

**L E E D S M E T R O P O L I T A N U N I V E R S I T Y**  
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**The Role of an Organizational Futurist in  
Integrating Foresight into Organizations**

A synthesis presented

by

**Andy Hines**

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## Abstract

The difficulties in integrating foresight into organizations suggest an opportunity for exploring a new organizational futurist role. The published works introduced this role and explored its feasibility along two principal paths: positioning and credibility. These works were critically reviewed to identify gaps and inform new research questions.

A first gap was that the narrow focus on positioning missed opportunities for a broader view of integration. An Integration framework was developed to re-contextualize the activities involved in integration. A second gap was that an emphasis on practice and action missed opportunities to gain insight from a more informed theoretical approach. A social constructionist perspective was adopted to provide an epistemological orientation to the work.

Addressing these gaps provided a firmer foundation upon which to identify and investigate new research questions. The first research question explored the connection of the organizational futurist to the foresight field. The second investigated ways for the organizational futurist to be more effective in bringing about successful outcomes. The third looked at the potential for institutionalizing foresight in organizations.

Contributions to knowledge include:

1. The development of the Integration framework maps the process and roles involved in foresight integration.
2. Making a case that the organizational futurist adopts a social constructionist perspective to guide the process of foresight integration.
3. Making a case that the development of the foresight field toward professionalization could be an important influence for aiding the organizational futurist role.
4. The development of an Outcomes framework provides a useful mechanism for the organizational futurist to stimulate a dialogue and discourse about successful outcomes for the integration of foresight.

5. Making a case that the organizational futurist adopts a discursive approach to institutionalization that builds from the periphery to the core of the organization.

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And finally, thanks to the many students and alums I've had the pleasure of working with at the University of Houston's Futures Studies program, and for those yet to arrive.

## **Declaration**

I confirm that this thesis is my own work and that all other sources of work referred to have been properly referenced. I confirm that this thesis has not been submitted for a comparable academic award.

Andy Hines

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## List of submitted works<sup>i</sup>

### *Enhancing positioning path*

1. (1999) with Louise Trudeau. Futurists on the “inside:” the state of practice of organizational futurists. **Futures Research Quarterly**, 15 (4), Winter, pp.49-62.
2. (2001) with Kerry Kelly & Scott Noesen. Viral Futures at Dow. **Futures Research Quarterly**, Fall, pp.59-66.
3. (2002) A practitioner’s view of the future of futures studies. **Futures**, 34 (3-4), pp.337-347.
4. (2003a) An audit for organizational futurists: ten questions every organizational futurist should be able to answer. **foresight**, 5 (1), pp.20-33.
5. (2007) with Peter Bishop. Chapter 6. Acting in **Thinking about the future: guidelines for strategic foresight**. Washington, DC, Social Technologies, pp.191-229.

### *Enhancing credibility path*

6. (1994) with Joseph Coates & John Mahaffie. Technological forecasting: 1970-1993. **Technological Forecasting & Social Change**, 47 (1), pp.23-33.
7. (2003) The futures of futures: a scenario salon. **foresight**, 5 (4), pp.28-35.
8. (2004) The history and development of the Association of Professional Futurists. In: Slaughter, R. **The Knowledge Base of Futures Studies, Professional Edition**. Indooroopilly, AU, Foresight International.
9. (2007) with Peter Bishop & Terry Collins. The current state of scenario development: an overview of techniques. **foresight**, 9 (1), pp.5-25.
10. (2009) How accurate are your forecasts? more accurate than you might think. **World Future Review**, 1 (5), October/November, pp.5-22.

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<sup>i</sup> The submitted works are organized into two themes or paths: the first is positioning for a more client-centred approach; the second is enhancing credibility by promoting the field and identifying and promoting high-quality work.

# Chapter One: Synthesis and critique of published works

## 1.1 Introduction

The question of how to integrate foresight into organizations has dominated my twenty-plus years of research and practice as a professional futurist. My direct experience with the difficulties of getting foresight integrated, that is melded with and part of the organization's culture and work processes, has driven me to explore "why" and "what might be done about it."

This work assumes applying the concepts and methods of foresight will enable organizations to more effectively anticipate and influence the future, and work toward their preferred futures. It recognizes, however, that it is an assumption. Many organizations do not seek the help of foresight or professional futurists. Gavigan & Scapolo (1999) observed that over the past 30 years, much strategy and policy-planning work has been conducted without using the foresight label, in some cases purposely avoiding it because it was in disrepute in planning circles. Nor has the case been decisively made that foresight can deliver on this promise for those who do use it.

A recent response to the "why so difficult" question was offered by van der Steen et al. (2011, p.337) in suggesting that foresight "delivers a type of knowledge that is difficult to apply in organizations," because there is a mismatch in timeframe such that the organization and its members have difficulty in fitting foresight findings into existing decision-making processes. This creates a gap between foresight and regular organizational processes that cannot be easily bridged.

They go on to suggest that "in futures studies it is necessary to maintain a fundamental distance from the everyday flows, agendas and processes in the organization" (van der Steen et al., 2011, p.338). While agreeing with the gap notion, I propose that the prospects for foresight integration may be improved with an organizational futurist immersed in the centre of these "flows" and aware of what "has already been constructed as 'real and good' and is 'in history'" (Hosking, 2011, p.55). Thus the organizational futurist role, rather than eschewing politics and power relations, studies, understands and uses them to the advantage of integrating foresight.

I became aware of this gap as a consulting futurist in the 1990s as clients consistently reported back their inability and ineffectiveness in applying our work internally. They usually claimed to have understood the work themselves, but that their internal clients

neither understood it nor saw it as useful. Discussions with colleagues and clients did not produce sufficient insight into just what the problem was. This thesis proposes that an organizational futurist role could help bridge this gap--thus, the guiding research question is:

“What is the role of an organizational futurist in integrating foresight into organizations?”

### The organizational futurist role

Finding a role as an organizational futurist<sup>2</sup> proved challenging, as a 1997 job search turned up no such positions. These roles may have existed informally, but for my purposes that role had to be crafted. I later reviewed the Association of Professional Futurist (APF) membership lists when I was Chair or a Board Member and found that the percentage of non-student members who fit the organizational futurist category was:

- 21% of 28 members (no student members) in 2002
- 17% of 201 non-student members in 2007
- 18% of 197 non-student members in 2010.

These figures suggest that organizational futurists are under-represented--consulting futurists have been much more prominent in the APF.

I set about crafting an organizational futurist role using an ethnographic/action research approach to explore whether it could help to more effectively integrate foresight. The published works relaying this experience were principally exploratory in providing a feasibility study on whether the organizational futurist role seemed promising.

There are many headings under which the work described here, and those who do it, can fall. For this work, the practitioners are “futurists” working within the field of “foresight.” There are legitimate questions on whether futurists are professionals or whether foresight is a profession. Futurist Verne Wheelwright (2000, p.319) argues that, “By nearly any traditional academic standard, ‘Futurist’ or ‘Studies of the Future’ [aka “foresight”] is not a profession. There are no professional standards, no code of ethics,

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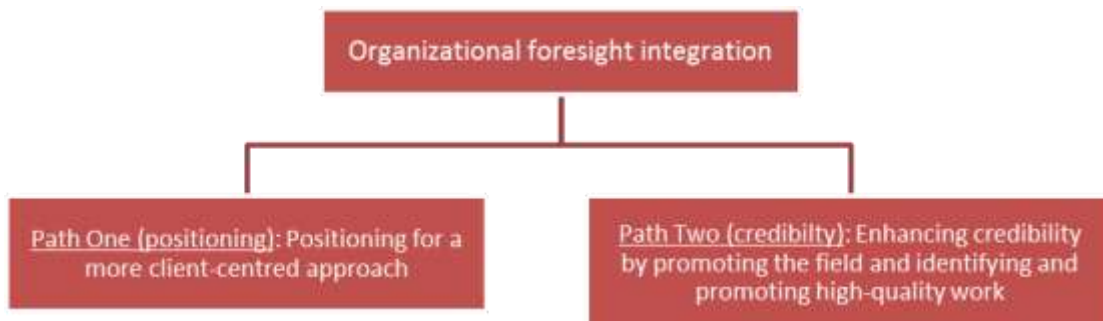
<sup>2</sup> An “organizational futurist” is defined as a futurist working as an employee for a single organization with responsibility for foresight activities.

no professional organization [no longer the case] and little public recognition or acceptance.” This issue is explored further in Section 1.3.2.

The research captured in the published works followed two paths.

- The positioning path centred on ways to position<sup>3</sup> a foresight capability internally, suggesting that organizational futurists would benefit from adopting a more client-centred approach.
- The credibility path focused on ways to improve the perception of the quality of foresight work, suggesting that organizational futurists would benefit from a thriving field and doing more systematic evaluation of their work and sharing it with clients.

**Figure 1. Two paths to organizational foresight integration**



A summary of each of the ten published works, including the methodologies, key issues, contribution to understanding, and the questions they raised is appended in Table A1.

The first path found that organizational futurists too often left it to clients to figure out how to apply the work, which often led good work to languish. Coates (2001) lamented that far too little has been written about how foresight is actually conducted or used in organizations. The APF added that “we’ve got to highlight good futures work” (Hines, 2003b, p.35). My idea was to develop an organizational futurist role occupied by someone with expertise as a professional futurist and working “inside” with clients that could perform a translation role (Hines, 1999a; 2002a). I took two jobs inside large organizations--The Kellogg Company and The Dow Chemical Company--developing this role (Hines, 2003a, p.5).

<sup>3</sup> Positioning is operationally defined as actively advocating for greater use of foresight, including marketing, branding, and politicking.

## 1.2 Research approach

The issue of futurists needing to pay greater attention to their theoretical orientations has recently been raised (Mermet, Fuller & van der Helm, 2009; Miller & Poli, 2010; Oner, 2010; Tiberius, 2011). Cunliffe (2011) provides a useful framework for this challenge of situating philosophical commitments and the logic behind the methods and knowledge claims of research. Her update of Burrell & Morgan's (1979) seminal work on paradigmatic perspectives suggests instead the use of knowledge problematics that tie together ontology, epistemology, and methodology, drawing upon Lather's (2006, p.51) notion that this approach provides, "a cross-disciplinary sense of where our questions come from, what is thinkable and not thinkable in the name of social inquiry in particular historical conjunctions."

The beauty of Cunliffe's revision is that it addresses the confining nature of Burrell & Morgan's four paradigms and opens up possibilities for cross-disciplinary approaches that more easily navigate across perspectives. It is compatible with an emerging strand of thinking in foresight, captured in a recent special issue of *Futures* edited by Inayatullah (2010, p.99) noting that "the strength of futures studies is its epistemological pluralism." The research underpinning the published works found this pluralist approach useful in meeting organizational culture and members where they stand, that is, having the epistemological flexibility to understand and accommodate different positions to aid understanding, sense-making, and a collaborative approach to constructing meaning--the organizational futurist audit being a prime example (Hines, 2003a).

The inter-subjective problematic adopted for this research is summarized as:

- Ontology: social reality is relative to interactions between people in moments of time & space
- Epistemology: social construction with an emphasis on in situ knowing-from-within, with the research embedded and embodied
- Methodology: principally ethnographic and drawing upon dialogic action research, but also including more conventional methods such as content analysis, case studies, issue identification and analysis, literature review, scenario planning, interviewing, questionnaires, historical analysis, and critical analysis (see Table A1 for methods used with published works)

A social constructionist perspective, which fits with Cunliffe's inter-subjective problematic, characterizes the approach taken for this work. It reflects the belief that

gaining insight into what is “going on” in an organization is best discerned by participating in the dialogue and discourse that is constructing the organization’s reality vis-à-vis foresight. It acknowledges that reality (both present and future) emerges intersubjectively from people’s constructions, but at the same time allows for the existence of an external reality independent of our cognition, reflecting Bhaskar’s (1989, p.13) view that ontologically, things “exist and act independently of human activity” and therefore they are not infinitely pliable according to the vicarious play of the transitive language-games. In other words, the research sees the crucial importance of language as constructor of reality, but acknowledges a reality outside of it that is useful for research to explore and attempt to understand.

Berger & Luckmann (1967, p.43) observed that an organization’s “social stock of knowledge” supplies “typificatory schemes” for the major routines of daily life. As long as the knowledge works, it is largely unquestioned and “the routines become legitimated” (1967, p.99). The introduction of new ideas, such as foresight, raises questions about the stock of knowledge and the routines and challenges existing interests. The burden then falls on the organizational futurist to offer an alternative approach worthy of legitimation. And this does not happen in isolation, as there are multiple discourses going on at any time competing for attention and potentially offering different solutions.

While Berger & Luckmann (1967, p. 152) note that conversation is the “most important vehicle of reality-maintenance,” it is not sufficient to drive creation of new shared meaning in organizations. Section 2.3.2 below notes that creating of new institutional meaning involves an iterative process involving the formation of texts, narratives, and discourses informed by dialogue.

The organizational futurist role is highly compatible with the key assumptions of social constructionism, as shown in Table 1 below (Gergen, 1985, pp.2-5).

<b>Table 1. Social constructionism and the organizational futurist</b>	
<b>Social construction assumption</b>	<b>Organizational future role</b>
A critical stance toward taken-for-granted knowledge	Key tenet is uncovering and challenging assumptions
Historical and cultural specificity	Need to be “in the mix” in order to be attuned to local conditions
Knowledge is sustained by social processes	Need to collaboratively create the future together
Knowledge and social action go together	Draws upon an action research approach

## A note on methodology

It is important to address and critique the nature of the research approach of the published works. It was pursued more from a reflective practitioner approach (Schon, 1983) than a traditional academic research one. The approach acknowledges Gray's (1996) concept of "practice-led" research within the context of formal research for higher degrees, in that my practice provided the foundation for the research questions. A key objective of this thesis, then, is to revisit and critique the published works from a more theoretical academic perspective.

In retrospect, the research in the published works drew upon the social constructionist epistemology noted above. Indeed, there is precedent for adopting a social constructionist perspective to foresight. Fuller & Loogma (2009, p.71) observe that foresight "...is both a social construction, and a mechanism for social construction." My positioning work implicitly took a social constructionist perspective in stimulating a dialogue about what might be useful, generating responses, and working toward shared meaning. Burr's (2003, p.113) text on social constructionism noted that the notion of positioning (Davies & Harre, 1990; van Langenhive & Harre, 1999) acknowledges the "active mode in which persons endeavour to locate themselves within particular discourses during social interaction."

In both of my organizational futurist roles, I regularly initiated dialogues with new potential internal clients about my foresight capabilities, learned about their problems, and in many cases found a match. Gergen (1995, p.37) observes that "if others do not recognisably treat one's utterance as meaningful, if they fail to co-ordinate themselves around such offerings, one is reduced to nonsense." Schon (1983, p.261) adds that "a participant's credibility behaves like a stock on the stock market, going up or down with the perception of his success or failure." My term for describing my approach was "permission futuring" (Hines, 2003a). When I was able to help with a problem, I leveraged that to ask for permission to explore new problem areas. As Burr (2003, pp.118-119) suggests, "an understanding of positioning and an ability to use it skilfully could be an important tool in a person's efforts to change themselves or their circumstances."

These conversations informed by texts provided a stream of data--along with resulting narratives, and discourses--that provided the foundation for developing interpretive insights, concepts, hypotheses-on-probation, frameworks, and theories elaborated here.

The aim of this research is to increase general understanding of the situation for organizational futurists in integrating foresight rather than showing or proving a cause-effect situation (Turnbull, 2002).

Lofland & Lofland (1995) observed that many research publications emerge out of the researcher's personal biography. The published works drew heavily from my personal experience, often mixing theory and practice. As Gummesson (2000, p.9) observes, theory and practice are typically separated in academic research: "Backed by bits and pieces of theory, the consultant contributes to practice, whereas the scholar contributes to theory supported by fragments of practice." The reflective practitioner approach attempts to put them back together (Schon, 1983). Using an action research approach, theory is linked to practice and practice to theory reciprocally (Yorks, 2005). Schon (2000, p.34) also noted how "the epistemology appropriate to the new scholarship must make room for the practitioner's reflection in and on action."

Denzin & Lincoln (1994, p.325) suggested that qualitative research strategies are rarely used in their pure forms. They describe the process as "bricolage," drawing on a combination of strategies, methods, and materials. Along those lines, my approach relied on a variety of methods noted in Table A1. I worked collaboratively with my colleagues as research participants, using our conversations as inspiration to influence the use of particular methods. The approach drew on Bakhtin's (1986, p.92) notion of dialogism, that is, "living utterances and the two-way movement of dialogue between people in particular moments and particular settings, in which meaning emerges in the interaction and struggle of back-and-forth conversation between people." Shotter (2005) refers to this as "witness-thinking" because our research interweaves talk with action and activities as we develop, work out, and sustain ways to relate to one another in unique moments of time.

This process often produced what are referred to as "hypotheses on probation" (Gold et al., 2011) that involve defensible reasoning from observation to explanation or explanation to action, but can be substituted if more promising ones are found. These and other interpretive insights were shared informally in the day-to-day working of the organizational futurist role. There were more formally shared in one case in a community of practice formed by the author known as the Explorer's Network, which provided regular opportunities to reflect and strategize on how to more effectively integrate foresight among a community of practitioners (Hines, 2003a).



Those hypotheses on probation and insights judged most useful were described and discussed in a regular dedicated research column “Hinesight” in the journal **foresight**. The “Organizational Futurist’s Audit paper (2003a) integrated several of these columns and won the Emerald Literati paper of the year<sup>4</sup> in foresight in 2003. These ideas were also discussed at conferences, workshops, and professional forums (Hines & Trudeau, 1999; Hines, 2003b, 2004, 2005; Hines & Bishop, 2007) as well as in publications.

This exploratory approach and its findings are described further in Chapter 1. Chapter 2 reports on a critical analysis of these findings that systematically broke them down and identified and evaluated potential alternative explanations. It noted inconsistencies and gaps in the published works and treated them as sources of potential new research questions. The specific critical approach used, taught at the University of Houston Graduate Program in Futures Studies and developed by Bishop (2011) drawing on Toulmin (2001), is described Section 1.4.

### 1.3 A conceptual framework of foresight integration

The critical review of my work revealed a gap in understanding and explaining the integration process. Thus I developed a conceptual framework of foresight integration to map the activities involved and link them to roles on the futurist and client side. The framework emerged both deductively from the review of the published works in considering the process and inductively from the critical review process for generating the new research questions. It revealed that my emphasis on positioning was situated in the middle of the integration process, and that future work would benefit from an understanding of the larger context.

Figure 2 below is a conceptual framework consisting of six activities operating across three different levels with various roles on the futurist and client sides. First, Table 2 explores the three levels: field, organization, and individual--with their respective actors (Hines, 1999b; Hines 2002b).

**Table 2. Foresight levels and actors**

<b>Level</b>	<b>Actors</b>
Field	Foresight field and the various client industries
Organization	Foresight firms and the client firms
Individual	Those actually doing the activities

<sup>4</sup> See <http://www.emeraldinsight.com/journals.htm?issn=1463-6689&volume=6&issue=5&articleid=1491160&show=html>

Consulting futurist	Works outside and consults to the client firm	Sometimes a sole proprietor Sometimes a member of consulting futurist firm Sometimes with a general consulting firm Members of the foresight field
Organizational futurist	Works for a single client firm	Sometimes the client Sometimes a broker between internal clients and consulting futurists Sometimes does the work as internal consultant for client Members of foresight field
Client	Engages consulting futurists	Part of client organization and industry Initially a champion Sometimes a broker between futurist and client of client Sometimes an organizational futurist; in this case also part of foresight field
Client of the client	End user of the foresight work	Part of client firm and industry Sometimes the direct client

Second, the six sequential activities comprising the integration process are explained in Table 3. “Doing the work” and “evaluating outcomes,” appear twice, once after introducing and again after positioning.

Table 3. Activities in foresight integration	
Activity	Description
1. Publicizing	Raising awareness of foresight capabilities. Also happens at individual futurist and foresight firm level with support from the foresight field.
2. Introducing	The client responds to publicizing and decides to engage, typically a champion persuades an internal client to sponsor a project.
3A. Doing the work	The foresight project is carried out, led by the futurist(s) with support from clients.
4A. Evaluating outcomes	Done formally or informally. If client side judges the project a success, they may spread the word internally and expand potential for more foresight work.
5. Positioning	The organizational futurist develops a positioning strategy to promote the capability.
3B. Doing the work	Project work is now accompanied by positioning work.
4B. Evaluating outcomes	If project and positioning work is judged successful, a discourse around foresight emerges and spreads more widely through the organization.
6. Institutionalizing	The organization provides a formal recognized role, e.g., showing up in formal work processes and/or on the organization chart.

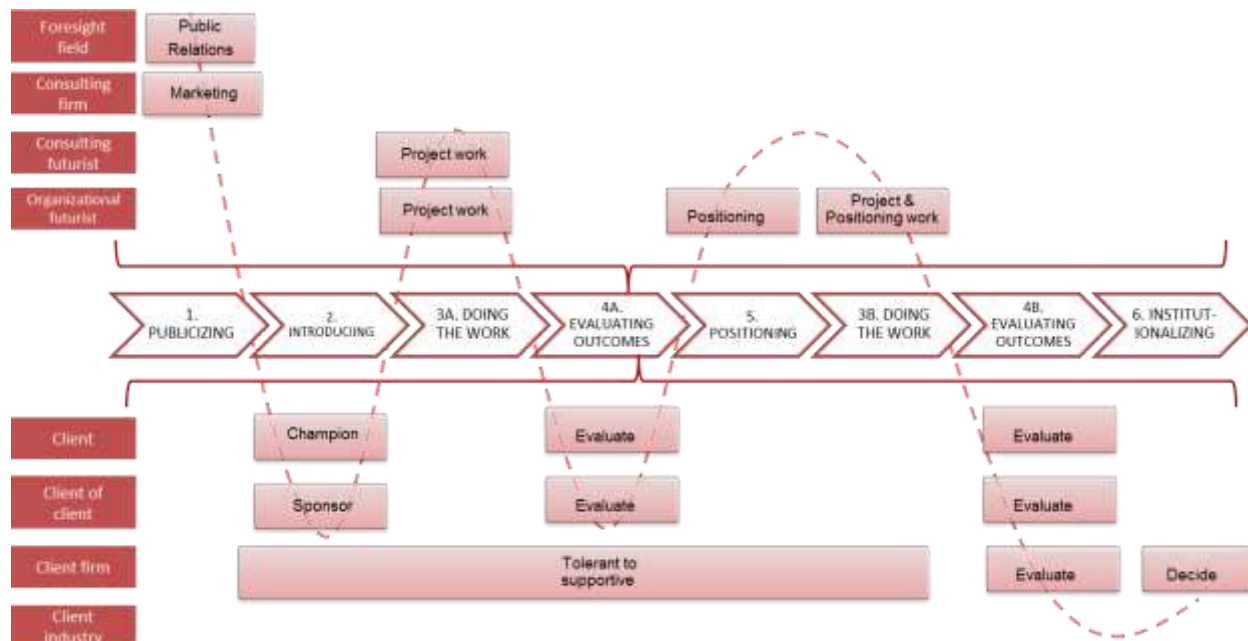
Tables 2 and 3 provide the building blocks for the Integration framework below. The six activities are at the centre, influenced above and below from the futurist and client sides, which each operate on the three levels. Figure 2 indicates where primary

responsibility resides at each step of the process, with the curved line demonstrating how responsibility shifts from the field to the organization to the individual level—and from the futurist side to the client side—during the process. It shows that the foresight field plays a key role in initiating the process by raising awareness about foresight.

It is important to note that while the figure highlights primary responsibility for the sake of clarity, Table 2 notes there are secondary and sometimes tertiary actors involved in each step. For instance, the client firm leadership can play a role ranging from tolerant to supportive early in the process. Tolerant means allowing the foresight work to take place “under the radar” where supportive suggests actively promoting it.

The organizational futurist role could also be placed on the client side, since they are employed by the client. The organizational futurist role in publicizing and introducing is indirect, in that an organizational futurist-in-waiting could champion the role (Hines, Kelly, & Noesen, 2000). That said, the bulk of the organizational futurist’s contribution begins with “doing the work” and proceeds from there along the framework. Figure 2 shows the process and relationships together.

**Figure 2. Integration framework**



The conceptual framework ties together the positioning and credibility research paths of the published works:

- Introducing, positioning, and institutionalizing activities relate primarily to the positioning path.
- Publicizing, doing the work, and evaluating outcomes activities relate primarily to the credibility path.

### **1.3.1 Positioning path**

#### *Introducing*

Introducing typically takes place via a project, although there are cases where a foresight function is commissioned before formal project work is done. In my case at Kellogg's, for instance, I was hired by a team doing "informal" work. In contrast, at Dow Chemical there had been several years of formal foresight activity before I joined (Hines, Kelly & Noesen, 2000).

#### *Positioning*

My consulting futurist work in the 1990s with literally hundreds of clients from a wide variety of organizations, industries, agencies, etc., brought home an important lesson: much more thought and consideration would have to be paid to the application of foresight if it was to become more integrated into organizations (Hines, 2002b). In social constructionist terms, I adopted an institutional entrepreneurship approach by generating texts, dialogues, and narratives aimed at influencing discourses about the future (Phillips, Lawrence, & Hardy, 2004).

I eventually produced a diagnostic "foresight audit" to suggest what kinds of questions one should answer to determine one's positioning strategy (Hines, 2003a).

#### *Institutionalizing*

My vision was that foresight would ultimately permeate the thinking of the entire organization and formal recognition as a function or small department would best enable that. The goal was to tie into and enhance existing work processes such that foresight became a routine part of organizational thinking (Hines, 2002b; Hines & Bishop, 2007).

Zucker (1987, p.446) notes that "institutional elements commonly arise from within the organization or from imitation of other organizations. Already institutionalized elements

can “infect” other elements in a contagion of legitimacy.” I used the term “viral strategy” to characterize my approach to communicating foresight capabilities to the parts of the organization beyond my initial responsibility (Hines, 2003a).

### **1.3.2 Credibility path**

The credibility path explored the role of professionalization and the evaluation and promotion of foresight work (focusing on technological forecasting and scenario planning). The goal of these works was to help enhance the credibility of organizational futurists. The professionalization works assumed that the field’s move toward professionalization would help the organizational futurist by being able to refer to a reputable source for this relatively novel capability (Hines, 2003b, 2004). The evaluation works assumed that credibility would be enhanced by providing a response to questions about the quality of foresight work through demonstrating the accuracy of previous forecasts and the multiplicity of scenario methods in practice (Hines, 1995; Hines, Bishop & Collins, 2007; Hines, 2009).

The synthesis reconsidered this approach to credibility in two ways. First, the question of quality work and methods was unpacked to identify a larger question of how to discuss successful foresight outcomes (Section 2.2). Second, I judged that quality work and methods to be dependent up the larger question of the professionalization and the prospects for the field as a whole (Section 2.1).

A common source of credibility that foresight lacks as a relatively new field is professional status. The field emerged after World War Two from the military and related think tanks in the US and along a separate path in Europe about the same time (Bell, 2003). It moved into national planning efforts and eventually was adopted by the private sector, with Shell’s use of scenario planning in the 1970s being the most well-known example (Wack, 1985a, 1985b). The APF was founded in 2002 with a goal of creating a “credible profession, thriving professionals” noting that “we are living in critical times for our profession...it’s ours to envision the future of the profession” (Hines, 2003b, pp.32-33).

Table 4 provides a view on the state of professionalization drawing on Gold & Bratton (2003) and Wheelright (2000). Wheelright surveyed 300 random participants from the World Future Studies Federation, the World Future Society, and University of Houston Futures Studies program alumni. The survey questions mixed a focus on individual practice and the field. My analysis, drawing upon Hines (2003b; 2004) and my

subsequent vantage point as Chair or Board Member of the APF through 2010, and the literature review, provides a judgement of yes or no. It suggests that of the ten criteria in Table 4, foresight meets three, and doesn't meet seven. A development favouring professionalization is that while just 54% agreed on the need for a professional association in 2000, one was nonetheless founded in 2002. That said, it is perhaps problematic that 41% preferred not to be identified as futurists, though it may be that the survey design included those who would not likely identify as professional futurists. Based on this analysis, it seems reasonable to conclude that foresight has not yet achieved professional status.

<b>Table 4. Foresight and professionalization criteria</b>			
<b>Hodson &amp; Sullivan (2002, p.282)</b>	<b>Freidson (2001, p.180) "ideal-type profession"</b>	<b>Wheelright (2000)</b> drawing on Barber (1965) & Pavalko (1988)	<b>Does foresight meet it?</b>
Specialized knowledge	Specialized work that is grounded in a body of theoretically based, discretionary knowledge and skill that is given special status	Theory and intellectual technique	Yes; 57% agree their practice meets this criterion; Slaughter (2005) attempted to codify a knowledge base
Autonomy	Exclusive jurisdiction created and controlled by occupational negotiation	Autonomy	No; only 30% agreed they had autonomy in using their knowledge vis-à-vis clients
Authority over other subordinate occupational groups	A sheltered position with labour markets based on qualifying credentials of the occupation	[Addressed in "Autonomy"]	No; futurist is not listed as an occupation by the Bureau of Labor Statistics (2010) in the US or the Office for National Statistics (2011) in the UK
A degree of altruism	An ideology that asserts a commitment to doing good and quality	Social values	No; not yet agreed as a field, but 65% agree in their individual practice
	A formal training programme to provide qualifying credentials		No; Hines (2004) notes failure to agree on certification; still the case today
		Sense of community and commitment	Yes; 66% agree

Ethics	No; 61% agree on need; APF and WFSF (World Futures Studies Federation) have not adopted a code of ethics
Standards	No; 62% agree on need; Slaughter's (1999) call for professional standards not yet addressed
Professional association	Yes, APF founded in 2002; 54% agreed on need at the time, before the APF was founded
A new name?	No; 41% preferred not to be identified as futurists; <i>Futures</i> 42 (3) issue with 4 articles citing disagreement on name: Sardar (2010); Masini (2010); Marien (2010); Tonn (2010)

### 1.4 Generating new questions

The research questions emerged from a critical review process developed at the University of Houston's Futures Studies program by Bishop (2011), drawing on Toulmin (2001). Bishop notes that since conclusions are based on evidence and assumptions, a route to alternative conclusions is to look for alternative evidence and assumptions. I chose the route of investigating the assumptions required to use the evidence at hand and explore alternative assumptions as part of the new research.

The process was to systematically go through each line of the published works looking for alternative assumptions, which were then put into question form, as follows:

1. A first-cut review of each work produced 358 potential new research questions.
2. An initial sort eliminated duplicates and an initial clustering reduced the number of questions to 324 in 22 categories.
3. The categories were re-clustered into what would become the Integration framework. The idea of crafting an Integration framework first emerged in Step 1. Thus the clustering was influenced by a rough notion of what the key activities might be, producing six categories with sub-categories.
4. The re-sorted questions were then reduced to 242 by eliminating those that did not seem particularly promising research questions.

5. The remaining questions were then prioritized using three criteria:
  - Was the question not addressed in previous work?
  - Would answering it help organizational futurists, clients, and the field?
  - Did it seem reasonable to answer?
6. This brought the number to 39. A fourth prioritization criteria was introduced:
  - Did the resulting “portfolio” of questions provide balanced coverage across the Integration framework?

This process reduced the list to the three research questions below. Table 5 below lists the research questions and notes their link to the Integration framework. The contributions to knowledge associated with each research question are described in Chapter 4.

<b>Table 5. Research questions</b>	
<b>Integration Framework Activity</b>	<b>Research Question</b>
Publicizing/Introducing	To what extent do developments in the foresight field influence the role of the organizational futurist in integrating foresight into organizations?
Evaluating outcomes	What are the ways in which organizational futurists can be effective in bringing about successful outcomes?
Institutionalizing	To what extent can foresight knowledge and understanding become institutionalised in organizations?

Exploring the first research question revealed that the organizational futurist role is dependent on, or at least influenced by, developments in the foresight field. The primary influence of the publicizing and introducing activities from the Integration framework derives from the field. The field’s publicizing activities influences whether the organizational futurist role exists and grows. The growth in credibility for the field may in turn provide credibility for the organizational futurist. Section 2.1 characterizes the current situation of the field as a means for offering clues as to how much help might be available.

The second research question investigates ways for the organizational futurist to discuss the question of what successful foresight means. Section 2.2 proposes an Outcomes framework for this purpose--recognizing that there is not a single right answer and acknowledging the importance of context. The framework is intended to provide organizational futurists with a mechanism for initiating and framing a discussion of outcomes and success. Greater clarity on that topic is assumed to improve the



prospects for integration, but that assumption remains to be tested. In addition, the literature search identified two new models for evaluating foresight work that are promising moves toward promoting a discourse on the topic.

The third research question focuses on the day-to-day process of foresight integration by drawing upon institutional theory. Institutionalization bears close resemblance to integration; for this work they are distinguished by referring to integration as the process of making greater use of foresight, while institutionalization represents a goal or outcome of that process in being formally acknowledged as an organizational capability or function. The use of the term “integration” allows for using foresight internally, and perhaps more deeply, but without the explicit aim of institutionalizing. It accommodates futurists who prefer the outsider role (see Figure 4) and are concerned about the possibility of insiders compromising their views in pursuit of institutionalization.

Section 2.3 observes that while the Integration framework identified key sets of activities involved in integration, it did not specify how movement occurs along the framework. The social constructionist perspective suggests that meaning-making emerges from relationship and dialogue. Institutional theory draws upon this perspective to provide a more micro view of what the process involves. These perspectives arm the organizational futurist with an approach to move the integration process along.

Chapter 2 describes what was learned from addressing these questions by doing a literatures search and analysis.

## Chapter Two. Researching the new questions

A literature review of the entire catalogue of five leading foresight journals-- Technological Forecasting & Social Change, Futures, Futures Research Quarterly/World Future Review, Foresight, The Journal of Futures Studies--was conducted for perspective on the research questions. Literature from other fields was brought in as appropriate.

### 2.1 Publicizing & introducing

*To what extent do developments in the foresight field influence the role of the organizational futurist in integrating foresight into organizations?*

This research question explores the beginning of the Integration framework--the publicizing and introducing activities. The immediate question regarding them is "of what?" What exactly is foresight? A striking observation from the literature review was the lack of consensus over what the field should be called, what it entails, and where it stands. The published works' focus on professionalization overlooked these fundamental questions about field. An investigation into these questions could provide useful input to the field and those promoting professionalization, which in turn could benefit the organizational futurist.

#### 2.1.1 Naming

The issue of what to call the field has received intermittent attention over the years (Cornish, 1977; Horton, 1999; Becker, 2002; Schwarz, 2005; Amsteus, 2008; Sardar, 2010; Masini, 2010; Marien, 2010; Tonn, 2010; Rohrbeck, 2011). There does appear to be some movement toward "foresight" as the name:

- A Google (2011) trends comparison of the search volume of foresight and futures studies found that futures studies was only mentioned 2% as frequently as foresight from 2004 to the present.
- There is a small trend toward academic programs being named foresight/strategic foresight rather than futures studies; of 16 dedicated graduate programs, three of the four newer ones are called strategic foresight, and the longest running program at the University of Houston is seeking to change from futures studies to foresight (Ramos, 2002; Acceleration Studies Foundation, 2011).

- The many European national technology foresight programs use the term, which emerged somewhat serendipitously as shorthand for a wide range of future-related activities (Martin, 2010).
- Foresight is often accompanied with a descriptor, thus social foresight (Slaughter, 2004), corporate foresight (Daheim & Eurz, 2006), adaptive foresight (Eriksson, 2008) strategic foresight (Slaughter, 2009), and technology foresight (Martin, 2010).

Many thoughtful and useful definitions of foresight have been proposed but consensus has not been achieved (Amsteus, 2008; Coates, 2010; Rohrbeck, 2011).

### **2.1.2 Setting boundaries**

The boundary question is not new. Amara (1984, p.401) lamented that “Futures Research is currently in a state of abeyance and may well be approaching a critical crossroad. In order to survive it needs to dispense with its tendency to be ‘all things to all people’, dealing with almost any activity that involves the future, and define for itself a unique and synthesizing role within a larger forecasting and planning framework.”

Nor is it limited to foresight. For instance, Gold, Rodgers & Smith (2003, p.440) note: “...two crucial issues for the claim of HRD professionalism. First, what is the HRD field of competence? Second, who negotiates the boundaries and has exclusivity been established? Clearly, with respect to the first issue, there are continuing debates about the field of HRD, how it is constituted and what exactly its ‘objects’ are.”

The multi-disciplinary nature of foresight, while a strength for practice, creates a challenge in terms of boundary-setting. Schultz (2002) observed that foresight is “inter-, trans-, and meta-disciplinary” and noted influences from philosophy, political science, history, international relations, systems science, economics, sociology, psychology, and literature. Boundary-setting is also difficult because much foresight work takes place without professional futurists. Kuosa (2011, p.332) notes that a “futures orientation is really not “owned” by futurists alone and this leads to fragmentation. Disciplines have their own interest in the future and their own ways of producing knowledge about it.

So, is technology forecasting part of foresight? Operations research? Technology assessment? Strategic planning? Some scenario planners have set themselves up as “forecasters” or “scenarists” rather than futurists. Some futurists have crafted names for their work as a way to carve out a professional niche, for example, Micic (2006, p.20)

coined “future management” as a bridge between futures research and strategic management.

Addressing the “what’s in” question is important because clients seeking expertise will often look for it at its source. If they are looking for strategic planning help, for instance, will they turn to futurists as the central source? Will strategic planners themselves identify as futurists? Table 6 summarizes several attempts that have been made to define the field.

<b>Table 6. Proposals to organize the field of foresight</b>		
<b>Author</b>	<b>Type</b>	<b>Categories</b>
<i>Historical, evolving paradigms/perspectives</i>		
Inayatullah (1990)	Traditions/perspectives	Predictive, interpretive, critical and action learning
Mannermaa (1991)	Research paradigm	Descriptive, scenario, and evolutionary paradigm
Slaughter (2004)	Traditions/perspectives	Empirical and cultural, critical, integral
Kuosa (2011)	Paradigms	Prediction, management, and dialectic thinking
<i>Static perspectives</i>		
Amara (1981)	Types of futures	Possible, probable and preferred
Linstone (1981)	Multiple perspectives	Technical, organizational and personal
Marien (2002a)	Futurist’s thinking	Probable futures, possible futures, preferable futures, present changes, panoramic views, and questioning
<i>Approaches/methods</i>		
Hines & Bishop (2007)	Foresight approach (activities)	Framing, scanning, forecasting, visioning, planning, and acting
Von der Grach (2010, p.384) citing Daheim & Uerz	Methodological evolution	Expert-based foresight, e.g., the Delphi; Framework-based foresight, e.g., quantitative forecasting; trend-based foresight, e.g., environmental scanning; context-based open foresight
<i>Content<sup>b</sup></i>		
Slaughter (2005)	Knowledge base (core elements of the field)	Futures concepts and metaphors, futures literature, futures organisations, futures methods and tools, images and imaging processes, and social innovations

It reveals that the most common approach is using paradigms or perspectives and how they have evolved over time. The most comprehensive attempt by Slaughter (2005) developed a knowledge base by gathering key writings about the field, its methods, as well as “content” knowledge, though there is disagreement about which are “key.” The

<sup>5</sup> The author just published *Teaching about the future: the basics of foresight education*. Houndmills, UK, Palgrave Macmillan, 2012 with Peter Bishop. It also offers a conceptual description of the field as taught by the University of Houston’s Futures Studies program.

challenge ahead is not to select the “right” approach, but to gain agreement on how they fit together. Chapters 3 and 4 discuss the potential for exploring a foresight “ecosystem” to address this challenge.

### 2.1.3 Current standing

Integrating is an issue that any new capability or field faces. Organizations want to know what the capability purports to do and then assess whether it believes it can do it. And in organizations, it is always easier to not do something than to try something new (Kleiner, 1996; Kahane, 2004; Hines & Bishop 2007, pp.228-229). Legitimacy and credibility questions are inevitable. Slaughter (1999) points out that all fields must pass through a process of academic, professional and social legitimation to be taken seriously. Table 7 is my analysis of where foresight “stands,” based on how it measures up to standard definitions, from least to most complex.

<b>Table 7. Where does foresight stand?</b>		
<b>Definition (Cambridge Online Dictionary)</b>		<b>Meet the criteria</b>
Capability	the ability to do something	Yes (Hines, 2002b)
Field	an area of activity or interest	Yes (Hines, 2002b)
Discipline	a particular area of study, especially a subject studied at a college or university	Maybe; 16 graduate degree programs globally
Profession	any type of work which needs special training or a particular skill, often one respected because it involves a high level of education	No, see Table 4 and description in 1.3.2

The literature review suggests foresight meets the capability test even with debate over what the “something” is. It also meets the definition of a field, but with some dissension. Marien (2002a, pp.261,264) for instance, argues: “...for those who persist in proclaiming that there is a ‘field’, I simply ask that you tell me who is in it, and who is not, and why.” Whether foresight is a discipline is a trickier question. It was noted in Section 2.1.1 that there are 16 graduate degree programs globally. There are about two dozen universities offering a course or courses--it could be more or less depending on how one defines a foresight course (Ramos, 2002; Acceleration Studies Foundation, 2011). It is not clear if that represents sufficient critical mass for a discipline.

Table 4 above suggested that foresight has not yet met the criteria of a profession. But other professions have been in similar positions at this point in their development. Henshel (1981) explored this question thirty years ago and found interesting parallels. In

short, the “marginal respectability” of foresight back then was very similar to that of the social sciences in their early years. Sociology began with the rather grandiose claim that it was going to create a science of society using natural science methods. Henshel suggested the foresight may also have been guilty of grandiose claims about oversimplifying the study of the future. He found that new fields tend to make ‘imperialist’ claims to large territories, yet colonize only a fraction of the area claimed....sociology often became the study of what was left over” (Henshel 1981, pp.404,410).

The situation hasn’t substantially changed in the thirty years since Henshel suggested that foresight might be on a slow path to professionalism. The continuing confusion around what foresight is and what professional futurists are makes it difficult to determine whether the field is growing or not. Slaughter (2009, p.7) observes that it is “impossible to quantify the number of futurists in the world, mainly because of the lack of an agreed definition.”

For the field to continue its journey towards becoming a profession, Fournier (2001, p.71) suggests that it will have to take an active part in its construction. She notes the example of accounting, which “took an active part in the construction of the organizational and social order it now claims to know.” In other words, the boundaries of foresight will not somehow be “revealed,” but, in social constructionist terms, must be proactively developed as part of an on-going dialogue process between futurists and clients. As the field has wrestled with these questions, clients have been left with what Shotter (1993, 148) calls a “chaotic welter of impressions.” He advises avoiding a “Neo-Darwinian struggle” for the correct view or approach but rather to create “a continuous, non-eliminative, multi-voiced conversation” (Shotter, 1993, p.9). Developing such an on-going dialogue is included as part of the research agenda in Chapter 4.

## **2.2 Evaluating outcomes**

*What are the ways in which organizational futurists can be effective in bringing about successful outcomes?*

It has been observed that “futurists have a hard time defining success” (Hines, 2003b, p.35). This section proposes an Outcomes framework for organizational futurists to use in stimulating a discourse about successful foresight outcomes. Gaining consensus on successful outcomes is a logical precursor to refining explicit measures--in other words, agree on what success is before measuring it.

The Outcomes framework could also be used for similar discussions within the foresight field—it could help the field build a consistent discourse on successful outcomes, which in turn could inform and benefit future organizational futurists.

### **2.2.1 Attempts at defining successful outcomes**

Probably the most common current position among futurists is to rely on the marketplace--being asked back--as an indicator of success (Coates, 2000). 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).

A weakness of a confrontational approach is that it can slow or eliminate dialogue and progress toward shared meaning. 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 (1995) observes 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). [see also 2.3.2 The Discursive model of institutionalization]

The Outcomes framework seeks to avoid the temptation of trying to pin down a simple clean definition of success to fit all cases. Rather it attempts to aggregate broad areas of agreement to help provide a coherent framework for dialogue. The intent is "changing the style of future argumentation" (Shotter, 1993, p.18). As Phillips, Lawrence, & Hardy (2004) point out, discourses that present that a more unified view of some aspect of social reality have a greater chance of being accepted--"reified and taken for granted" in their terms--than those where the texts contradict each other or are less clear.

Forty sources were identified in the literature review as touching on outcomes, including a mix of purposes, goals, and benefits (see Table A3). The list was sorted into two principal categories of targets for outcomes: decision-making and deliverables. A key

observation is that successful outcomes are context-dependent--the particulars of each organizational situation will suggest some variation on “success” within the framework.

The first target, the decision-making process, is defined here as the process of making a decision that involves: (1) gathering information/knowledge (learning); (2) making choices among options (deciding); and (3) taking action--without acting it's not really a decision in operational terms (acting). 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. Sometimes “decisions” are legitimations of actions already taken. The process is one of collective sense-making involving iterations between the components.

The second target involves project deliverables, the specific, tangible item(s) to provide to the client--e.g., reports, presentations, workshops, etc.--that contain the desired results, e.g., forecasts, new business opportunities, strategic options, etc. They provide a secondary focus or supporting role in the framework. They are the “means” by which the “end” of improved decision-making is pursued.

The decision-making process is depicted sequentially in Figure 3 below, but in practice it is often iterative and feeds back on itself (arrows depict this). For instance, learning influences decisions and actions that in turn can lead to further learning. Learning, which may refer either to operational or conceptual levels, here uses Kim's (1993, p.43) definition of “increasing an organization's capacity to take effective action.” Kim's framework links individual and organizational learning via shared mental models.

Giddens (1976) suggests deeper processes of learning or meaning creation as both influencing and being constrained by those shared mental models. Individual learning is shared with groups, leading in some cases to group learning--or not--and sharing among groups can ultimately lead to organizational learning. This learning is captured in texts, or what Kim calls standard operating procedures, as well as in shared mental models that represent the organizational memory. This memory is accessed to solve problems, but it can inhibit learning when the standard operating procedures become hardened orthodoxies that are difficult to challenge (Kim, 1993). Wack (1985a, p.74) suggests that effective scenarios “...change the decision-makers' assumptions about how the world works and compel them to reorganize their mental framework of reality.”

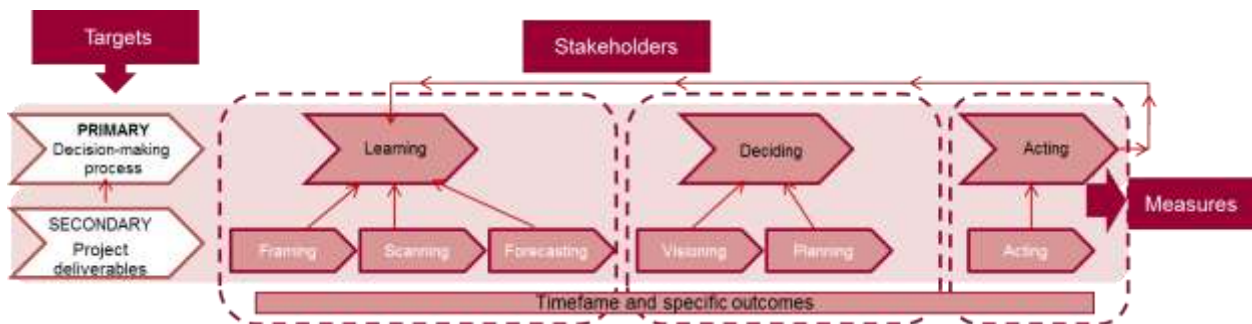


This approach captures the key themes regarding the appropriate target of influence for futurists being to improve decision-making about the future, which involves learning (as described above), aims at action, and is achieved via foresight activities and deliverables. A weakness of this approach is that there is little direct input from clients.

### 2.2.2 A conceptual framework of organizational foresight outcomes

The ideas in the previous section are brought together in a second conceptual framework. The approach takes a systemic view of outcomes, but acknowledges Georghiou (2006, p.761) and Waehren's (2009, p.329) views that foresight cannot be fully evaluated independently from its context.

**Figure 3. Outcomes framework**



The organizational futurist would most likely use the Outcomes framework during positioning work as noted in the Integration framework (Figure 2). The framework provides a basis to establish common ground as the organizational futurist strategizes on how to position and build the foresight capability, as well as guiding outcomes for particular projects.

Figure 3 suggests three principal foci to the dialogue. For stakeholders, the issue is deciding who to involve and when. The bulk of the dialogue explores the appropriate targets for foresight work. The framework suggests beginning with the primary focus of the decision-making process, which is broken into the components of learning, deciding, and acting. A subsequent dialogue would explore the secondary target of project deliverables, which are the linked to the components of decision making via the six activities of foresight work (explained on p.35). That dialogue would be followed by moving on to the timeframe and identifying more specific outcomes within the three components. It is conceivable that the dialogue could progress in reverse--from secondary to primary.

The learning from this step would feed into the third focus on measures. It is beyond the scope of this work to specify those measures, but some promising candidates identified in the literature are suggested in Section 2.2.3. The three foci are further elaborated below.

### 1. Stakeholders

Futurists and their clients are the principal stakeholders. The organizational futurist straddles the boundary between futurist and client. In using the framework with clients, the important question for the organizational futurist is who to include from client side and when. It is a question relevant to positioning strategy. For instance, one may start the discussion with smaller and supportive groups, and then expand from there using that feedback (see Section 2.3.2)

In using the framework with the field, it might be helpful to have a discussion about the types of futurists involved, as different types are likely to have different expectations for success. I propose types that vary along three dimensions, with most having a blend of the characteristics of each type.

**Figure 4. Types of futurists**



Along the applied-normative dimension, the applied futurist focuses on helping the client to achieve their goals without explicitly advocating their own point of view. The normative futurist focuses on getting clients to adopt their view (Slaughter, 2010). Along the facilitator-expert dimension, facilitator types are focused on processes for helping clients develop their own views (see, for instance, Scharmer, 2007). Expert futurists concentrate on providing their expert views to client. Along the insider-outsider dimension, insider futurists use their political and persuasive skills and intimate knowledge of the organization to help get foresight implemented. Outsider futurists raise challenging questions for the organization, aka “disturbing the present;” in some cases, they suggest explicitly avoiding organizational politics (Inayatullah, 2000, p.373)

Each of the types is an extreme on a continuum and one can imagine a degree of blending or hybrids. For instance, I earlier developed the inside-outer role in an organizational futurist capacity (Hines, 2003a, p.23). From an outcome point-of-view, one can imagine that applied and normative futurists would have different views of success, as would insiders and outsiders—probably less so with facilitator and expert. But the framework developed should be robust enough to handle all types. Put simply, the applied and normative (and insider-outsider) will seek to achieve different kinds of learning results, but they are both still learning. Similarly, they will both seek to influence decisions and actions, albeit with different intended results. But these dual approaches are not without their downsides. For instance, the client might be confused by expecting one type and getting other. Amara (1984, p.404) warned that:

“the futures research community must be vigilant about maintaining as clear a separation as possible between its advocacy (value-driven) and its conceptual and analytical arms. Failure to do so will obfuscate the meaning of futures research and raise basic questions about its long-term credibility, effectiveness, and viability.”

## *2. Targets*

The Outcomes framework suggests that influencing decision-making about the future is the primary aim of foresight, achieved, principally, though not exclusively, through projects and deliverables. It acknowledges that “non-deliverable” benefits may emerge.

The framework suggests that foresight is undertaken for purposes of aiding a decision or decisions, although occasionally a project is asked for by clients for learning purposes. Even in this case, 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.

Learning is placed before the decision to represent the process of gathering 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 three components are linked to deliverables organized along the *Thinking about the Future* framework (Hines & Bishop, 2007). The first three activities--framing, scanning, and activity--are principally aimed at learning. There is work at 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. Hines' (2007) analysis of responses by thirty-six futurists citing the benefits of their work to clients sorted under the six activities as follows:

- Framing (22%)
- Scanning (16%)
- Forecasting (22%)
- Visioning (10%)
- Planning (7%)
- Acting (23%)

It was somewhat surprising to note that relatively high contribution of framing and acting, which were acknowledged to be the newest of the six activities (Hines & Bishop, 2007). Framing notes the important of dialogue and mutual agreement on that nature of the problem to be explored, clarifying and re-clarifying what is to be learned, while acting emphasizes the importance of following through, perhaps reflecting the practitioner's recognition that too often foresight work did not get there in the past.

The timeframe is an important boundary condition worth noting in the framework 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: (Hines, 2003a, citing Baghai, Coley & White, 2000; Curry & Hodgson, 2008)

- Horizon One (H1), the short term focus on the current prevailing system and executing the core work; operationally focused, typically 2-5 years
- Horizon Two (H2), the medium term, focuses on extending the core work into new areas; transitionally focused, typically 5-10 years
- Horizon Three (H3), the long term, explores new territory and potentially new systems, typically greater than 10 years.

Finally, the target dialogue could expand to identify specific outcomes. Table 8 suggests specific candidates for each component based on the literature review that identified potential success criteria mentioned by forty sources (see Table A3).

**Table 8. 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 perspectives considers</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>

### 3. Measures

The Outcomes framework suggests there is a lot of dialogue to be had before getting to the point of measuring the outcomes. Future research would be needed to link the results of that dialogue to potential measurement tools identified in the foresight literature. Section 2.2.3 explores some promising measurement tools.

#### 2.2.3 Attempts at measuring successful outcomes

Many researchers have observed that the issue of measuring foresight’s impact has been around for a long time (Backer, 1984, p.416; Georghiou & Keenan, 2006, p.762; Chermack, 2006, p.767; Amsteus, 2011, p.64). Until recently, there appear to have been no quantitative attempts to do so. Timing is an issue, as the outcome of a future-based decision may not be apparent for several years. At the same time, “there are always alternative explanations possible” (Horton, 1999, p.8). 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.

### *Measuring the practices*

Grim's (2009) Foresight Maturity Model 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. I assisted in the development of the foresight model by providing insight on the five levels of the practices involved in the six activities of foresight adapted from Hines & Bishop (2007), which are used to assess the maturity of an organization's foresight practices.

Grim believes that the inherent difficulties in measuring outcomes suggests it is more practical to measure how well the work is carried out--measure the practices rather than outcomes. So far clients have not 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 actual projects rather than evaluation. In Boje's (2001) terms, foresight often remains "stuck" at the ante-narrative level, that is, a story that captures the sequence of events about the project, but not progressing to the narrative level, in which a meaning making process develops a plot about how it can successfully help the organization in the longer term.

### *Measuring the decision-making process*

Instruments identified in the literature search were found to address the three components of the decision-making process suggested above.

**Table 9. Instruments for "measure" aspects of decision-making process**

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 (2010) 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.

Rohrbeck (2011) devised a different approach to developing a foresight maturity framework that aims more broadly than Grim's, but perhaps with less precision. His framework has three components:

- **Context:** assesses the companies' needs for corporate foresight by: (1) size of company (2) nature of strategy (3) corporate culture (4) source of competitive advantage (5) complexity of environment (6) industry clockspeed
- **Capabilities:** assesses the corporate foresight system concerning its strength in identifying, interpreting, and responding to discontinuous change along five dimensions: (1) Information usage (2) method sophistication (3) communicating foresight information and insights (4) organization (5) culture
- **Impact:** assesses the value contribution of foresight activities by: (1) reduction of uncertainty (2) triggering actions (3) influencing others to action (4) secondary benefits

The capabilities component covers similar ground as Grim, but characterizes the activities much differently. A likely explanation is Grim coming at it from the practitioner perspective and Rohrbeck from the academic. Some of Rohrbeck's characterizations might appear quirky to practitioners, such as citing the combination of roadmapping and scenario planning as a best practice. Rohrbeck also casts a wider net in combining the futures research 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.

These models offer a promising start in providing a means to evaluate outcomes, but are perhaps premature in that the dialogue among futurists and clients about the specifics of success remain to be negotiated. The Outcomes framework is intended to stimulate the dialogue about outcomes and thus inform future measurement approaches.

## 2.3 Institutionalization

*To what extent can foresight knowledge and understanding become institutionalized in organizations?*

Institutionalization appears at the “end” of the sequence of activities in the Integration framework (Figure 2). It is dependent on how well its predecessor activities fare. Institutionalization is only likely to be considered if foresight outcomes are judged to be useful and if it is introduced in the first place.

As a new capability, foresight is going to challenge existing interests in the organizational “territory or “turf,” and thus be engaged in competition for limited resources (Taylor & Van Every, 2000, p.292). Lave & Wenger (1991) suggest that new ideas and approaches typically come from new actors on the periphery of the organizational mainstream. “Newcomers” propose ideas that are responded to by the appropriate territory or “community of practice” in their terms. If judged of sufficient interest the newcomers and their ideas are gradually integrated into the community. Barrett (1998, p.616) observed that “essential to organizational learning is...understanding how to function as an insider. This recognizes that learning is much more than receiving abstract, acontextual, disembodied knowledge. It is a matter of learning how to speak the language of the community of practitioners.”

### **2.3.1 Assessing the potential response to foresight**

The synthesis suggested a potential area for improving the integration of foresight by assessing the potential responsiveness of the client audience to foresight before a project is undertaken. I developed the Organizational Futurist audit (Hines, 2003A) for this purpose, but it was aimed primarily at organizational futurists themselves and asked them to judge the receptivity of the audience without their participation.

Rohrbeck et al. (2008, p.27) suggests that “a corporate culture needs to provide support to SF (strategic foresight) and foster openness for applying new concepts.” He observes that it helps the futurist if the organization is supportive of foresight and is willing to take risks and try new concepts. This puts the burden on the client and client organization to be open and receptive to novel concepts. But as Shotter (1993, p.5) put it, “for those who currently occupy the centre, new approaches can often seem like dangerous monsters on the prowl.” Institutional theory suggests that “deviation from the accepted institutional order is costly in some way, and the more highly institutionalized a particular social pattern becomes, the more costly such deviations are (Lawrence, Winn, & Jennings, 2001).

Organizations provide guidance to its members on the established ways of doing things. Its discourses, defined as structured collections of meaningful texts that include any



kind of “symbolic expression requiring a physical medium and permitting of permanent storage” (Parker, 1992; Taylor & Van Every, 1993, p.109), make “certain ways of thinking and acting possible, and others impossible or costly” (Phillips, Lawrence, & Hardy, 2004, p.638). Those who suggest new ways of doing things thus ought to assume the burden of proof that the established way of doing things is either not up to the task, or that the proposed new approach will achieve better results, since they are asking clients to take on professional risk. Mack (2005, p.75) embraces this notion that the burden is on the futurist by noting the need to create a safe haven for change, not simply to assume that it ought to be there.

The literature review identified four instruments for assessing potential responsiveness to foresight, summarized in Table 10. The first three instruments get to individual views. The fourth is a more general assessment of the context. Of the three that get to individual views, the Foresight Styles Assessment is most directly aimed at foresight, but it is the least developed and tested. The other two have been used more extensively, but they are less directly related to foresight.

<b>Table 10. Instruments for assessing “receptivity” to foresight</b>	
Foresight Styles Assessment (Dian, 2009)	Specifically developed to provide a reliable measure of one’s foresight capacity. Gary (2009) analysed and fine-tuned it with a factor analysis that revealed a four factor solution of Framer, Adapter, Tester, and Reactor.
Leadership Development Profile (Cook-Greuter, 2005)	This instrument benchmarks foresight capacities. It suggests that one’s personal developmental level in terms of leadership maturity and personal integration will provide a useful indicator of one’s ability to understand and apply foresight.
Strategic Orientation (Miles & Snow, 1978)	Gary (2009, p.20) suggested this well-established instrument could be used by futurists. It identifies three strategic orientations: defenders, prospectors, analysers and a fourth, reactors, which is a lack of strategic orientation.
Rohrbeck’s Maturity Model (2011)	One part of his three-part model addresses context by assessing a companies’ needs for corporate foresight by: (1) size of company (2) nature of strategy (3) corporate culture (4) source of competitive advantage (5) complexity of environment (6) industry clockspeed.

Other instruments could be added to this list, but they also do not directly address views on foresight. For instance, I have used Beck & Cowan’s (1996) Spiral Dynamics assessment of team member’s worldviews as a way to indirectly gauge their receptivity to foresight and my own New Dimensions Values Assessment tool gauges individual values types (Hines, 2011c).

Shotter (1993, p.52) observes that “acceptable responses must be negotiated within a context of argumentation.” A new or revised instrument that sheds insight on this context could help stimulate a more effective dialogue about how foresight can help organizations approach the future more effectively. It could help the organizational futurist to be aware of the way the organization constructs its conventions, makes sense of reality, and how it rules in or rules out certain ways of thinking and acting (Fairclough,1992), or shed insight into the appropriate genres that are “recognizable, interpretable, and usable” (Phillips, 2004, p.644).

### **2.3.2 Discursive model of institutionalization**

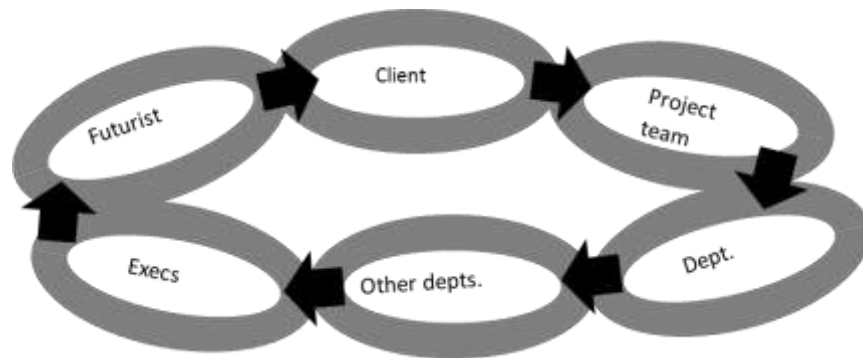
Clients are situated within a web of relationships. They are typically part of a project team, which is in turn is situated within a larger group, such as a department. Their activities will formally or informally be made known to this larger group, by means such as departmental update meetings or informal “water-cooler” conversations. If the client becomes an advocate, they can take a proactive role in stimulating these conversations. Along the way foresight texts may be shared. Thus, a dialogue may spread throughout the organization in a similar fashion and eventually create a discourse, as people from the department talk to people in other departments and so on. Figure 5 below suggests the process can be visualized in terms of a chain of integration.

The social constructionist approach to integration suggests building the case from the ground up, one dialogue at a time as part of crafting a discourse, and proceeding from futurist to client to project team to department to other departments and so on up to the executive level. Each link presents a narrative or text attempts to persuade the next of the validity. Members use rhetorical techniques aimed at persuading the social construction of discourse (Watson, 1995). Taylor & Van Every (2000, p.96) argue that “discourse is built up progressively” as texts move from the local to the global.” The process can be stalled by a break in the chain at any point along the way. Along these lines, van der Heijden et al. (2002, p.166) drew upon Vygotsky’s notion of scaffolding, which suggests a role for organizational futurists in connecting random intuitive knowledge existing in a “zone of proximal development” into codified knowledge by asking appropriate questions, stimulating dialogue, and thus building toward a discourse.

Figure 5 provides a visual of the process, but it oversimplifies the complexity of the twists, turns, back-and-forth, need for iteration, and its generally messiness. Boje (2001, p.64) observes that “stories are not static; stories web, assemble, disassemble, and

otherwise deconstruct one another in self-organizing systems.” In other words, the initial ideas being introduced, once shared, begin a journey that the organizational futurist cannot control. The stories may be interpreted differently than intended, or re-interpreted in unanticipated ways, by individuals or groups unknown to the futurist. Boje (2001, p.64) adds that stories spread across “sanctioned channels and catch points” such as meetings, briefings, memos and events, but also informally as well, and alternative or more complex stories may emerge.

**Figure 5. Hypothetical chain of integration**

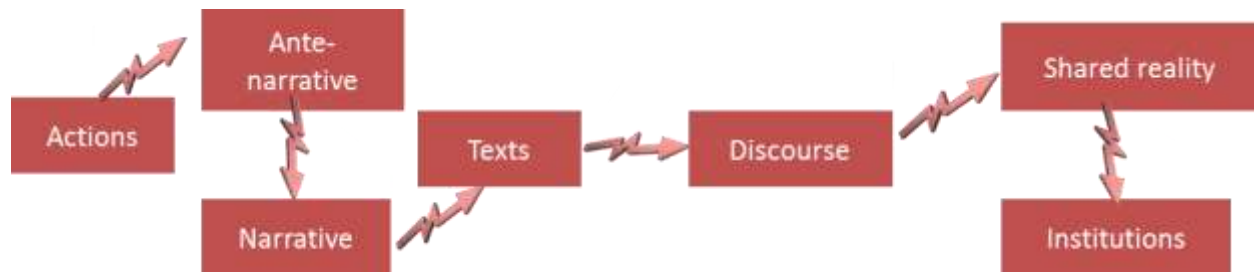


Thus, it might help to suggest a complementary metaphor of a jazz performance taking place in forging each of the links. It highlights the elements of uncertainty, teamwork, and the iterative nature of the process. Advanced jazz performers seek to create “shared meaning” by coordinating various improvisational acts. A soloist offers an “ante-narrative or narrative” (Boje, 2001), that is responded to by his fellow players. Many times it does not click initially, and it may take several iterations before it does and the piece comes together and flows. The jazz performance captures the messiness and beauty of the process (Barrett, 1998). The way in which the narrating processes are conducted and reflected are crucial to whether or not intended changes are simply changes in surface content--in narrative themes--or are more radical changes in constructing shared meaning (Hosking & Haslam, 1997).

The jazz metaphor assumes that the foresight discourse is being considered in isolation, but competing discourses are typically present--whether directly related to foresight or unrelated issues that are competing for organizational attention. Additionally, powerful organizational interests that “warrant voice” may seek to preserve the status quo and impede the foresight discourse (Burr, 2003, p.137).

Figure 6 shows Phillips, Lawrence, & Hardy's (2004, p.641) Discursive model of institutionalization, which I adapted by adding in a step between actions and texts to highlight the importance of the dialogue signified as ante-narrative and narrative. Their key four steps suggest that actions generate texts that embed in discourses that in turn produce institutions.

**Figure 6. Discursive model of institutionalization**



Source: Adapted from Phillips, Lawrence & Hardy, 2004, p.641.

Each step involves an act of meaning making--an utterance is presented and responded to in dialogue, and later reflected upon if sufficiently interesting. The process begins with actions; for our purposes, when a foresight project is undertaken. It will generate ante-narratives, or stories that convey a sequence of events (Boje, 2001). These ante-narratives spread among the client and project team. If they are found of sufficient interest, they are cast into narratives by adding a plot to the story--an act of meaning-making. The important insights will be captured in texts, some directly from the project and others incorporating interpretations that recasts the output. These are shared with either the department or other internal groups. Assuming further interest, groups of texts will come together as a discourse on the topic. Through dialogue on the discourse, a shared sense of reality may emerge and thus may lead to institutionalization (Phillips, Lawrence & Hardy, 2004).

### 2.3.3 Challenges

At the broadest level, the challenge can be said to be the lack of an agreed-upon discourse for the institutionalization of foresight. As Phillips, Lawrence, & Hardy (2004, p.645) point out, "discourses that are more coherent and structured are more likely to produce institutions than those that are not." A review of the institutionalization of foresight activities by Becker (2002, pp.18-19) reveals that the challenges he cited ten years ago remain (Schwarz, 2005; Daheim & Eurz, 2006; Vecchiato & Roveda, 2010; Oner & Beser, 2011). For instance, he cited that corporate foresight:

- is too fragmented (few centralized departments and lots of lone hands) and too segmented (activities are too specialised and uncoordinated)
- is too often limited in scope (e.g., R&D-decision-making)
- is not integrated strongly enough in the corporate culture
- lacks internal and external networks, which creates inefficient re-work
- is at odds with shareholder value mentality that discounts long-term thinking.

There is some disagreement within the field about whether institutionalization is an appropriate goal. Figure 4 previously identified three dimensions along which futurists vary. The most polarized combinations are the applied-insider and normative-outsider. An applied-insider type, which best characterizes the organizational futurist role described in this work, is likely to argue for institutionalization as an appropriate goal. The normative-outsider type is more likely to argue for provoking the organization and staying out of politics, feeling that such participation will inevitably compromise futurists' views in order to fit in.

The argument for institutionalization suggests gains for learning and building on experiences. Dator (2009, p.3) suggests “the necessity of setting up some kind of an on-going 'futures' unit which can keep the future-oriented process going.” Voros (2003, p.12) adds the need for foresight to avoid “being a separate, special and merely ‘episodic’ occurrence which shines forth briefly and then vanishes without trace,” and make it a permanent part of organizational planning. Along those lines, Slaughter (2009, p.15) laments that few futurists appear to take seriously the need to build on foresight capabilities within an organization and “to devote time and attention to enabling structures and processes that would provide this work with continuity and security....” Finally, Rohrbeck & Gemünden (2011, p.233) also emphasize the need for integration into an organization’s process landscape and organizational structure to create an impact and add value.

### **2.3.4 Current status**

Several researchers support the view that institutionalization is struggling. Slaughter (2009, p.17) suggests that “integration of this work appears to be rare at every level.” Rohrbeck (2011, p.177) found that “even though I was able to identify various best practices in specific capability dimensions, none of the firms had implemented a comprehensive, stable and effective corporate foresight system.” Interestingly, it was earlier noted in Table 9 that Chermack (2006) reported success measuring a scenario intervention on six of seven constructs—“embedded systems” was the one that did not

return significant results. Where there has been success, it's been driven by an individual who knows how to "work the system" (Slaughter, 2009, p.16). Otherwise, implementation tends to be hit and miss, so that a foresight capability is not typically embedded in organizational processes.

This does not mean that foresight is not being applied in organizations. I introduced the notion of a "stealth positioning" of foresight to highlight the potential for avoiding any potential negative baggage with the term and/or the field by doing the work using language more palatable to the organization (Hines, 2000). Several years later, this stealth positioning continues (von der Gracht, Vennemann & Darkow, 2010). Graves (2007, p.122) noted that it may feel dangerous to engage in "foresightful practices," so that one strategy "is to go undercover--in other words, to introduce foresight by stealth."

Schwarz (2008) notes an increase in corporate foresight in Germany. Vecchiato & Roveda (2010) found that for those firms using foresight, some established autonomous and permanent foresight units while others embedded foresight within other departments.

There is also progress to be noted in many European Union initiatives regarding foresight (see for instance The European Foresight Platform <<http://www.foresight-platform.eu/>> and European Foresight <<http://forera.jrc.ec.europa.eu/>>). Georghiou et al. (2008, p.239) did find "a growing interest in technology foresight in the OECD member countries and were also able to cite 495 cases involving national technology foresight programs. These programs are both "distinguished from more general approaches of futures studies initiated by central government or agencies" (Georghiou et al., 2008, pp.xviii,3). This makes them different from the organizational futurist role covered here, where the individual typically crafts their own role and draws from full range of foresight capabilities.

A key contribution of Chapter 2 was the development of the Outcomes framework. It arguably fills the largest gap in the integration process by providing the basis for a dialogue around outcomes for clients. These dialogues have often been avoided. Other times, clients are barraged with confusing and sometimes contradictory notions of "success." Integration is an involved and time-consuming process that involves a patient process of back-and-forth and give-and-take between futurists and clients. Integration and institutionalization are constructed jointly—and there is much work to do on the futurist side in helping clients to understand not only what foresight is about, but how it

can help them improve their decision-making as they confront problems and challenges regarding the future. As Shotter (1993, p.39) observes: “as people coordinate their activity in with the activities of others, and respond to them in what they do, what they as individuals desire and what actually results in their exchanges are often two very different things. In short, joint action produces unintended and unpredictable outcomes.”

With this foundation in place, Chapter 3 explores the theoretical and practical implications and Chapter 4 concludes the work and lays out a research agenda to follow up on the questions and issues raised.

## **Chapter Three. Implications**

### **3.1 Theoretical implications**

The critical review of the published works identified two paths to foresight integration--positioning and credibility--upon which to focus new research and theorization. The Integration and Outcomes frameworks that emerged open up significant possibilities for new knowledge and thus frame the implications.

The Integration framework that emerged from the positioning path contextualized integration and the social constructionist perspective provided a guiding epistemology. It addresses questions such as: which activities typically happen before positioning and which after; what other stakeholders might be involved; and how do the activities and stakeholders relate?

The Outcomes framework emerging from the credibility path similarly provides a context to stimulate and guide dialogue about what success might mean in terms of foresight integration. This second path centred on how to improve the credibility of foresight by promoting quality foresight work. The literature search revealed a lack of consensus around what entailed “high-quality” work, which in turn related to a larger question of what successful foresight work is.

The theoretical and practical implications explored here form the basis for a research agenda in Chapter 4. To help make the linkages between the implications and the research agenda explicit, the connection of the implications to the eight research agenda items is noted in brackets.

#### **3.1.1 Theoretical implications from the activities of the Integration framework**

The Integration framework provides a contextual view of the integration process. Adopting a social constructionist approach offers promise by emphasizing a dialogue approach aimed at creating shared meaning across stakeholders, within the field and with clients, building on the ideas of Shotter (1993, p.9) to create a “multi-voiced conversation.” Indeed, Fuller & Loogma (2009, p.78) note that “foresight, as a concept and as practice, is a social construction.” The social constructionist approach also offers potential guidance for aiding the professionalization of the field and its clients (Fournier, 1991; Gold & Bratton, 2003). As Henshel (1981) observed, foresight is travelling down a path that other fields have traversed before it. The current wide range of views about



what to call it (Cornish, 1977; Horton, 1999; Becker, 2002; Schwarz, 2005; Amsteus, 2008; Rohrbeck, 2011), how to define it (Amsteus, 2008; Coates, 2010; Rohrbeck, 2011), how to bound and describe it (see Table 6) and how to talk about outcomes and success (see Figure 3), can be viewed as a natural, though not inevitable, stage in the social construction of the profession. The literature review revealed a significant opportunity for improving this dialogue by including more of the client perspective. This may require incentivizing practitioners to share their client experience and capturing the learning from the dialogues in texts, sharing those texts, and integrating them into an overall discourse about integrating foresight. But practitioners, struggling to make a living, arguably have an incentive to keep client dialogues private as a competitive advantage. They may see little gain in sharing with the field at present. Phillips, Lawrence, & Hardy (2004) suggest that sharing can be incentivized by making the case that a more coherent dialogue about foresight will help enlarge the pool of potential clients. [Item 1]

There is an opportunity for creating forums to host this sense- and meaning-making process that can build the discourse about what foresight is and what it offers. While the question has been occasionally addressed by the field, it has yet to catalyze toward consensus. There is no guarantee of consensus and attempts to enlarge the conversation could be perceived as a power play or insult or encroachment upon one's "defined turf" (Schein, 2010, p.96). These challenges suggest a need for research to identify potential approaches for engaging the field and its stakeholders in this dialogue. [Item 1]

The Integration framework suggests that the process iterates between the individual, organization, and firm levels. It suggests that insights at the individual level aggregate to the firm level and then the field level. But that is an assumption that remains to be tested. Further study of the Integration process would also benefit from bringing in the client perspective. [Items 3, 7]

Publicizing is first in the Integration framework because clients have to find out about foresight before they can introduce it. But it is situated at the end of the research agenda in Chapter 4. The reasoning is that the field would benefit from clarifying its discourses before appealing to potential clients and the public. This position is not meant to suggest that publicizing efforts stop, but that it might be more useful to invest time and resources in building the discourse first. Jumping into a public relations campaign, for example, without addressing foundational theoretical questions, could

reinforce the current confusion among clients and the public about foresight and drive them elsewhere for answers, as observed earlier by Gavigan & Scapolo (1999). [Items 1, 6]

A place to start was raised by Coates, Mahaffie & Hines (1994) in mapping the landscape of science and technology foresight and looking for patterns among industries or sectors. It did not identify whether particular sectors or fields had used foresight to a greater extent than others. To do this properly would require gathering input from individual futurists and firms and sharing them with the field. Researching and discussing these questions among the foresight field could lead to adjustments in the publicizing and introducing dialogue and activities of the integration process. Case studies could be an effective mechanism to broaden insights into the patterns that govern foresight adoption, rejection, or ignorance. [Item 4]

More effective publicizing enhances the prospects for introducing. The Outcomes framework may have a role to play here as well. Clients are unsure of what to expect from foresight, thus the Outcomes framework provides a means to have a more informed dialogue on outcomes. It provides a starting point to address concerns from clients on what they will get from introducing foresight. Failure to do so makes it less likely to overcome client tendencies to being timid about risk (Kahneman & Lovallo, 1993). The framework provides a mechanism around which to base the conversation 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). [Items 3, 4, 7]

Positioning activities, central to my previous published work, are likely to be more effective by drawing upon the expanded view of the context of integration. There is an opportunity to be more deliberate and strategic in plotting these activities with a greater awareness of how they fit within the larger context. One troubling aspect of the previous work is that it was highly experimental, often relying on my intuition to decide what to try next, which sometimes worked out favourably, but sometimes didn't. Weick (1987) observed that organizations are uncomfortable with trial and error, lest the error propagate through the organization. An important benefit of the current work would be to reduce the riskiness of trial-and-error approaches by taking a more grounded and systematic approach with the Integration framework as context. [Items 1, 7]

The last component of the Integration framework, institutionalizing, similarly appears to benefit from a bottom-up, gradually-spreading dialogue approach that builds shared meaning along the way. As Phillips, Lawrence, & Hardy, (2004, p.646) argue, “the likelihood a discourse will produce powerful institutions will depend on the degree to which the discourse is structured and coherent....” [Items 1, 3]

As with publicizing, institutionalization is further down the road in terms of prioritizing for research. Phillips, Lawrence, & Hardy’s (2004) Discursive model of institutionalization offers a process guide for the organizational futurist. It suggests the importance of developing dialogues with clients that will test ideas, concepts, and approaches in an iterative fashion that will lead to an on-going refinement of the sense that the organizations makes from foresight. It remains to be tested in terms of how it applies to the integration of foresight. But Lawrence, Winn, & Jennings (2001) caution that this dialogue process involves deviating from the existing order and creating risk for clients. Thus, the futurist community needs to advance its understanding of itself and offer a more coherent dialogue for clients to respond to and lessening their risk in participating. [Items 3, 4, 7]

Finally, the Integration framework provided the context for an opportunity for improving the prospects or foresight integration by further development of the field. Professionalization can provide a forum for engaging the many questions relating to the building the texts, narratives, and discourses of foresight. This field-level activity can benefit the firms and practitioners as they engage with clients, and provide the feedback loops that continually build understanding and effectiveness. [Items 1, 2, 5, 6]

### **3.1.2 Theoretical implications from the Outcomes framework**

The Outcomes framework may be more difficult to gain consensus around than the Integration framework. Fewer claims have been made in the literature around integration. Table A3 identified forty sources addressing notions of successful outcomes, but my research identified just three efforts to model the process of foresight integration (Voros, 2003; Hayward, 2004; Keller, 2007). Thus, gaining consensus around and outcomes framework may require more give-and-take or unlearning and relearning (Hedberg, 1981). [Items 1, 7]

The three primary components of the Outcomes framework--stakeholders, targets, and measures--are analysed for their implications.

Stakeholders are organized into futurist and client sides. For futurists, the Outcomes framework seeks to provide a framework under which differing views of success can coalesce or at least peacefully co-exist. It is intended that a focus on influencing the decision-making process can provide a broad enough frame under which futurists with different purposes can feel comfortable. [Item 1]

The opportunity for including clients in the dialogue has been noted as well. In light of the different types of futurists, there is an opportunity for being clear with clients on identifying which type of futurist one is getting. This could be part of a project to develop a professional code of ethics for foresight. [Items 3, 5]

On the client side, the challenge is stimulating multiple dialogues. 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 the 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. [Items 3, 7]

The timeframe issues are perhaps less urgent, but nonetheless still involve significant issues and differences among practitioner as well as clients. Brier (2005) documented several conflicting definitions of what constitutes short, medium, or long term, concluding that "there is, so far, as I know, no generally accepted standard of time for futures researchers when they refer to the future." He also noted some disagreement on the "proper" timeframe, citing 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." Further complicating the issue is that clients tend to "discount the future" as timeframes extend (Linstone, 1973). The goal here would be seek agreement on a range of years or principles for what constitutes the short-, medium-, and long-term, and simply to gain willingness to agree-to-disagree and acknowledge different views about which is the "proper" focus rather than trying to resolve it one way or another. [Item 1]

The important point is not to drive toward consensus on a single definition of success, but rather provide a framework that organizes outcomes in a coherent manner. It could be helpful to think of layers of success. The top layer seeks consensus that the decision-making process is proper focus for considering success—in other words, how successful has foresight been in influencing the decision-making process. The next layer involves three aspects of decision-making: learning, deciding, and acting. The analysis in Chapter 2 suggested that these aspects indeed range broadly enough to encompass the various views of success identified in the literature search. The next layer involves the specific attributes of each of these three aspects: learning, deciding, and acting. There is an opportunity to refine these attributes with subsequent research. [Items 1, 7]

The question of measures follows the above. Gaining consensus around success in turn influences the required types of measures. There are emerging candidate measures that can be built upon, modified, and adapted as the outcomes dialogue unfolds. [Items 1, 7]

Perhaps the most important overall theoretical implication of the outcomes question is that the Outcomes framework provides a starting point for the dialogue and meaning-making. Dialogue about it will likely lead to revisions, tweaks, and improvements. If such a discussion can build a discourse among futurists, it will bring a greater clarity to the dialogue with clients. [Item 1]

### **3.2 Practical implications**

The strong focus on the individual organizational futurist in integrating foresight following the positioning and credibility paths outlined in the synthesis makes sense given the relative immaturity of the field. Steps in building the field toward a profession could benefit futurists and clients, and their firms, in a way that creates reinforcing feedback loops. One might argue that the problem has been an inability to achieve “critical mass” to ignite the process. Or to use Gergen’s (1995, p.37) term, it has often been responded to as “nonsense.” [Items 1, 3]

The practical implications are organized by the three research questions around publicizing/introducing, evaluating outcomes, and institutionalizing. An important insight is that some cases the research literature seemed to be ahead of developments in practice. In these cases, it was necessary to “back up” to where developments had not yet gained shared meaning between futurists and clients in order and start the analysis

there. For instance, it is noted that it is somewhat premature to talk about institutionalization when the publicizing/introducing and outcomes question are still being negotiated.

### **3.2.1 Practical implications of “introducing”**

The literature review did not find best practices for introducing foresight. The Integration framework was created to begin filling the gap by providing a conceptual map of the integration process. For futurists, the explanation of integration could become more consistent, so that multiple futurists aren't each explaining it differently and thus confusing clients. For clients it provides a framework around which to devise their integration plans. The Integration framework also revealed that a publicizing step precedes introducing, which suggests an opportunity for a contribution from the field about raising the profile of foresight, so that more introducing opportunities could become available. [Item 6]

The Integration framework also revealed that introducing is driven by dialogue with clients that are captured in narratives and texts as part of developing a discourse that works toward shared meaning. It suggests that organizational futurists be prepared for an iterative, on-going dialogue taking place in a disorderly, unaccountable, chaotic fashion--the edge of chaos or “to-and-fro'ing” (Shotter, 1993). It cautions patience and an open-minded perspective that is willing to actively listen to client needs and make adjustments, which can be challenging for normative futurists who may have strong views about what is right for the clients (Kahane, 2004), and thus suggests an approach informed by epistemological pluralism.

The Integration framework suggests a sequential flow to the activities, such that it is difficult to tackle a new activity in the framework if a previous one has not been adequately addressed--as noted in the above paragraph--and “shared meaning” has not been attained. [Item 7]

Section 3.3.1 suggested a need for various field-building activities: naming, defining, and bounding the field, to which evaluating outcomes can be added from Section 2.2. In terms of naming, defining and bounding the field, an ecosystem approach is suggested that defines what is core to foresight and what is shared with other fields. It is worth noting that while the field's multi-disciplinarity is a strength in terms of the range of perspectives it can draw upon, it is a weakness in terms of clarifying its unique contribution. It may be possible through further research to build a visual, graphic, and

dynamic depiction of the field and all its activities and relationships that can be used as a dialogue-starter. [Item 1]

The challenge of incentivizing field- and profession-building, noted earlier, may be approached from multiple vantage points. While this work seeks to build the theoretical argument for its necessity, it may also be approached from the more practical vantage point of assessing expectations about the field from practitioners and clients. It may be that the incentives are less elusive than anticipated. It may be useful to explore as well the possibility organizational and consulting futurists could be seen at cross-purposes or that the current prevalence of consulting futurists (see page 2) could lead to a view that organizational futurists are akin to second-class futurists having less status. [Item 5]

It is anticipated that the field will involve a move toward professionalization, but it is also possible to develop a complementary focus on the field's academic base. While some promising developments are underway, clearly there is much work ahead (Wheelright, 2001). There are only 16 graduate degree programs in foresight globally (Ramos, 2002; Acceleration Studies Foundation, 2011). There may be greater opportunities to reinforce cooperation between academics and practitioners, as well as clients; for instance, a gathering of academic programs could initiate a best practices research project. [Item 5]

Finally, the Organizational Futurist Audit instrument, a key deliverable from the synthesis work originally developed in 2003, could be updated to incorporate the learning from the research done for this work (Hines, 2003a). [Item 8]

### **3.2.2 Practical implications of “evaluating outcomes”**

Evaluating outcomes provides a rich area of focus for enhancing integration. That said, it would be greatly aided by--and to a degree dependent on--other questions around the field being addressed first: naming, defining, and bounding. Systems effects suggest that making progress with outcomes would have beneficial impacts on introducing and institutionalizing. Nonetheless, work in this area can proceed independently and could provide support for futurists in persuading clients of the value of foresight work. [Items 1, 4, 7]

My analysis occasionally got too far ahead of developments. For instance, an early draft of research questions suggested developing a success “scorecard,” which presumed a degree of consensus around what success is that is clearly not here yet. But identifying this gap led to the contribution of the Outcomes framework. [Item 7]

The most promising development around measuring outcomes, Grim's (2009) Foresight Maturity Model, focused the outcomes question on the futurist side. It measures how well futurists are doing in relation to proposed best practices in doing foresight work. A practical next step to build on this framework is to expand the focus to other activities on the Integration framework and to look for ways to include more of the client perspective. [Item 1, 3, 7]

An interesting research question would be to explore whether a top-down approach--focusing first on overall goals and then working out details--or a bottom-up approach works better. [7]

An obvious practical step in understanding integration is to do research with organizations that have tried it. What worked, what didn't, and why? [Item 4, 7]

Current efforts to evaluate foresight work noted in the credibility path and by others (Popper et al., 2010) are largely piecemeal, suggesting an opportunity for a field-level initiative to coordinate these activities on a larger scale. It may be possible to promote a similar initiative to assess the viability of the several measurement instruments that have emerged, and their perceived contribution. It may be possible to integrate these measures into an overall assessment instrument. But this focus on evaluating foresight work is best viewed as a means for contribution to the dialogue with clients for creating a shared understanding of success. [Items, 1, 4, 7]

### **3.2.3 Practical implications of “institutionalizing”**

This research question produces fewer actionable implications owing to it being the least developed of the three. Being at the “end” of the integration processes, it is dependent on earlier activities in the process. Success in institutionalizing is dependent on success in introducing and evaluating outcomes. The social constructionist approach provides a perspective that can guide the institutionalizing question. A model of typical steps and their process flow in institutionalization was suggested by Hypothetical chain (Figure 5) and the Discursive model (Figure 6), which provides the organizational futurist with frameworks around which to craft an institutionalization strategy. [Items 1, 4, 7]

A social constructionist perspective also suggests that the question of whether institutionalization is a “proper” goal should emerge from discussion and negotiation



among futurists and with clients. This work suggests that institutionalizing is a proper goal, but recognizes that it is not a binary question—“for” and “against”—but depends on the context (Hines, 2002b; Hines & Bishop, 2007). There may be cases where external provocation that challenges the existing order is more appropriate (Inayatullah, 2000). To inform this discussion about institutionalization, a research project could compare the social constructionist approach proposed in this work with cases where foresight is institutionalized when it is introduced--i.e. by CEO mandate, or a “skunk works” approach where the capability is explicitly removed from organizational politics. [Items 1, 4, 7]

The Outcomes framework could be used to evaluate and track projects/efforts on an institutionalization path, perhaps comparing outcomes with organizations adopting a provocateur path. [Items 4, 7]

Another implication emerging from the research on outcomes and success was to reconsider the “stealth” positioning that I had advocated (in certain circumstances) in the synthesis and more recently and expanded on with some new ideas (Hines, 2000, 2011a, 2011b). The long-term viability of stealth should be questioned, and it may be that a goal for the field is to make “stealth” unnecessary. While it may facilitate getting foresight introduced, it may do a disservice to crafting a discourse around it. If integration is to succeed, the stealth eventually has to be unmasked. Stealth may be guilty of creating the confusion about what foresight is, which was identified as a key challenge in Section 2.1. [Item 7]

A more directly practical implication was the identification of specific frameworks for positioning foresight in the organization from my earlier work (Hines, 2000; Becker, Daheim & Eurz, 2006) that could be evaluated and built upon. [Items 4, 8]

These implications naturally come together in the form of a proposed agenda for future research, in a way that combines the big theoretical questions with the more “hands-on” practical ones. It was often difficult to separate the theoretical and practical, which may be viewed as a positive, as it suggests the potential for stronger links between theory and practice.

## Chapter Four. Conclusion

The published works began with a fundamental question on why integrating foresight into organizations has proven so difficult and this work went on to explore ways in which an organizational futurist might help. The synthesis of the published works represented an exploratory research approach to investigate the feasibility of an organizational futurist role, based to a large extent on my direct experience in crafting such a role. This exploratory work relied on an action research approach that was light on theory and conceptualization. This thesis addresses this gap. It began with a critical review of the published works to identify new research questions. A thorough review of the foresight literature supplemented by reviews of literature in topics such as social constructionism, narrative theory, discourse analysis, institutional theory, organizational learning theory, business and management research assisted the conceptualization.

The research questions inspired five principal contributions to knowledge.

*Guiding Research Question: What is the role of an Organizational Futurist in integrating foresight into organizations?* [refers to contributions 1 and 2 below]

1. The development of the Integration framework for mapping the process and roles involved in foresight integration.

The Integration framework describes six activities involved in the foresight integration process, operating across the levels of individual futurists, futurist firms, and the foresight field as well across the client side. It fills a gap in the foresight field, which has not focused sufficient attention on how the integration process unfolds within organizations. This lack of attention likely reflects the prevalence of consulting futurists who typically work with several organizations rather than focusing on an individual organization over a long period of time. This work suggests a framework for contextualizing the integration process that in turn provides an orientation for the organizational futurist role.

The intent was not to identify a definitive path that characterized every attempt at integration. It would be over-reaching, perhaps, even to suggest it was typical. Rather the intent was to provide a starting point to enable a dialogue about integration, acknowledging the crucial rule of the social construction process of integration unique to

each organization. The Integration framework provides context for exploring the integration process.

The analysis revealed that the published works account of the organizational futurist role focused heavily on positioning in the middle of the integration process. This suggested an expanded range of possibilities for thinking more broadly about before and after.

2. Makes a case that the organizational futurist adopts a social constructionist perspective to guide the process of foresight integration.

A social constructionist perspective, informed by an epistemological pluralist approach, provides an opportunity to meet organizational clients “where they are.” It focuses attention on the need for greater dialogue with clients and among the field. Fuller & Loogma (2009, p.77) note that “a central tenet of social constructionism is that without participation between people in making meaning (or sensemaking) no meaning exists. The proposed organizational futurist role emphasizes an insider approach (see Figure 4), recognizing that other approaches, such as the provocateur are viable and useful as well, but not appropriate to this one. The key rationale is that the socially constructed nature of meaning-making in the organization (and for that matter of the future itself) involves a high degree of dialogue and relating that is difficult to effectively participate in from outside the organization (i.e., in a consulting futurist role). The organizational futurist benefits from being “closer” to the inner workings of organization. As Cunliffe (2011, pp.653-654), suggests “knowledge is ephemeral, indeterminate, embedded, and reflexive, thus one must be present with it.” Gergen (1985, p.267) notes that “the process of understanding is not automatically driven by the forces of nature, but is the result of an active, cooperative enterprise of persons in relationship.” And Shotter (1999, p.371) adds that...”our actions are, to an extent, responsively shaped by what occurs around us.” These quotes illustrate how dialogue, rhetoric and argumentation are central to this meaning-making process, and the need for participation is vital. The process is elaborated more specifically in contribution #5 below.

The organizational futurist is likely to benefit from an approach informed by epistemological pluralism. This assumes greater attention to epistemological issues, as some futurists have pointed out (Mermet, Fuller, & van der Helm, 2009; Miller & Poli, 2010; Oner, 2010; Tiberius, 2011). The organizational futurist is likely to confront a plurality of epistemologies. This suggests an approach that is open to dealing with this

plurality. This informs and builds on the published works initial suggestion of a need for political skills. It is not meant to suggest that all futurists must take this approach, but rather that is of great value to the organizational futurist role as outlined.

The integration of foresight can be viewed as a socially constructed process involving the six activities of the Integration framework. The next three contributions derive from relating the organizational futurist role to this socially constructed process along the Integration framework, linked to the three supporting research questions.

*Research question one. To what extent do developments in the foresight field influence the role of the organizational futurist in integrating foresight into organizations?*

3. Makes a case that the development of the foresight field toward professionalization could be an important influence for aiding the organizational futurist role.

The first research question focused on how foresight is publicized and introduced to organizations. The analysis suggests that the prospects for the organizational futurist role are to a significant degree dependent on the field level: how well the field publicizes itself and persuades clients to adopt foresight. Key issues for the field are identified as well as an analysis of the state of professionalization. Several criteria are combined to assess professionalization and provide a view on where it currently stands. In addition, the social constructionist approach could be applied to field building. Dialogue among practitioners and with clients about the field/profession could help bring the two together to a much greater extent. The field itself has not sufficiently developed its own discourse about foresight, nor has it adequately involved its prospective or actual clients. There is not yet a clear or compelling case on why organizations should adopt and integrate foresight. It also suggests the organizational futurists could benefit from participating in field- and profession-building.

*Research question two: What are the ways in which organizational futurists can be effective in bringing about successful outcomes?*

4. The development of an Outcomes framework provides a useful mechanism for the organizational futurist to stimulate a dialogue and discourse about successful outcomes for the integration of foresight.

The second research question led to a framework for evaluating foresight outcomes and discussing the question of what success in foresight integration might look like. It addresses a challenging issue for the organizational futurist in providing a means to stimulate a dialogue about expectations for success. It proposes an emphasis on influencing decision-making processes, based on three components of influencing learning, the decisions themselves, and actions based on those decisions. The framework links six principal activities of foresight work (Hines & Bishop, 2007) to the three components of the decision-making process, thus demonstrating specific potential avenues for how foresight work can contribute. The Outcomes framework is intended to stimulate conversations within organizations, providing a mechanism to have a discussion about success.

*Research question 3. To what extent can foresight knowledge and understanding become institutionalized in organizations?*

5. Makes a case that the organization futurist adopts a discursive approach to institutionalization that builds from the periphery to the core of the organization.

The third research question explored the potential contribution of institutional theory to the integration process. Exploring this question led to introducing contributions from several other bodies of knowledge, including social constructionism (Shotter, 1993), discourse analysis (Phillips et al., 2004; Taylor & Van Every, 2000), communities of practice (Lave & Wenger, 1991), narrative theory (Boje, 2001), organizational learning (Barrett, 1998), relational constructionism (Hosking & Haslam, 1997) and Vygotsky's notion of scaffolding (van der Heijden, 2002). While the relative immaturity of foresight integration suggests it might be a bit premature to talk about institutionalization, given the need to address many others issues involved in the integration process, it nonetheless provides a basis to further discuss and explore the question. It identified a Discursive model of institutionalization (Figure 6) to characterize the process for how ideas, concepts, or capabilities, such as foresight, typically emerge from the fringe of the organization and work their way toward the mainstream. It suggests the burden is on the organizational futurist to make the case for foresight--since it challenges existing routines and interests, it is likely to face resistance. A Hypothetical chain of integration (Figure 5) suggests what the process typically looks like, again offering a basis for discussion rather than a rigorous solution for what the process must look like. It suggests a scaffolding approach to integration that leads to new ways of understand

that progressively build the case for integration. Meaning emerges in the interaction and struggle of back-and-forth conversation between people (Bakhtin, 1986). If agreement isn't reached at any stage, foresight integration can stall. Thus, it is not suggest that this is a linear process of simple to greater complexity, but a highly iterative socially constructed process--one that moves from text to narrative to discourse to meaning-making and back again.

The implications from Chapter 3 included several specific recommendations to promote the integration of foresight. Items 1-6 are envisioned as sequential, as each builds upon its predecessor. Items 7 and 8 could proceed on a parallel path.

#### **4.1 Research agenda**

1. Design a "Building the Profession" project to identify potential approaches for naming, defining, and bounding the field and evaluating outcomes. The APF is a logical initiator and convener for 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. Perhaps the most difficult of the issues in terms of approach is bounding. One recommendation is to borrow from Gold, Rodgers & Smith's (2003) "field of competence" and Prahalad & Hamel's (1990) core competencies ideas and do a core competence activity. The goal would be to map out a foresight "ecosystem" that would help clarify which approaches and tools are unique to futurists and which are best shared with like-minded groups--and explore the resulting relationships between approaches, tools, and groups.

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 issues around integrating foresight, including the questions identified here, could be initiated.

3. Explore ways to increase the incorporation of client perspective. This too could be part of #1 but also has a home in foresight's academic programs. One specific project would be to refine existing "responsiveness" instruments: Foresight Styles Assessment

(Dian, 2009); Leadership Development Profile (Cook-Greuter, 2005); Strategic Orientation (Miles & Snow, 1978); Rohrbeck's Maturity Model (2011); or to draw upon them to develop a new one. The results could also be incorporated into an updated Organizational Futurist Audit (Hines, 2003a) as part of Item #8.

4. Assess the state of foresight in general and organizational foresight in particular.

Timing-wise, this project makes sense after the first three. It may be beneficial to first clarify the field issues, and then explore its current status. An important component, or perhaps a separate project, would be to look for patterns in industry adoption. Another important component, which could also be a separate project, would be to focus specifically on the status of integration of foresight into organizations. A case study approach makes sense here.

5. Incorporate client and public input on professionalization. Table 4 provided a view of how futurists see the state of professionalization. The social constructionist perspective suggests two important missing inputs: the perspectives of clients and the public.

6. Design potential approaches for a public relations campaign to promote awareness of foresight. A public relations campaign could be designed to raise awareness of foresight capabilities with the goal of stimulating dialogues with potential clients. But how to go about it? What have other fields done? What particular points might be most useful to promote? A useful first step would be to gather data around the current degree of awareness of foresight in organizations and the public-at-large, which could build off of Item #4.

7. Test the Integration and Outcomes frameworks with futurists and clients. This project would gather input from experienced and new clients for their input on the Integration and Outcomes frameworks. Has integration proceeded along the proposed framework in their experience? Does the Outcomes framework provide a useful guide for discussing success? In what cases is institutionalization a proper goal for organizational futurists--or not?

8. Revise and update the organizational futurist audit. Revisit the ten questions in the original audit (Hines, 2003a) in light of the learning from this work, as well as from this research agenda.

## Appendix

Table A1. Summary of published works

Papers	Methodologies	Key issues explored	Contribution to understanding	Questions raised
<i>Path One: Positioning for a more client-centred approach</i>				
1. (1999) with Louise Trudeau. Futurists on the “inside:” the state of practice of organizational futurists. <b>Futures Research Quarterly</b> , 15 (4), Winter, pp.49-62.	Content analysis used to report and analyse results from a one-day Organizational Futurists Workshop at World Future Society Professional Members Forum designed and facilitated by the author. Twenty-seven participants shared experiences and mini-case studies around several categories and questions relevant to the organizational futurist role.	Focuses on more effective positioning of foresight activity with an emphasis on understanding client receptivity. Suggests a shift in organizational futurist roles from traditional planning functions to new areas such as market research and new product and business development.	New organizational roles suggest a need to reassess the skills, approaches, and methods for doing this type of foresight work.	A formidable list of identified challenges suggests there are issues with how well foresight is being practiced. This in turn raises the question of what success looks like.
2. (2001) with Kerry Kelly & Scott Noesen. Viral Futures at Dow. <b>Futures Research Quarterly</b> , Fall, pp.59-66.	Case study of authors’ organizational experience in integrating foresight, derived from interviews as well as authors’ direct ethnographic experience, with the analysis providing an evaluation and lessons learned.	Reviews the recent history and experience of the author’s organization in integrating foresight, noting the reliance on a few key champions in promoting it and exploring the process of how it spreads through the organization.	Identifies one path to the integration of foresight. Suggests the crucial importance of participating and stimulating dialogue, crafting narratives, and building a discourse around foresight as a means to promote and integrate it into the organization.	Is there a typical path or process to integrating foresight? Is there some guidance in terms of identifying and enlisting champions and change agents for foresight?
3. (2002) A practitioner’s view of the future of futures studies. <b>Futures</b> , 34 (3-4), pp.337-347.	Issue identification and analysis from the practitioner point-of-view for the future of the field, drawing on author’s ethnographic experience, discussions with colleagues and a literature review.	Explicitly calls for more effective integration of foresight into organizations and challenges futurists to focus more on client needs, rethink methodology, and reconsider the development of the profession as a whole.	Makes the case for a long-term confluence of organizational needs with the offerings of futurists, provided they can meet several challenges identified at the field and practitioner level, including methodological development.	Identifies the possibility of gaining useful insight by exploring the individual and industry levels and perspectives to supplement the existing focus on the organizational level. Challenges raised in the call to arms have not yet been met. Why?



<p>4. (2003a) An audit for organizational futurists: ten questions every organizational futurist should be able to answer. <b>foresight</b>, 5 (1), pp.20-33.</p>	<p>Ethnographic approach leading to issue identification and analysis around the organizational futurist role led to the creation of a diagnostic instrument; issues and insights from the author's experience were reported on in "a regular column on business futures" in the journal <b>foresight</b> and provided the basis for the audit.</p>	<p>Formally proposes an "organizational futurist<sup>vii</sup>" role, a futurist who works exclusively for one organization, as a means for more effective integration. Proposes a diagnostic audit that identifies and explores 10 key issues facing organizational futurists as they position foresight within organizations.</p>	<p>The audit's ten questions provide a mechanism for individuals or teams to consider when positioning foresight within an organization. It can also be used as an evaluation tool for assessing the health of an existing foresight function.</p>	<p>The audit that assumes foresight is being introduced, but leaves open the question of how and why the introduction process occurs. The audit does not suggest what success looks like.</p>
<p>5. (2007) with Peter Bishop. Chapter 6. Acting in: <b>Thinking about the future: guidelines for strategic foresight</b>. Washington, DC, Social Technologies, pp.191-229.</p>	<p>Questionnaires from three-dozen contributors from around the world (&gt;50% outside the US) captured their best practice guidelines for strategic foresight; insights from the questionnaires were prioritized, collated, and edited into a common voice and format; gaps in the framework were filled by the author.</p>	<p>Focuses sharply on guidelines for improving the effectiveness of getting futures acted upon, as well as emphasizing ways to institutionalization as a means for achieving integration into organizations.</p>	<p>Provides specific guidance for consulting and organizational futurists, as well as clients, on how to improve prospects integrating foresight.</p>	<p>Is institutionalization necessarily the appropriate goal? Or is a skunk works approach that sets foresight outside the mainstream potentially more effective? These questions then get back to "what is success? Is success fitting into the mainstream or transforming the organization?"</p>
<p><b><i>Path Two: Enhancing credibility by promoting the field and identifying and promoting high-quality work</i></b></p>				
<p>6. (1994) with Joseph Coates &amp; John Mahaffie. Technological forecasting: 1970-1993. <b>Technological Forecasting &amp; Social Change</b>, 47 (1), pp.23-33.</p>	<p>Evaluation--using a analysis template developed for the project--of more than 1,500 science and technology forecasts done from 1970 to 1993 organized into 54 scientific and technological areas. The templates were then analysed for</p>	<p>A comprehensive exploration and assessment of the state of technological forecasting that reports lessons learned from a three-year consulting project that resulted in the book <i>2025</i>.<sup>vii</sup></p>	<p>Captures a shift in the field away from more traditional quantitative approaches to technological forecasting to more qualitative ones, in particular the use of scenario planning. Observed that different industries have different levels of</p>	<p>Many of the identified issues still exist today. Why do some industries use foresight while others don't? It also raises the question of how do industries become aware of foresight and decide to try it. And do those industries using technology forecasting or foresight do any better than those who</p>

<sup>vii</sup> Joe Coates, John Mahaffie & Andy Hines, *2025: Scenarios of US and Global Society Reshaped by Science and Technology* (Akron: Oak Hill, 1997).

	lessons about technology forecasting and sharing those with the field.		interest and performance regarding foresight.	do not? Reinforces the need for a multi-layer or -level framework that looks at both practitioners and clients, and their interactions.
7. (2003b) The futures of futures: a scenario salon. <b>foresight</b> , 5 (4), pp.28-35.	Scenario planning project designed and led by the author for the Association of Professional Futurists, drawing on research and more than three dozen interviews and using a variation of the 2x2 uncertainty matrix approach, and identifying implications of the scenarios and identifying potential strategic responses for the association.	Focal issue of the project is what the future of the field and the role of the professional futurist might look like in the next 20 years. It identifies issues very similar to those in author's experience-- around market demand, futurists' approaches and tools and how they fit, as well as exploring issues in the development of the field and profession.	Provides a degree of consensus among professional futurists around some key issues identified by the author as being important to the field and profession.	Raises questions about the viability of the field going forward unless futurists adjusted and enhanced their approaches and methodologies, as well as potential benefits from greater cooperation among futurists.
8. (2004) The history and development of the Association of Professional Futurists. In: Slaughter, R. <b>The Knowledge Base of Futures Studies, Professional Edition.</b> Indooroopilly, AU, Foresight International.	Descriptive historical account and analysis of the formation and early history of the Association of Professional Futurists.	Reveals the still-nascent state of foresight and that it is on the path to professional status, but not there yet, and identifies some key challenges ahead on that path.	Provides support for the notion that the foresight field is still under-developed and suggests issues in further developing it	Can the field address issues it will confront if it is able to develop and mature?
9. (2007) with Peter Bishop & Terry Collins. The current state of scenario development:	Literature review and creation of a framework to identify, categorize, and analyse 26 scenario techniques, comparing their strengths and	Provides a comprehensive review and assessment of the popular scenario planning method.	Finds that the greater use of scenario planning is representative of a larger shift from quantitative to qualitative tools.	It is not clear how effective scenario planning has been. This shift can be linked to more qualitative methods is linked to the larger credibility question, i.e.,

<p>an overview of techniques. <b>foresight</b>, 9 (1), pp.5-25.</p>	<p>weaknesses.</p>	<p>Identified more than two dozen techniques sorting into eight general categories that are or could be used, with a key conclusion that scenario planning is in danger of becoming "stale."</p>	<p>has the greater reliance on qualitative tools further harmed the prospects for improving the credibility of futures?</p>
<p>10. (2009) How accurate are your forecasts? more accurate than you might think. <b>World Future Review</b>, 1 (5), October/November, pp.5-22.</p>	<p>Critical evaluation of 107 of the forecasts made in the authors' 1997 book <i>2025: Scenarios of US &amp; Global Society as Reshaped by Science &amp; Technology</i>. Compares the author's own evaluations with those of organizational colleagues and professional colleagues with the APF and identified lessons learned.</p>	<p>Suggests a key reason for ineffective responses is a lack of scholarship that evaluates the effectiveness of forecasting in particular and foresight in general. Evaluated 107 forecasts for accuracy and identified patterns in forecasting and areas to improve.</p>	<p>Describes ways to reposition the accuracy question. Finds a reasonably high degree of accuracy; the work provided support for responding to accuracy question. Identifies questions around what accuracy is, how is it measured, how useful is it, etc. Raises the possibility of developing more rigorous mechanisms for evaluation or the possibility of using third-party evaluation of forecasts.</p>

**Table A2. Initial prioritized questions along the Integration framework**

<b>Cluster</b>	<b>Description</b>
<p><u>1. Publicizing.</u> The role of foresight field in supporting the integration of foresight</p>	<p><i>Overall demand for futures</i></p> <ol style="list-style-type: none"> <li>1. How much foresight work is available? Is there really there “lots more foresight work available than there are futurists to do it? How many qualified futurists are there?</li> <li>2. Would deeper theoretical and foundational work coming from universities help build the credibility of foresight internally?</li> </ol> <p><i>Changes in client base</i></p> <ol style="list-style-type: none"> <li>3. What about an analysis of which business sectors are paying attention to the future, and which are not?</li> <li>4. Can we verify the cyclical nature of interest in foresight? Is there a way to track interest in the future over time? Did interest surge with the millennium and then recede?</li> </ol> <p><i>Organization/client culture readiness</i></p> <ol style="list-style-type: none"> <li>5. What is the role of organizational values and culture in relation to “receptivity” to foresight?</li> </ol>
<p><u>2. Introducing.</u> Explores how client industries and firms become aware of and adopt foresight and the role of futurists in the process</p>	<p><i>Leverage points</i></p> <ol style="list-style-type: none"> <li>6. What are the mechanisms by which foresight gets introduced into organizations?</li> <li>7. What is the best way to attract “newbies” to foresight? Aim at individuals, organizations, industries? All of the above?</li> </ol> <p><i>Role or value of history/case studies</i></p> <ol style="list-style-type: none"> <li>8. Should experts be brought in more frequently to critique the work of futurists (and vice versa)?</li> <li>9. Can foresight use its own case histories to make its case, e.g., here’s how futurists in the past have dealt with a comparable situation?</li> <li>10. How useful would it be to point out where foresight advice was ignored and turned out to be right?</li> </ol>
<p><u>3. Doing the work.</u> How consulting futurist(s), often with participation of direct client/organizational futurist do the foresight work.</p>	<p><i>Practitioner attributes</i></p> <ol style="list-style-type: none"> <li>11. Is the field better served by a personality-led quirky guru boutique approach or a “lunch pail” anonymous approach?</li> <li>12. To what extent should the insider embody the program?</li> </ol> <p><i>Frameworks</i></p> <ol style="list-style-type: none"> <li>13. Have organizational futurists spent too much time at the organization level, thereby neglecting the opportunity to focus more on the individual level?</li> <li>14. Should foresight follow standard project management practices, such as milestones, or will this water down the impact?</li> <li>15. Does the layered/depth approach adequately address the orientation question?</li> </ol> <p><i>Tool kit</i></p> <ol style="list-style-type: none"> <li>16. Does it help internal clients to understand how the tools work, or</li> </ol>

	<p>is it better to just focus on the results and keep it a black box?</p> <p><i>Quantitative versus qualitative</i></p> <p>17. Should futurists “translate” a qualitative message into quantitative terms? Does this compromise the work?</p>
<p><u>4. Evaluating success.</u> How do all the actors decide what success is</p>	<p><i>Measuring success</i></p> <p>18. How is success in foresight defined? What does it look like?</p> <p>19. Do organizations that use foresight perform better? Do the industries and firms that do rigorous forecasting perform any better than those without?</p> <p>20. Is it possible to develop some form of foresight scorecard--measure the futurist or measure how well the organization responds to the futurist (or both)?</p> <p>21. Which is the goal of foresight--is it transformation or just solid professional contribution?</p> <p>22. How do futurists best answer the “contribution to the bottom line” question?</p> <p>23. Is success in doing the good work (in futurists control) or in getting it acted on (not in futurist’s control)?</p> <p>24. How is the organizational futurist’s performance defined?</p> <p>25. Should futurists seek “small wins” or is the home run more in line with our agenda?</p> <p><i>Third party as source of credibility</i></p> <p>26. Would have a professional certification of some sort help the credibility of the organizational futurists?</p> <p>27. To what extent could the credibility of foresight be enhanced by 3<sup>rd</sup> party review?</p> <p>28. Would professional standards and code of ethics (and certification) help?</p>
<p><u>5. Positioning.</u> How the direct client/organizational futurist decides to interact with their clients and consulting futurists</p>	<p><i>Broker role</i></p> <p>29. How deeply should futurists know the industry—does it water down the foresight perspective?</p> <p><i>Credibility/Stealthiness</i></p> <p>30. What is the corporate view on the term/the discipline itself? Is it safe to come out of the closet? Is there any cachet or cool factor in foresight?</p> <p>31. What is the role of credentials in providing credibility?</p> <p>32. Do university degrees, certifications, or certificates matter?</p> <p><i>Permission Futuring</i></p> <p>33. Is there a way to track the long-term prospects of the foresight activity, in terms of how it evolves over time?</p>
<p><u>6. Institutionalizing.</u> How, or whether, the client or client decides to formalize foresight work and role of</p>	<p><i>Institutionalization</i></p> <p>34. Is institutionalization the proper goal?</p> <p>35. Where are the proper influence points for foresight?</p> <p>36. Where does futurists role extend--up front stimulus to back end</p>

the futurist in that process

implementation?

37. How successful has succession been in foresight functions?

38. Is foresight better suited for skunk works?

39. How important is the role of training? When is the right time to introduce it?

Table A3. Sources of outcomes considerations		
Adelson, 1989, p.30	Coates, 2010, p.1431	Neef & Daheim, 2005
Alsan & Oner, 2003, p.33	Curry, 2008, p.119	Oner, 2011, p.50
Amanatidou, 2008, pp.539-540	Daim et al., 2009, p.34	Pang, 2010, p.5
Amara, 1984, p.404	Eriksson, 2008, p.463	Ratcliffe, 2005, p.3
Amsteus, 2010, p.59	Fuller, 2009, p.71	Rohrbeck et al., 2008, p.29
Barber, 2009, p.142	Georghiou & Keenan, 2006, p.765	Rohrbeck, 2011, p.51
Becker, 2002, pp.8-9,18-21	Glenn, Gordon & Dator, 2001, p.185	Slaughter, 1999, p.836
Bezold, 2010, p.1514	Hayward, 2004, p.29	Slaughter, 2009, p.7
Bootz, 2010, p.1590	Inayatullah, 2000, pp.370,373	van der Helm, 2007
Buchen, 2005, p.4	Jarratt & Mahaffie, 2009, p.5	Waehrens, 2010, p.329
Burke, 2009, p.100	Karlsen, Overland & Karlsen, 2010, p.61	Wilson, 2000, p.23
Burt & van der Heijden, 2008, p.1110	Karp, 2004, p.9	Wright et al., 2008, p.219
Chermack, van der Merwe & Lynham, 2007, p.380	Korte & Chermack, 2007, p.646	
Coates, 1989, p.15	Micic, 2010, p.1503	

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## Submitted works<sup>viii</sup>

### *Enhancing positioning path*

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### *Enhancing credibility path*

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9. (2007) with Peter Bishop & Terry Collins. The current state of scenario development: an overview of techniques. **foresight**, 9 (1), pp.5-25.
10. (2009) How accurate are your forecasts? more accurate than you might think. **World Future Review**, 1 (5), October/November, pp.5-22.

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<sup>viii</sup> The submitted works are organized into two themes or paths: the first is positioning for a more client-centred approach; the second is enhancing credibility by promoting the field and identifying and promoting high-quality work.