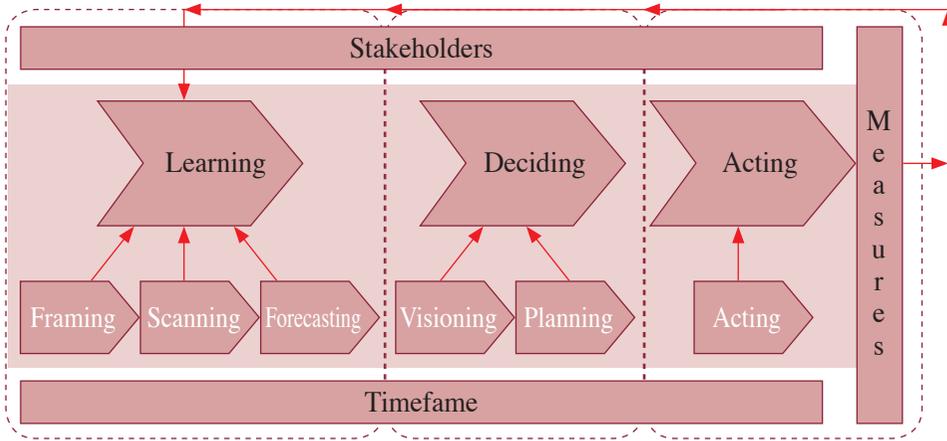


Figure 1. Foresight Outcomes Framework

At the center of the framework in Figure 1 are the three components of decision-making: learning, deciding, and acting. Learning is placed before deciding to represent the process of gathering and discovering information, knowledge, and options to aid the decision. Acting completes the decision-making process, and, of course, can feed back into learning and continue the process. The decision-making process is the primary target or focus of the organizational futurist. It is depicted sequentially, but in practice it is often iterative and feeds back on itself (the arrows depict this in Figure 1). For instance, learning influences decisions and actions that in turn can lead to further learning, in the sense of Kim’s (1993, p. 43) definition of “increasing an organization’s capacity to take effective action.”

Further development of the framework might advance more specific learning outcomes, such as moving toward triple-loop learning. Isaacs (1993, p. 30), acknowledging the work of Argyris and Schön (1978) on single- and double-loop learning, suggested that triple-loop learning “attempts to help individuals and organizations examine and change the underlying assumptions, or the theories behind their actions.” Indeed, futurists would agree that challenging underlying assumptions is fundamental to their work (Coates, 1999). The social constructionism perspective and Bohmian dialogue advocated in this piece are compatible with the

notion of triple loop learning, as they encourage reflection and working toward shared meaning that takes time to develop. Organizational futurists, for example, may seek to encourage more triple loop learning as a specific type of learning outcome.

Underneath each of the three components are six project activities organized along the *Thinking about the Future* framework (Hines & Bishop, 2007) and taught as the Framework Foresight method at the University of Houston Foresight Program (Hines & Bishop, 2014). The first three activities--framing, scanning, and activity--are principally aimed at learning. There is work in clarifying the problem (framing), gathering information about the future (scanning) and mapping out the potential future landscape (forecasting). Visioning and planning are aimed principally at deciding. Visioning helps clients develop a vision of their preferred future and planning provides options for enabling that vision. Acting in the framework provides tools for enabling the client to take action on the work.

Foresight projects are sometimes undertaken for purposes of aiding a decision or decisions, while other times a discovery or exploratory project is asked for by clients for learning purposes not directly tied to an immediate decision. Even in this case of an exploratory project, it could be argued that this learning is ultimately going to be tied to a decision, e.g., should we proceed with foresight? Does what we have learned apply to our work? Acting completes the framework as decisions are not really decisions until action is taken, unless the decision is not to act or delay acting.

Stakeholders are noted in the model to include the organizational futurist(s), their clients, and the clients of the clients. In using the framework with clients, an important question for the organizational futurist is who to include and when. The social constructionist perspective suggests an opportunity for greater inclusion of clients in the dialogue around success. There may be multiple dialogues going on simultaneously. It is tempting to focus on senior executives as the perceived power brokers in organizations. An alternative school of thought, perhaps captured best by Hamel's (2000) *Leading the Revolution*, argues that change and innovation is everyone's job and explicitly attacks the orthodoxy that senior executives set organizational direction. This thinking aligns with the social constructionist approach advocated here that suggests that dialogues need to be far more inclusive. The dialogue starts with the immediate clients and only when sharing meaning is gained is "permission" granted to expand the dialogue to additional groups. One could imagine beginning with senior executives, but this simply starts the process from a different point--the rest of the organization still needs to buy-in for integration to take place.

The inclusion of timeframe can be a useful orienting mechanism in discussing outcomes. An important boundary condition worth noting in the model relates to decisions about the future. Technically speaking, of course, all decisions are about the future, so for our purposes here, there are three time horizons: (Curry & Hodgson, 2008; Hines, 2003a, citing Baghai, Coley & White, 2000)

- Horizon One (H1), the current prevailing system as it continues into the future; operationally focused, typically 2-5 years
- Horizon Two (H2), an intermediate transition space that focuses on extending the core work into new areas; typically 5-10 years
- Horizon Three (H3), competing ideas or arguments about the next system

that explores new territory and potentially new systems, typically greater than 10 years.

Hines (2014) noted that he developed a two-day new business development workshop called “pipeline fills” that were specifically oriented as Horizon Two activities. The concept of three horizons sidesteps potential arguments about a single “proper” timeframe (Brier, 2005). For instance, Brier (2005, p. 840) cites Shostak: “I do not work within 5 years of the present, as it is too close;” Stevenson, “I think a generation ahead, anything else is hardly futures;” and Coates, “I have no interest in those tactical short term futures.” The three horizons model suggests a mix of timeframes depending on the particular project or circumstances.

The third element incorporated into the framework is measures. The availability of Grim’s and Rohrbeck’s maturity models, as well as several other instruments described in Table 3, suggests there will be opportunities to link the Foresight Outcomes framework to measures. At this time, it is suggested that there is much to be gained from having better dialog around outcomes--as a first step. The link to measures should come later, after the framework has been tested and used.

Table 3. *Measuring instruments*

Learning	<ol style="list-style-type: none"> <li>1. Chermack (2006) developed an instrument to measure the impact of a scenario planning intervention. One study found increased perceptions of organizational learning across six of the instrument’s seven constructs.</li> <li>2. Chermack (2006) also recommends Watkins &amp; Marsick’s (1999) Dimensions of the Learning Organization Questionnaire based on 30 years of experience working with organizations to increase their capacity to support learning.</li> </ol>
Deciding (strategic conversation aspect)	Chermack, van der Merwe & Lynham (2007) offer the Conversation Quality and Engagement Checklist (CQEC) instrument to measure the impact of scenario planning on the strategic conversation. The CQEC has been around for thirty years. It assesses participant conversation and communication skills--a “surrogate” for strategic conversation.
Acting	Amsteus (2011b) developed an instrument that correlates foresight capability and firm performance. It includes a diagnostic tool for determining which aspects of foresight on which managers are weak. One study of the instrument found a moderately positive, statistically significant relationship between managerial foresight and firm performance.

These tools have not yet been used with the Foresight Outcomes Framework but offer a logical starting point for building the robustness of the framework.

## Implications

The Foresight Outcomes Framework is intended to provide organizational futurists with a mechanism to facilitate dialog, make meaning, and seek agreement around evaluating outcomes. It provides a mechanism around which to organize the process by providing a set of expectations that can be checked, and enabling adjustments of mental frameworks by “surfacing, testing, and improving [of] our (actors’) internal pictures of how the world works” (Senge, 1990, p. 175).

The framework can also help the organizational futurist strategize on how to position and build the foresight capability, as well as guiding outcomes for particular projects. Referring back to the four levels identified at the beginning of the piece, the organizational and project levels are the most important to the organizational futurist, thus they are covered first.

- At the organizational level, the framework provides guidance in setting objectives for the function with stakeholders, as well as suggesting which projects to take or target. For example, if the agreement with stakeholders is to focus primarily on aiding “deciding,” then the organizational futurist might be wary of taking a project that involves acting/prototypes, or doing too many pure exploration projects aimed primarily at learning.
- At the project level, the framework provides guidance on which of the six activities to do or emphasize, aligned with the objectives set at the organizational level. Projects can be scoped in line with overall objectives. For example, if the overall emphasis is on learning, that might suggest scanning and forecasting projects are prioritized.
- At the individual level, the framework provides guidance on where practitioners need to focus their professional development. For example, if acting is going to be emphasized, the futurist may seek training on design.
- At the field level, the framework can provide guidance to the practitioners on which “interests” their work is serving. For example, the futurist might ask their clients if they would be interested in doing a project targeting social interests, if they felt those interests were being neglected.

Table 4 shows the four performance levels and how they relate to outcomes. The focus of this work is on organizational outcomes, which are bolded in the table and emphasized throughout the paper. This reflects that fact that the primary purposes of the Foresight Outcomes Framework is to provide a framework for the organizational futurist to discuss desired outcomes for the organization.

The project level is most closely related, since projects are the most common unit of work. Two approaches to measuring project outcomes are discussed. Grim’s Foresight Maturity Model is incorporated into the framework, as its approach corresponds closely to the three organizational outcomes of learning, deciding, and acting. The six activities in Grim’s model sort cleanly into the three outcomes. Rohrbeck’s model is introduced as it is an interesting and useful approach, but where Grim’s model focuses on foresight practices and how well they are carried out, his focus is based on the bottom-line outcome of ROI (return on investment) and does not fit as cleanly to the three outcomes.

The tie to the individual is more indirect, nonetheless it does suggest that individuals can hone their skills in the six project activities that in turn influence the

three organizational outcomes. Thus, improving one's ability to frame, scan, and forecast should improve learning outcomes; improving one's visioning, and planning capabilities should improve deciding outcomes; and improving on leading should improve on acting outcomes.

Finally, the ties at the field level on the type of interests that foresight work is serving – pragmatic, progress, and civilizational--are currently not linked to the framework. The field-level work on a competency model would be a useful fit (note: the author is working on a foresight competency model through an Association of Professional Futurist's Task Force, but that work is still in progress).

Table 4. *Levels and outcomes*

Performance Levels	Outcomes		
Individual	Proficiency in project-level activities and relevant techniques and methods		
Project Rohrbeck ROI	Context (need for foresight) Capabilities (ability to respond to change) Impacts (ROI)		
Project Grim Maturity Model (the practice)	Framing Scanning Forecasting	Visioning Planning	Leading
Organization	Learning	Deciding	Acting
Field	Pragmatic, Progressive, Civilizational <i>Potential future linkage: Competency Model</i>		

Perhaps the most important overall theoretical implication of the outcomes question is that the Foresight Outcomes Framework provides a starting point for dialogue and meaning-making. Dialogue about it will likely lead to revisions, tweaks, and improvements. If such a dialog can build a discourse among futurists, it will bring a greater clarity to the dialogue with clients.

## Conclusion

The organizational futurist needs help in establishing what success looks like for themselves and their stakeholders. In setting up a role or function, the organizational futurist can use the Foresight Outcomes Framework to guide conversations with clients and key stakeholders about expectations, and thus set a relative emphasis on strategic direction. For instance, is the organizational futurist accountable for acting, i.e., actively involved in developing artifacts, designs, or offerings, etc. And also, do they want to be? Is the work being aimed at specific decisions, often meaning it is tied to work processes, e.g., integrated with the strategy process? Or is it focused primarily on learning, helping the organization become more aware of the future?

In practice, it is likely to be a mix of the three, and the precise mix will vary by organization and may even change during the tenure of the organizational futurist. Having the expectations aligned provides a guiding orientation for the organizational futurists in how they approach and plan their work.

There are still more questions than answers. What follows is a research agenda suggesting four useful areas to explore.

## Research agenda

1. *Design a “Successful Foresight” project to that uses and improves the Foresight Outcomes Framework.* One of the global organizations in the field, such as the Association of Professional Futurists (APF) or the World Futures Studies Federation (WFSF) could convene this project, which could provide a design for how to approach and talk about these vital issues for the field. It would aim toward eventually gathering stakeholders for dialogue, potentially combining publications, meetings, conferences, etc.

2. *Create a “Learn from other fields” project.* The research for this work frequently went outside the foresight literature to social constructionism, organizational development, organization learning, narratives and discourse, and institutional theory among others. While foresight prides itself on including multiple disciplines and perspectives in carrying out its project work, there is an opportunity to expand the application of this multi-disciplinary perspective to looking at itself as a field. Along those lines, a project to explore how other new fields have dealt with “success” could be initiated.

3. *Test the Foresight Outcomes Framework with futurists and clients.* This project would gather input from experienced and new clients for their input on the Foresight Outcomes Framework. Does it provide a useful guide for discussing success? The results could also be incorporated into an updated Organizational Futurist Audit (Hines, 2003a).

4. *Develop a Foresight Competency Model.* Competency models “provide a framework for business and industry to clearly articulate their workforce needs... and demonstrate the commonality of the broad knowledge and skills needed in an industry” (PDRI & JBS, 2012, p. 3). Identifying these competencies at the field level could provide useful insight on clarifying the recommended means to achieve the outcomes in the Foresight Outcomes Framework.

In closing, the Foresight Outcomes Framework is focused primarily on organizational futurists due the author’s focus and research on that role. A happy side-effect of this work would be that the framework finds wider use in foresight--the author sees no substantive reason why it cannot be used more widely with some minor modifications.

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## Appendices

### A1. Forty Sources of Outcomes

Adelson, Marvin. (1989). Reflections on the past and future of the future. *Technological Forecasting & Social Change*, 36(1-2), 30.

Alsan, A., & Oner, M. A. (2003). An integrated view of foresight: Integrated fore-

- sight management model. *Foresight*, 5(2), 33.
- Amanatidou, E., & Guy, K. (2008). Interpreting foresight process impacts: Steps towards the development of a framework conceptualising the dynamics of 'foresight systems.' *Technological Forecasting & Social Change*, 75(4), 539-540.
- Amara, Roy. (1984). New directions for futures research: Setting the stage. *Futures*, 16(4), 401-404.
- Amsteus, Martin. (2011a). Managerial foresight: Measurement scale and estimation. *Foresight*, 13(1), 58-76.
- Argyris, Chris, & Donald Schon. (1978). *Organizational Learning: A Theory of Action Perspective*. MA: Addison-Wesley.
- Barber, Marcus. (2009). Questioning scenarios. *Journal of Futures Studies*, 13(3), 139-146.
- Becker, Patrick. (2002). *Corporate foresight in Europe: A first overview*. Working Paper. Paper presented at the Institute for Science and Technology Studies, University of Bielefeld, Germany.
- Bezold, Clem. (2010). Lessons from using scenarios for strategic foresight. *Technological Forecasting & Social Change*, 77(9), 1513-1518.
- Bootz, Jean-Philippe. (2010). Strategic foresight and organizational learning: A survey and critical analysis. *Technological Forecasting & Social Change*, 77(9), 1588-194.
- Buchen, Irving. (2005). Finding time for the future and overcoming future avoidance. *Foresight*, 7(6), 3-7.
- Burke, Robert. (2009). From strategic foresight to conversations about alternative and desired futures using scenarios to transform the present. *Journal of Futures Studies*, 13(3), 99-104.
- Burt, George, & Kees van der Heijden. (2008). Towards a framework to understand purpose in Futures Studies: The role of Vickers' Appreciative System. *Technological Forecasting & Social Change*, 75(8), 1109-1127.
- Calof, Jonathan, & Jack E. Smith (2012). Foresight impacts from around the world: A special issue. *Foresight*, 14(1), 5-14.
- Chermack, T. J., van der Merwe, L., & Lynham, S. A. (2007). Exploring the relationship between scenario planning and perceptions of strategic conversation quality. *Technological Forecasting and Social Change*, 74(3), 379-390.
- Coates, Joseph. (1989). Forecasting and Planning Today Plus or Minus Twenty Years. *Technological Forecasting & Social Change*, 36(1), 15-20.
- Coates, Joseph. (1999). Getting at assumptions is troublesome. *Technological Forecasting & Social Change*, 62(1), 97-99.
- Coates, Joseph. (2010). The future of foresight—A US perspective. *Technological Forecasting & Social Change*, 77(9), 1428-1437.
- Curry, A. (2009). From foresight to insight: Using scenarios well. *Journal of Futures Studies*, 13(3), 119.
- Daim, T., Basoglu, N., Dursun, O., Saritas, O., & Gerdri, P. (2009). A comprehensive review of Turkish technology foresight project. *Foresight*, 11(1), 21-42.
- Eriksson, E. Anders & Weber, K. Matthias. (2008). Adaptive foresight: Navigating the complex landscape of policy strategies. *Technological Forecasting & Social Change*, 75(4), 462-482.
- Fuller, Ted & Loogma, Krista. (2009). Constructing futures: A social constructionist

- perspective on foresight methodology. *Futures*, 41(2), 71-79.
- Georghiou, Luke & Michael Keenan. (2006). Evaluation of national foresight activities: Assessing rationale, process and impact. *Technological Forecasting & Social Change*, 73(7), 761-777.
- Glenn, Jerome., Gordon, T. J., & James Dator. (2001). Closing the deal: How to make organizations act on futures research. *Foresight*, 3(3), 177-189.
- Hayward, Peter. (2004). Facilitating foresight: where the foresight function is placed in organisations. *Foresight*, 6(1), 19-30.
- Inayatullah, Sohail. (2000). Tips and pitfalls of the futures studies trade. *Foresight*, 2(4), 369-374.
- Isaacs, William. (1993). Taking flight: Dialogue, collective thinking, and organizational learning. *Organizational Dynamics*, 22(2), 24-39.
- Jarratt, Jennifer, & John Mahaffie. (2009). Reframing the future. *Journal of Futures Studies*, 13(4), 5-12.
- Karlsen, J. E., Øverland, E., & Hanna Karlsen. (2010). *Sociological contributions to futures' theory building*. *Foresight*, 12(3), 59-72.
- Karp, Tom. (2004). Building foresight abilities in organizations: A future opportunity for futures studies. *Futures Research Quarterly*, 5-30.
- Korte, R., & Chermack, T. (2007). Changing organizational culture with scenario planning. *Futures*, 39(6), 645-656.
- Micic, Pero. (2010). Future Markets-Radar: A case study of applied strategic foresight. *Technological Forecasting & Social Change*, 77(9), 1499-1505.
- Neef, Andreas & Cornelia Daheim. (2005, July). *Corporate Foresight: The European Experience*. Paper presented at the WFS General Assembly Conference, Chicago, IL.
- Öner, M. Atilla & Beser, Senem. (2011). Assessment of corporate foresight project results: case of a multinational company in Turkey. *Foresight*, 13(2), 49-63.
- Pang, Alex. (2010). Futures 2.0: rethinking the discipline. *Foresight*, 12(1), 5-20.
- Ratcliffe, John. (2005, June 10). *Challenges for corporate foresight: Towards strategic prospective through scenario thinking*. Paper presented at the 7th Annual International Conference, Foresight Management in Corporations and Public Organisations: New Visions for Sustainability, Helsinki, Finland.
- Rohrbeck, R., Mahdjour, S., Knab, S., & Frese, T. (2008). *Benchmarking report: Strategic foresight in multinational companies*. European Corporate Foresight Group.
- Rohrbeck, R., & Gemünden, H. (2011). Corporate foresight: Its three roles in enhancing the innovation capacity of a firm. *Technological Forecasting & Social Change*, 78(2), 231-243.
- Slaughter, Richard. (1999). Professional standards in futures work. *Futures*, 31(8), 835-851.
- Slaughter, Richard. (2009). The state of play in the futures field: A metascanning overview. *Foresight*, 11(5), 6-20.
- van der Helm, Rudd. (2007). Ten insolvable dilemmas of participation and why foresight has to deal with them. *Foresight*, 9(3), 3-17.
- Waehrens, Brian Vejrum, & Jens Ove Riis. (2010). Failures to enact the future--A social practice perspective. *Futures*, 42(4), 328-336.
- Wilson, Ian. (2000). From scenario thinking to strategic action. *Technological Forecasting & Social Change*, 65(1), 23-29.

Wright, G., Van der Heijden, K., Burt, G., Bradfield, R., & Cairns, G. (2008). Scenario planning interventions in organizations: An analysis of the causes of success and failure. *Futures*, (40)3, 218-236.

## References

- Albright, Rich. (2002). What can past technology forecasts tell us about the future? *Technological Forecasting & Social Change*, 69(50), 443-464.
- Amsteus, Martin. (2011a). Managerial foresight: Measurement scale and estimation. *Foresight*, 13(1), 58-76.
- Amsteus, Martin. (2011b). Managers' foresight matters. *Foresight*, 13(2), 64-78.
- Backer, Harold. (1984). Making futures research useful: The practitioner's opportunity. *Futures*, 16(4), 408-417.
- Baghai, M., Coley, S., & White, D. (2000). *The Alchemy of Growth: Practical Insights for Building the Enduring Enterprise*. NY: Basic Books.
- Belliveau, P., Griffin, A., & Somermeyer, S. (Eds.). (2002). *The PDMA Tool Book for New Product Development*. NY: John Wiley & Sons.
- Bishop, Peter. (2001). A yardstick too far? *Foresight*, 3(3), 163-167.
- Bohm, David. (1996). *On Dialogue*. NY: Routledge.
- Bootz, Jean-Philippe. (2010). Strategic foresight and organizational learning: A survey and critical analysis. *Technological Forecasting & Social Change*, 77, 1588-1594.
- Brier, David. (2005). Marking the future: A review of time horizons. *Futures*, 37(8), 833-848.
- Buchen, Irving. (2005). Finding time for the future and overcoming future avoidance. *Foresight*, 7(6), 3-7.
- Burt, George & van der Heijden, Kees. (2008). Towards a framework to understand purpose in futures studies: The role of Vickers' Appreciative System. *Technological Forecasting & Social Change*, 75(8), 1109-1127.
- Chermack, Thomas. (2006). Assessing the quality of scenarios in scenario planning. *Futures Research Quarterly*, 22(4), 23.
- Chermack, T. J., van der Merwe, L., & Lynham, S. A. (2007). Exploring the relationship between scenario planning and perceptions of strategic conversation quality. *Technological Forecasting & Social Change*, 74(3), 379-390.
- Cornish, Edward. (1997). Forecasts thirty years later. *The Futurist*, 45-48.
- Curry, Andrew & Hodgson, Anthony. (2008). Seeing in multiple horizons: Connecting futures to strategy. *Journal of Futures Studies*, 13(1), 1-20.
- Georghiou, Luke, & Michael Keenan. (2006). Evaluation of national foresight activities: Assessing rationale, process and impact. *Technological Forecasting & Social Change*, 73(7), 761-777.
- Grim, Terry. (2009). Foresight maturity model (FMM): Achieving best practices in the foresight field. *Journal of Futures Studies*, 13(4), 69-80.
- Hamel, Gary. (2000). *Leading the Revolution*. Cambridge, MA: Harvard Business School Press.
- Hendry, John. (2000). Strategic decision making, discourse, and strategy as social practice. *Journal of Management Studies*, 37(7), 955-977.
- Hines, Andy. (2003a). An audit for organisational futurists: Ten questions every organizational futurist should be able to answer. *Foresight*, 5(1), 20-33.

- Hines, Andy. (2003b). The futures of futures: A scenario salon. *Foresight*, 5(4), 28-35.
- Hines, Andy, & Peter Bishop. (2007). *Thinking about the Future: Guidelines for Strategic Foresight*. Washington DC: Social Technologies.
- Hines, Andy. (2009). How accurate are your forecasts? More accurate than you might think. *World Future Review*, 5-22.
- Hines, Andy. (2012). *The Role of an Organizational Futurist in Integrating Foresight into Organizations*. Leeds, UK: Leeds Metropolitan University.
- Hines, Andy, & Peter Bishop. (2013). Framework foresight: Exploring futures the Houston way. *Futures*, 51, 31-49.
- Hines, Andy, & Jeff Gold. (2014). An organizational futurist role for integrating foresight into corporations. *Technological Forecasting & Social Change*, 101, 99-111.
- Horton, Averil. (1999). A simple guide to successful foresight. *Foresight*, 1(1) 5-9.
- Inayatullah, Sohail. (2008). Six pillars: Futures thinking for transforming. *Foresight*, 10(1), 4-21.
- Kim, Daniel. (1993). The link between individual and organizational learning. *Sloan Management Review*, 35(1), 37-50.
- Kurzweil, Ray. (2010, October). How my predictions are faring. *KURAWEIL*. Retrieved on December 29, 2010, from <http://www.kurzweilai.net/predictions/download.php>
- Michael, Don. (1995). Barriers and bridges to learning in a turbulent human environment. In Gunderson, Lance, Holling, C. S. & Light, Stephen. (Eds.), *Barriers and Bridges to the Renewal of Ecosystems and Institutions* (pp. 461-485). New York: Columbia.,.
- Personnel Decisions Research Institutes, Inc. (PDRI) and JBS International, Inc. (JBR), Aguirre Division. (2012). *Technical Assistance Guide for Developing and Using Competency Models – One Solution for the Workforce Development System*. U.S. Department of Labor, Employment and Training Administration (ETA).
- Popper, R., Georghiou, L., Keenan, M., & Miles, I. (2010). *Evaluating Foresight: Fully-Fledged Evaluation of the Colombian Technology Foresight Programme (CTFP)*. Santiago de Cali, Colombia: Universidad del Valle.
- Rohrbeck, Rene. (2011). *Corporate Foresight: Towards a Maturity Model for the Future Orientation of a Firm*. Berlin: Physica-Verlag.
- Rohrbeck, Rene. (2012). Exploring value creation from corporate-foresight activities. *Futures*, 44, 440-452.
- Schultz, Wendy. (1997, November 10). *The Foresight Fan: Systemic approaches to foresight*. Presented at King's Fund European Symposium, Health Futures: Tools to Create Tomorrow's Health System, London, UK. Retrieved on September 24, 2015, from <http://www.infinitefutures.com/essays/publichealth/foresightfan.shtml>
- Schwartz, Peter. (1996). *The Art of the Long View: Planning for the Future in an Uncertain World*. NY: Currency Doubleday; Reprint edition.
- Senge, Peter. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organisation*. NY: Doubleday.
- Shotter, John. (1993). *Conversational Realities: Constructing Life through Language*. London: Sage.

- Slaughter, Richard. (1999). Professional standards in futures work. *Futures*, 31(8), 835-851.
- Slaughter, Richard. (2004). Road testing a new model at the Australian Foresight Institute. *Futures*, 36(8), 837-852.
- Slaughter, Richard. (2009). The state of play in the futures field: A metascanning overview. *Foresight*, 11(5), 6-20.
- Van der Duin, Patrick. (2012). Looking back on looking forward. *Futures*, 44(5), 415-419.
- Van der Steen, Martin & Van der Duin, Patrick. (2012). Learning ahead of time: how evaluation of foresight may add to increased trust, organizational learning and future oriented policy and strategy. *Futures*, 44(5), 487-493.
- Van der Steen, Martin & Van Twist, Martin. (2010). Beyond use: Evaluating foresight that fits. *Futures*, 44(5), 475-486.
- Voros, Joseph. (2003). A generic foresight process framework. *Foresight*, 5(3), 10-21.
- Wack, Pierre. (1985). Scenarios: Uncharted waters ahead. *Harvard Business Review*, 63(5), 73-89.
- Waehrens, Brian, & Riis, Jens. (2010). Failures to enact the future--A social practice perspective. *Futures*, 42(4), 328-336.
- Watson, T. (1995). Rhetoric, discourse, and argument in organizational sense making: A reflexive tale. *Organizational Studies*, 16(5), 805-821.

