



Contents lists available at ScienceDirect

Technological Forecasting & Social Change



An organizational futurist role for integrating foresight into corporations

Andy Hines*, Jeff Gold

University of Houston, 4800 Calhoun Rd, 110 Cameron Building, Houston, TX 77204-6020, United States

ARTICLE INFO

Article history:

Received 11 June 2013

Received in revised form 26 March 2014

Accepted 8 April 2014

Available online xxxx

Keywords:

Foresight

Corporate foresight

Organizational futurist

Integration

ABSTRACT

Integrating foresight into corporations has proved to be challenging and rare. The paper proposes an organizational futurist role as an internal champion and broker to facilitate the integration process. It builds on the direct experience of one of the authors in crafting the role by revisiting and critically reviewing the papers reporting on findings from that experience. A literature review is then used to reflect on the gaps identified and to stimulate new conceptualizations in order to ground the role in a more suitable academic approach. The paper proposes several tangible approaches for how an organizational futurist role might respond to three principal challenges to the integration of foresight identified and confirmed by a review of the literature. The paper concludes with a research agenda to explore those approaches.

© 2014 Elsevier Inc. All rights reserved.

1. Introduction

This special issue suggests that foresight is increasingly being used by corporations. This paper adds, however, that the integration of foresight work, where it is melded with and part of corporate culture and work processes, is still relatively rare [1]. It suggests that the integration of foresight can “create an impact and add value” [2].

An organizational futurist role is proposed to aid with integration. An “organizational futurist” is defined as a futurist working as a full-time employee for a single organization with responsibility for foresight activities. Hines' original idea was that this organizational futurist role be occupied by someone with expertise as a professional futurist who could work “inside” with clients and help translate the foresight work — thus promoting the integration of foresight within the organization [3]. It could be viewed as a reinterpretation of a more traditional planning role but it is distinguished from planning as more of a generalist role in that it seeks to raise foresight capacity across the full range of organizational activities. It goes beyond a single application area, such as

planning, or any other single role, for instance, technology forecasting. It embraces both strategic planning and technological forecasting as components of a larger kit of several approaches and tools that can be drawn upon to integrate foresight as broadly as possible across the organization.

The approach used to explore the topic begins with Hines' direct experience in crafting an organizational futurist role. His consulting experience in the early- to mid-1990s led him to conclude that the “internal delivery of our work” was the firm's number one business challenge and clients consistently reported back their inability and ineffectiveness in applying the foresight work internally. This motivated his decision to spend a decade working inside two Fortune 500 corporations to gain first-hand experience of why it was so difficult, and to craft and explore the feasibility of an organizational futurist role to improve the prospects for integration [4].

This paper begins with a consideration of that experience, framed as a reflective practitioner account [5]. It has been observed that many research publications emerged out of the researcher's personal biography [6]. While, theory and practice are typically separated in academic research [7], the goal in using the reflective practitioner approach is to bring them back together. Schon also noted how “the epistemology appropriate to the new scholarship must make room for the practitioner's reflection in and on action” [8].

* Corresponding author.

E-mail address: ahines@uh.edu (A. Hines).

This paper draws upon the Hines dissertation, supervised by Gold, which critically reviewed ten of his publications reflecting on the role of the organizational futurist and the challenges of integrating foresight [4,9–17]. It seeks, through a literature review, to investigate whether the challenges identified by Hines were unique to his experience or if they were shared by the larger foresight community. It then critically reviews Hines' responses to those challenges and re-conceptualizes the organizational futurist role by drawing upon the theoretical framework of social constructionism, narrative and discourse theory, institutional theory, organizational learning theory, and business and management research.

This article assumes that integrating foresight will enable corporations to more effectively anticipate and influence the future, and work toward their preferred futures. This assumption is clearly open to challenge and critique and many corporations do not seek the help of foresight or professional futurists. Indeed, much strategy and policy-planning work has been conducted that over the past 30 years without using the foresight or futurist label; in some cases, purposely avoiding it because it was a label of disrepute in planning circles [18]. Nor has the case been decisively made for those who do use it that foresight can deliver on this promise. Indeed, even futurists themselves have raised this question. For example, Molitor charged that “as a practitioner and teacher of forecasting engaged for some 50 years in the futures field, I can't recall any personal experience with scenario exercises that was worth the time and effort spent” [19]. While this critique was aimed at a particular method, it is nonetheless a daunting charge.

2. Research approach

Hines' interpreted his experiences and shared insights on the organizational futurist role internally in a community of practice [4]. They were also shared externally in a regular dedicated column in the journal *foresight*, as well as being discussed and analyzed at conferences, workshops, and professional forums [9,14,15,20] and other publications [12]. Some key learning points were synthesized in a paper “The Organizational Futurist's Audit” [4] that won the Emerald Literati paper of the year in foresight in 2003.

For the dissertation, ten publications were selected for a critical analysis that systematically broke down the works and identified and evaluated potential alternative explanations. It noted inconsistencies and gaps and treated them as sources of potential new research questions. The specific critical approach that was used is taught at the University of Houston Graduate Program in Foresight [21]. This review suggested new research questions to address and shed further light on the potential of the organizational futurist role. The questions were explored through a literature search and analysis, drawing on the foresight literature but expanding well beyond it.

The critical review and literature search, as reported below, revealed that Hines' experience surfaced challenges that were indeed shared by the foresight community. This confirmation suggested it would be useful to offer the organizational futurist role as a potential aid in assisting with foresight integration, but first it was necessary to review, critique, and reconceptualise that role drawing upon the literature between the time of the experience and the present.

Thus three principal challenges to foresight integration are identified in Section 3. Section 4 then proposes how an organizational futurist role can help deal with them and assist with the integration of foresight.

3. Challenges to integrating foresight

The exploration of the organizational futurist role began with the broad question of why it was so difficult for clients to use foresight work. A recent paper exploring this very question suggested 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 [22]. This creates a gap between foresight and regular organizational processes that cannot be easily bridged. This “why so difficult” question is reframed here into three primary challenges, based on Hines experience and confirmed in the literature review.

Before discussing these challenges, a few comments on the current state of foresight seem appropriate. In this paper we are specifically concerned with the use of foresight provided by professional futurists. Everyone, including corporations, uses foresight in their daily lives and practices but usually, they do not do so systematically. That is, such use is not based on concepts, approaches, and methods developed and used by professionals for formally studying the future.

Professional futurists have often not been clear about describing what it is they do offer. The field is still grappling with what to call itself and what its boundaries are [23] and this “may hamper progress in the field” [24]. The terms within foresight are often confusing in that different practitioners describe the same terms in differing ways [25]. Clearly, these deficiencies cast doubt on the validity of those who practice foresight to the claim of professionalism, as part of an effort to reduce a client's decision-making complexity [26].

While Hamel and Prahalad's best-selling *Competing for the Future* brought some notoriety to using foresight for strategy-making [27], that work paid no attention to professional foresight or futurists. A review of the index found no mentions of a professional futurist or futures studies or professional foresight. Foresight work has been done and written about by professional futurists, albeit with little attention focused on building an on-going foresight capability within corporations. There is “little reliable data on the extent to which foresight is used” [28]. It may even be that the use of foresight is underestimated, since commercial competitive considerations keep much work confidential [29].

The challenges are identified below, with Hines's experience noted first, followed by insights or confirmation from the literature review. Section 4 proposes responses to these challenges.

3.1. Episodic use of foresight

Both the Kellogg Company and Dow Chemical hired Hines as part of company-wide initiatives to become more innovative. In both cases, the initial enthusiasm for the initiatives and the foresight work waned amidst a leadership transition that resulted in pressure for cost-cutting and less emphasis on experimenting with new approaches. One might assert that a

key benefit of an organizational futurist is keeping foresight “alive” during these down periods, and thus avoiding the need to start all over when more favorable conditions re-appear. This assertion, however, needs to be tested.

Hiring Hines was Kellogg's first foray into formal foresight work. Despite the wavering of company commitment over time, he was able to train a successor who remained with the company for more than a decade and has kept the role and capability alive, albeit in a less prominent fashion. The title of the role changed from “Global Trends” to “Knowledge Management” and incorporated a wider range of responsibilities beyond a focus on foresight. Interestingly, two of Hines's superiors were later responsible for initiating formal foresight functions within their new organizations – Ford and Hershey's.

Dow Chemical had been using consulting futurists – including a subsequent firm Hines worked for – for several years before hiring Hines. In fact, one of the internal clients for the foresight work recommended bringing Hines on full-time. His hiring boosted the profile of foresight work internally, by shifting the role from part- to full-time. In this case, however, no direct successor was found, and the foresight work reverted to its previous part-time format with the occasional hiring of consulting futurist – including Hines [10].

The literature review revealed these were not isolated phenomena. Perhaps the episodic character is best summed up by Godet: “a future study rarely survives after the departure of the initiator” [30]. The use of foresight by private firms appears to lag governments and research institutes and was comparable to its use in universities [31]. In corporations, the use of foresight is often episodic – a project or two followed by long periods of inactivity. There are a few exceptions; Shell, Nokia, Philips, Siemens, BASF, Morgan Stanley, and Daimler were noted for starting “a long time ago to engage systematically in foresight as a continuous process embedded in strategy formulation.” For most corporations, however, “the impact of strategic foresight on the performance of the firm is actually blurred and some skepticism arises regarding its real value added” [32].

Strategic planning, an approach used by many futurists, enjoyed “a heyday in the 1970s” such that “no self-respecting CEO would dare appear before a board with a strategic planning system in place or under development” [33]. A 1980s survey found that almost half of the US Fortune 1000 industrial companies were using forecasting techniques in their planning processes [32]. A similar pattern was observed in Europe, where it was noted in 1988 that corporate foresight had been long established “even if not under that name” [34]. Nevertheless disillusionment with the utility of the methods, economic recessions, and a proliferation of staff and empire building eventually led to the decimation of many corporate planning departments [33].

Foresight began to re-emerge in functions other than planning in the late 1990s and 2000s [9]. A 2008 Delphi survey found that 71% of participants from German companies agreed that the use of futures studies was on the rise, but noted difficulties and problems in its use might impede a further rise in acceptance [35]. Another 2008 benchmarking study of 83 companies found that 69% had “continuous SF [strategic foresight] activities in place” [36].

It is interesting to note that two high-profile futurists, Peter Schwartz of Shell and Global Business Network fame, and Ray Kurzweil, recently joined corporations – Salesforce.com and Google respectively. It is not clear if they are filling the role of organizational futurist as proposed here, but there are two other prominent examples or organizational futurists in high-profile roles: Brian David Johnson at Intel and Sheryl Connelly at Ford.

3.2. Cultural resistance to foresight

Upon entering the corporate world, Hines did not have firm views on what these barriers were, but in trying to integrate foresight, they indeed emerged. There seemed to be an overall pattern of resistance. In the literature, perhaps the most-cited barrier to the use of foresight cited by futurists is the catchall of cultural resistance or non-receptive corporate climate [36]. This resistance or non-receptivity is broken down into four categories in Table 1. The list represents a merger of barriers experienced by Hines and identified in the literature review. It is not suggested as the definitive list, but as a useful starting point.

A key insight derived from Table 1 is that an organizational futurist ought to arrive into their position armed with an understanding that there is likely to resistance to their work, thus not be surprised by it. It also suggests where some key work will need to be done, as addressing this resistance will likely be crucial to the success of integration efforts.

3.3. Integration not a priority

It was difficult to find an organizational futurist role – a 1997 job search revealed no such positions. Hines eventually found a job as a “Trends Manager” with the Kellogg Company and later crafted a role as Futurist and Ideation Leader within the Dow Chemical Company. He used these positions to develop the organizational futurist role from 1997 to 2005 [58]. The demise of planning functions seemed to have demoralized the futurist community however, from working on the inside.

Given the lack of support within the futurist community at the time, Hines devoted time to building local and national networks, such as being involved with creating the Michigan Futurists network and a Corporate Foresight Network. Within these networks, he found some persons nominally responsible for foresight, but few had any formal training as futurists. Many had been funding external work and learning from that; they began to call themselves futurists, although an equal if not larger number eschewed the title, which has only recently become more palatable [4].

Foresight work was clearly being applied in corporations, but its integration was not a priority. Hines introduced the notion of a “stealth positioning” of foresight so as to highlight the potential for avoiding any potential negative baggage with the term and/or the field by doing the work using language more acceptable to the organization [59]. The critical review raised the question of whether this stealth positioning is actually beneficial in the long run. If the goal is to encourage greater use of foresight, the stealth positioning could be counter-productive if it does not eventually become acknowledged.

Several years later, the literature review revealed that this stealth positioning continues [41]. However, there have been increases in corporate foresight and some progress toward integration, particularly in Germany [60] and Europe in general. For instance Shell, BASF, Nokia and Philips have established permanent foresight units [61].

Most foresight work though, still appears to be done principally with external consultants. One study reports on a scenario intervention improvement on six of seven constructs, with “embedded systems” being the exception [62]. Foresight activities within corporation still tend to be limited in scope. Rohrbeck noted 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” [63].

There is some disagreement within the field about whether formal institutionalization is an appropriate goal. Seeking institutionalization means getting involved in organizational politics, which some futurists explicitly recommend avoiding, fearing that such involvement could comprise futurists' views and discourage the ability to raise challenging questions [64]. Thus futurists should “maintain a fundamental distance from the everyday flows, agendas and processes in the organization” [22]. Others argue that futurists ought to be immersed in the center of organizational flows and aware of what “has already been constructed as ‘real and good’ and is ‘in history’” [65]. Indeed, Schwarz noted a lonely organizational futurist (in his case a SEWS manager) needs “broad interaction and participation within the organization” to be effective in implementation [66].

The argument for institutionalization suggests gains for learning and building on experiences. This may involve “some kind of an on-going ‘futures’ unit” [67] or systemic approach outlining functions and processes [68], and avoiding “being a separate, special and merely ‘episodic’ occurrence” [69].

One could argue that foresight been more successful at the project level, but has struggled in terms of being made an on-going priority. This possibly 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. Where there has been success beyond individual projects, it has been driven by an individual who knows how to “work the system” [6]. Otherwise, implementation tends to be random, so that a foresight capability is not typically embedded in organizational processes.

4. Organizational futurist response to challenges

Having set up the challenges to integrating foresight in Section 3, Section 4 explores how an organizational futurist role might help. As noted in Section 2, the role is reconceptualized based on the lessons derived from an extensive literature review from within and outside of foresight.

4.1. Addressing the episodic challenge

Section 3 noted that the fortunes of foresight appear to wax and wane over time. A factor in this cyclicity is that formal foresight work is typically project-based and led by external consultants, creating gaps of time in between projects where foresight often recedes from attention.

Hines' experience suggested that promoting the greater use of foresight was a continuous job. He developed the concept of “positioning” foresight work to describe a strategy of consistently promoting the use of foresight guided by an overall strategy, which included an emphasis on preventing attention from fading in between projects. This strategy could not emerge in isolation, but rather needed to be grounded in the particular needs and context of the organization. An example of how a consistent approach can work came from his experience in leading a “Lead User” project [70], which centers on the identification of need-related trends, to explore opportunities for the company in the area of natural foods. It should be noted that in the 1990s the idea of natural foods was far less accepted than today. During and after the study, the team was seeking champions for the findings of the study to implement the insights and establish a presence for the organization in natural foods. Dozens of internal visits to prospective champions – typically Directors of either individual brands or product categories – yielded some praise for a good project, but it was not until months after the project was completed that a champion was found and led to the eventual establishment of a natural foods division. The team judged that if not for its ardent belief in the findings and willingness to “knock on doors” and sell it, it would have died. This experience was repeated many times, suggesting that the organizational futurist must be strategic in what projects or priorities to pursue, as well as being persistent in keeping the ideas alive in the organization's strategic conversations. This is admittedly a small sample size and thus the claim that an “ongoing consistent” approach is more effective than episodic needs to be investigated. This is part of research agenda item 5.3 below.

The critical review identified this issue and the subsequent conceptualization identified a connection with a social constructionist theoretical framework, recognizing an ongoing process of negotiation and meaning-making through talk and language. This described perfectly what Hines had been doing – he described it as “permission futuring,” in that small successes were leveraged to ask for permission to explore new problem areas [71]. A key benefit of the organizational futurist is that by being inside the organization full-time, they can commit to this ongoing meaning-making process in a way that is extremely difficult for consulting futurists external to the organization and typically engaged for the life of a project. In fact, one could argue that the time “in-between” projects is as vital to the meaning-making process as the project itself. They are complementary processes, suggesting that organizational futurists and consulting futurists could be allies in working with clients on integration. Of course, there is the possibility that the two roles could be seen as competitive, thus this claim needs to be tested, which is suggested in research agenda item 5.2.

It is suggested that promoting the greater use of foresight as a continuous process in organizations would improve integration. However, such a strategy cannot emerge in isolation, but rather needs to be grounded in the particular needs and context of the organization. How such grounding can be achieved suggests an appreciation of ongoing meaning-making processes based on conversations with organizational participants.

Table 1
Barriers to foresight.

Barrier	Hines' experience	Excerpts from literature review
Foresight competes for attention.	Confronting how busy colleagues did not have time for new initiatives. The notion that "good ideas" would find their way to the agenda was quickly abused.	<ul style="list-style-type: none"> • Organizations already have powerful stories lodged in their subconscious about how the world works, thus foresight needs to have equally or more powerful new stories to gain people's attention [37]. • Powerful stories often serve to preserve the interests of particular ways of understanding and finding solutions to complex decision-making [38] • Too busy [39], or too concentrated on the present task [40] • Inattention by futurists to what matters to the users of corporate foresight exercises, that is, futurists fail to make the case that foresight is worth the attention [2].
Foresight is perceived as threatening.	Perhaps overly optimistic in assuming a receptive response. It became clear that not everyone was pleased by the introduction of foresight.	<ul style="list-style-type: none"> • Foresight is seen as a threat to the existing order [9]; distracting, disturbing, disruptive [41]; and managerial competence is equated with knowing and certainty and the future is uncertain [42] • "New information is almost invariably upsetting to routines and expectancies and, thereby, threatening to established images of competence" [43] • As foresight can be thought of as a device for "disturbing the present" [44], resistance is not the result of stupidity or venality of individuals, but rather is inherent to social systems [45]
Foresight is viewed as intangible	Foresight was perceived by some as more of an intellectual activity than about getting things done. This was even true of futurists to some degree, given the relative lack of emphasis on implementation.	<ul style="list-style-type: none"> • "Seeing is believing" but in the case of foresight work, the ability to see an outcome and get enough people to believe in it strongly enough to act don't necessarily follow [46]. • Clients tend to "discount the future" as timeframes extend [47] • When it boils down to implementation, the momentum stalls [48]; lack of timely intervention [49]
Foresight capacity is lacking	Capacity building was a strategic goal from the outset. It became clear that surface level recognition of futures thinking was there – i.e., pop level of trends list, but to go deeper would require more work.	<ul style="list-style-type: none"> • The relative immaturity of the foresight field [50] • Organizations prefer not to deal with the future, whether "a nesting set of denials" [51] or "future avoidance" [52]. • Biases about the future [53], such as the planning culture in most corporations still favoring single-point forecasting [54] • Anti-intellectualism [55] • Difficulty with key perspectives in foresight, such as cross-disciplinarity, cross-professional and cross-cultural communication [56] and the role of multiple perspectives [57]

We therefore argue that social constructionism provides a useful guiding approach for organizational futurists. Social constructionism reflects the view that gaining insight into what is "going on" in an organization is best discerned by participating in the conversations that are constructing the organization's reality vis-à-vis foresight. There are a variety of approaches to social constructionism [72]. One of the most well-known presentations has been made by Ken Gergen [73] who argues that, social constructionism is concerned with how meanings are made through conversations between one person and another or more. Such meanings become embedded into ongoing ways of talking and acting, which may in turn become accepted versions of reality. Whatever meanings are made, leading to accepted facts or truths about the world, are always "highly circumscribed by culture, history or social context" (72). For such meanings to continue to remain acceptable depends on the day-to-day workings of social processes. What comes to be accepted as real, serves a function within a particular historical and cultural context. It acknowledges that reality (both present and future) emerges inter-subjectively from people's constructions through talk of how to go on in daily life and beyond. In other words, the role accepts the crucial importance of language as constructor of reality, but acknowledges a local cultural and historical reality outside of it that is useful for research to explore and attempt to understand.

It is intended that organizational futurists can extract useful principles and lessons from social constructionism in guiding their work. The suggestion is compatible with an

emerging strand of thinking in foresight, captured in a recent special issue of *Futures* edited by Inayatullah noting that "the strength of futures studies is its epistemological pluralism" [74]. This view is 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 [4].

Berger & Luckmann observed that an organization's "social stock of knowledge" supplies "typificatory schemes" for the major routines of daily life [75]. As long as the knowledge works, it is largely unquestioned and "the routines become legitimated" [75]. 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 argue for an alternative approach worthy of legitimation. This does not happen in isolation, as there are multiple discourses going on at any time competing for attention and potentially offering different solutions. Futurists therefore must seek with others to make foresight meaningful and to repeat such processes through argument to ensure acceptance. The offerings of a service by futurists in the form of a skilled action becomes sensible when responded to positively by others because it satisfies particular needs, desires and interests within a particular situation. The outcome of such processes, foresight meanings, replicated many times in many situations, may well lead to an impression

of order, stability, and permanence which make the integration of foresight possible. Included in such a reality may be the working up of a particular way of talking about the future and other practices within a particular context, the establishment of practices within special locations to develop expert skills, ensure continuity, and protect the status acquired.

Table 2 [73] shows how the organizational futurist role is highly compatible with the ideas of social constructionism.

Several other researchers have noted the usefulness of social constructionist principles for foresight [70,75–77] and Fuller & Loogma observed that foresight “...is both a social construction, and a mechanism for social construction” [78].

Social constructionism therefore points to the importance of stimulating a conversation and creating shared meaning as part of positioning the foresight capability in the organization, acknowledging the “active mode in which persons endeavour to locate themselves within particular discourses during social interaction....and that 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” [76].

4.2. Addressing the “cultural resistance” challenge

Section 3 categorized cultural resistance in terms of four barriers. Suggestions for addressing each are offered below.

4.2.1. Addressing demands on time

The first barrier is that potential internal clients had many demands upon their time. As a new and relatively nebulous capability, foresight had a particularly high hurdle to overcome to gain attention and to shift the attention toward it being helpful rather than threatening. Hines set up visits with persons across organization to introduce himself and to probe for issues that could benefit from the application of foresight. He discovered that many colleagues with new business responsibilities had the next generation of new business opportunities in pretty good shape, but nothing after that. Based on this feedback, he developed a two-day “pipeline fill” workshop to address that need. The process involved trend identification and analysis for the purpose of identifying potential discontinuities, as well as identifying and challenging assumptions about the business team's approach and about the external marketplace. These techniques stimulated ideation for business opportunities that were then built into concepts compatible with the organization's stage-gate process [79]. It became quite useful and popular – Hines counted forty such workshops over the course of one year. The workshop “promised” to deliver roughly a dozen new business concepts that were compatible with the companies' stage-gate process and thus helped to fill the particular business unit's new business portfolio, at the costs of two days' time of roughly a dozen of the unit's people. It also gave Hines permission to later

go back to these clients and suggest other ways that foresight could be used, and indeed proved invaluable to the spread of foresight within the organization. A key challenge was that it remained up to the business unit to take the concepts and refine them and push them through the stage-gate process after the workshop.

4.2.2. Addressing foresight as threatening

A second barrier is that foresight is often perceived as threatening. Hines' discussions with clients before becoming an organizational futurist prepared him for the possibility of an indifferent or potentially hostile response to the introduction of foresight. To help his own understanding of the reception to foresight, as well as to aid other organizational futurists, he developed the “Organizational Futurist Audit” tool that had ten diagnostic questions for helping assess the climate for foresight work [4].

The critical review, however, noted that this tool largely relied on the organizational futurist's analysis of the situation and included very little direct input from clients. To address this shortcoming, the literature review uncovered several instruments that could be either used outright or adapted for the organizational futurist to help assess the organizational climate. Of course, these instruments need to be tested, which would be part of research agenda item 5.1.

The literature review suggested corporate foresight needs a supportive culture, such as openness to applying new concepts, in which to operate [36]. It may be that some organizations simply are not ready or willing to adopt foresight, and a component of developing the “receptivity” assessments below might be to identify reactions that suggest it may be best to simply move on.

Foresight, while it has some particular barriers specific to it, also faces struggles similar to any new concept. Organizations provide guidance to its members on the established ways of doing things through 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” [80]. Indeed, “for those who currently occupy the center, new approaches can often seem like dangerous monsters on the prowl” [81]. Institutional theory suggests institutionalization creates stability in formalizing routines that enhance performance. It notes that challenges to the existing order come in the form of “new institutional elements” from small group or organization-level processes that may be more effective [82], and that deviating from the accepted institutional order and embracing these new elements can be costly to individuals [83].

Those who suggest new ways of doing things, including futurists, 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,

Table 2

Social constructionism and the organizational futurist.

Social construction ideas	Organizational future role
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 made and sustained by social processes	Need to collaboratively create the future together
Knowledge and social action go together	Draws upon an action research approach

Table 3
Instruments for assessing “receptivity” to foresight.

Instrument	Description
Dian's Foresight Styles Assessment [85]	Specifically developed to provide a reliable measure of one's foresight capacity. Gary analyzed and fine-tuned it with a factor analysis that revealed a four factor solution of Framer, Adapter, Tester, and Reactor [86]
Leadership Development Profile [87]	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 [88]	Gary suggested this well-established instrument could be used by futurists [86]. It identifies three strategic orientations: defenders, prospectors, analysers and a fourth, reactors, which is a lack of strategic orientation.
Rohrbeck's Maturity Model [63]	One part of his three-part model addresses context by assessing 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.

since they are asking clients to take on professional risk. Mack 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 [84].

The literature review identified four instruments for assessing potential responsiveness to foresight, summarized in Table 3. 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.

Other instruments could be added to this list, but they also do not directly address views on foresight [89,90].

A new or revised instrument that sheds insight on this context could help stimulate a more effective dialog 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 [91], or shed insight into the appropriate genres that are “recognizable, interpretable, and usable” [92].

4.2.3. Addressing intangibility

The third barrier is that foresight is perceived as intangible. Foresight as a relatively new capability naturally seems a bit mysterious to those not yet familiar with it. That is a fairly obvious point that requires little further explanation. To help ground foresight and make it more tangible, an Integration Framework is proposed to demonstrate how the integration process might proceed, that is, how it might move from being introduced, made effective use of, and eventually institutionalized.

It was noted that Hines employed a positioning strategy with a goal of making greater use of foresight within the organization. As noted in the examples of the Lead User project and the “Pipeline Fills,” it led to some successful outcomes. In both corporations, Hines was primarily a one-person function (he had an intern for a brief period) although he did have internal networks to leverage. Of course, there was no guarantee that successful workshop outcomes would move beyond the workshop. From a social constructionist viewpoint, while meaning could be made in the workshop, once participants returned to work, they

would need to find others to support what they wanted to do. Depending on what they said or did, the participants could not be sure that others might agree with any workshop outcome. They might also disagree, ignore, judge or ask for further explanation. The important point, suggested by Shotter, is that “acceptable responses must be negotiated within a context of argumentation” [81]. So a key point is that futurists need to learn to make arguments, and help others do the same not only when they run workshops, but also as part of foresight integration overall.

The critical review observed that Hines' strategy was emergent and opportunistic and lacked grounding. Specifically, there was not a clear sense of where he wanted to take the foresight capability. A troubling aspect of this approach is that it was highly experimental, often relying on intuition to decide what to try next, which sometimes worked out favorably, but sometimes didn't. Weick observed that organizations are uncomfortable with trial-and-error, lest the error propagate through the organization [93]. 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. This oversight is addressed in two ways. First, his experience on how foresight appeared to proceed was analyzed. Then the literature was reviewed for fresh input, but this did not find reveal much specifically on how foresight unfolded in organizations over time. However there was much useful guidance from institutional theory on how new capabilities in general emerged, which we consider below.

Focusing first on how foresight appears to unfold over time, we conceptualized a framework of foresight integration for characterizing that process, shown as Fig. 1. To be clear, this framework needs further testing. As it stands it reflects a mix of direct experience and subsequent reflection. Perhaps the key point is that future integration efforts might use this framework to suggest a process for how foresight might be integrated into an organization over time. In the spirit of social constructionism, it is offered as a starting point for dialog and meaning-making rather than a definitive answer on how integration “must” or even “should” proceed. It offers a tangible framework for considering the process of integration.

The framework maps the path of activities involved and links them to roles on the futurist and client side. The framework emerged inductively from Hines' experience and

deductively from the literature review – from the foresight field process frameworks were proposed [12,69] and concepts relating to a process framework were found in social constructionism [70] institutional theory [80,81,90,93] and organizational learning theory [96]. The critical review revealed that the important 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.

It is important to note that the framework is a simplification describing one set of activities – integration of foresight – and that these activities operate in a context with other diverse and complex systems and networks of interacting systems operating at the same time [76].

The framework consists of six activities operating across three different levels with various roles on the futurist and client sides. Table 4 explores the three levels: field, organization, and individual – with their respective actors [94].

Second, six sequential activities comprising the integration process are explained in Table 5. “Doing the work” and “evaluating outcomes,” appear twice, once after “introducing” and again after “positioning.”

Tables 4 and 5 provide the building blocks for the Integration framework in Fig. 1. The six activities are at the center, influenced above and below from the futurist and client sides, which each operate on the three levels. Fig. 1 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 4 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 [99]. That said, the bulk of the organizational futurist’s contribution begins with “doing the work” and proceeds from there along the framework.

While the framework identifies key sets of activities involved in integration, it does not specify how movement occurs along the framework. The social constructionist perspective suggests that meaning-making emerges from relationship and a conversation between at least two voices coming into contact. Futurists need to make their offers acceptable but there is no certainty that such offers will be accepted by others. As we have suggested, others may agree or disagree, ignore, judge or ask for further explanation, all part of a negotiation ‘within a context of argumentation’ [79].

Institutional theory draws upon this perspective to provide a more micro view of what the process involves. These perspectives support the organizational futurist with an approach to move the integration process along.

4.2.4. Addressing need for capacity building

The fourth barrier suggested a need to build foresight capacity. Hines’ experience identified this need, but the more pertinent question is “how?” His practical approach was to promote the success of project work as a way to make the case for “more foresight.” Indeed, at Dow Chemical, the Human

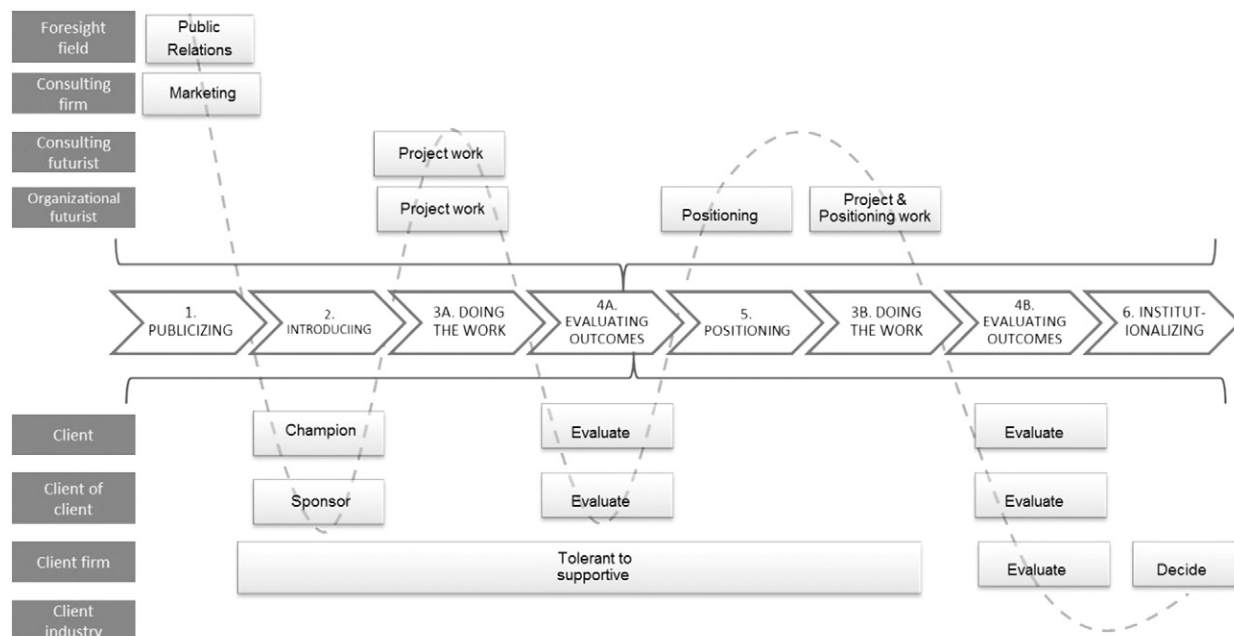


Fig. 1. Integration framework.

Table 4
Foresight levels and actors.

Level	Actors
Field	Foresight field and the various client industries
Organization	Foresight firms and the client firms
Individual	Those actually doing the activities
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
Client	Engages consulting futurists Members of foresight field Part of client organization and industry Initially a champion Sometimes a broker between futurist and client of client
Client of the client	End user of the foresight work Sometimes an organizational futurist; in this case also part of foresight field Part of client firm and industry Sometimes the direct client

Resources function asked Hines to develop a training workshop on foresight tools that made some contribution to building capacity, as several hundred employees took the training [10]. Of course, this is not a guarantee of capacity-building, as it still remained for the participants to apply what was learned.

Revisiting this approach in the critical review, it was apparent that this approach may have owed more to luck than strategy. The exploration of the foresight literature had little to say on this question of internal capacity-building. We turn to institutional theory to open up the possibilities for new thinking and conceptualization around this challenge.

Institutionalization appears at the “end” of the sequence of activities in the Integration framework (Fig. 1). 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 [95]. Lave and Wenger observed 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 [96]. If judged of sufficient interest the newcomers and their

ideas are gradually integrated into the community. The key to effectiveness is understanding how to function as an insider, which goes beyond just acquiring knowledge, but learning how to speak the language of the community of practitioners [97].

Clients are situated within a web of relationships. They are typically part of a work team, which 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 dialog 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. Fig. 2 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 conversation 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 to the executive level. Each link presents a narrative or text to persuade others of its validity, as members use rhetorical techniques in the social construction of a foresight discourse [98]. The discourse is built up progressively as texts spread more

Table 5
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.

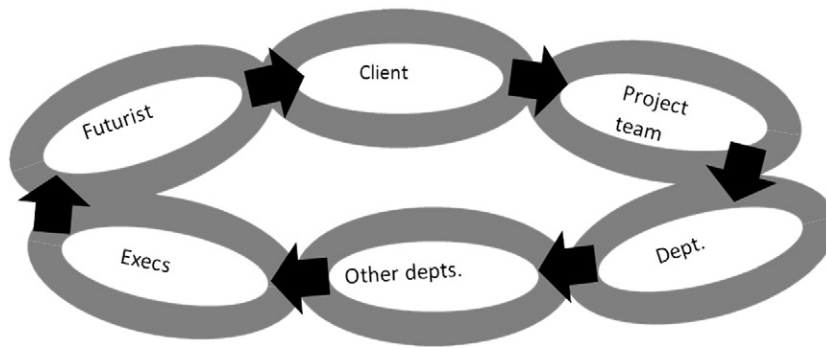


Fig. 2. Hypothetical chain of integration.

widely through the organization [95]. The process can be stalled by a break in the chain at any point along the way. Van der Heijden 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 dialog, and thus building toward a discourse [101].

Fig. 2 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. Foresight discourse is not static: stories web, assemble, disassemble, and spread across meetings, briefings, memos and events, as well as informal channels and alternative or more complex stories may emerge [100]. In other words, the initial ideas being introduced, once shared and made meaningful, 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.

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" that is responded to by his fellow players [100]. 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 [97]. 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 [99].

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 [72].

Fig. 3 shows Phillips, Lawrence, & Hardy's Discursive model of institutionalization [91], which is adapted by adding in a step between actions and texts to highlight the importance of the dialog signified as ante-narrative and narrative. Their key four steps suggest that actions generate texts that embed in discourses that in turn produce institutions.

Each step involves an act of meaning making – an utterance is presented and responded to in dialog, 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 [99]. 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 project 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 dialog on the discourse, a shared sense of reality may emerge and thus may lead to institutionalization.

At the broadest level, the challenge can be said to be the lack of an agreed-upon discourse for the institutionalization of foresight. Put simply, "discourses that are more coherent and structured are more likely to produce institutions than those that are not" [90]. A review of the institutionalization of

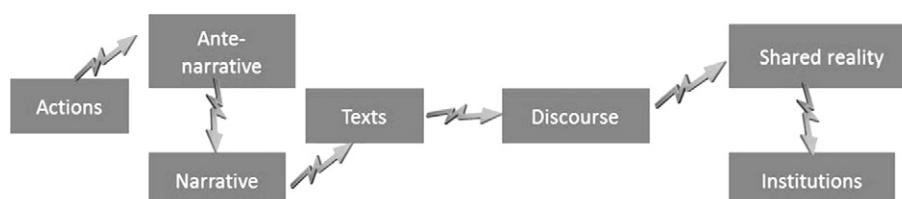


Fig. 3. Discursive model of institutionalization.

foresight activities by Becker reveals that the challenges he cited ten years ago remain [32,66,102–104]:

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

Integration is an involved and time-consuming process that involves a patient 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's side in helping clients to understand not only what foresight is about, but also how it can help them improve their decision-making as they confront problems and challenges regarding the future.

4.3. Addressing the “lack of support” challenge

It is understandable that the foresight field has not actively promoted an organizational futurist role. It is still relative scarce and somewhat obscure. A review of the Association of Professional Futurist (APF) membership lists 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, but nonetheless organizational futurists have maintained a steady percentage of the membership. There is some evidence that the role is growing. One study noted, for instance, the presence of “activity managers” who are in charge of the corporate foresight activity in his study of 19 European firms [2].

Hines found little help from the field as a practitioner and was thus relegated to suggesting a wish list of how it might help. In revisiting the wish list during the critical review, we focused on the potential value of the professionalization of the field as providing a credibility aid to the organizational futurist. Put simply, the pursuit and attainment of professional status for the field would help the organizational futurist make their case for greater use of foresight. Admittedly, this linkage is rather indirect, but the need for credibility clearly emerged from the Hines' experience and the literature review as an important need. Any efforts aiding the quest are judged to be useful including professionalization. Indeed, we recently collaborated on a paper on “professionalizing foresight” that makes this link [23].

5. Conclusion

In Section 4 we specifically addressed ways in which an organizational futurist can aid foresight integration. We are unaware of any other work that directly poses or addresses

this question. Thus, a key contribution of this work is to theorize that an organizational futurist role can aid in organization by sharing experience of the role, critiquing that experience, and offering a framework and concepts concerning that role to be tested with further research. This work frames foresight integration in terms of how an organization futurist can help by suggesting specific responses to three challenges directly experienced by the authors and confirmed in the literature review. These responses in Section 4 form the basis of the following to suggest a future research agenda:

5.1. Census of organizational futurist role

To ground the research agenda, it is proposed to undertake a “census” of how widespread the organizational futurist role is, how it is being used, and what the results are. This might take the form of a survey followed up by case studies to highlight variations. In particular, we need to understand the social processes that constructed variations in the reality of foresight.

5.2. Work with foresight educational and professional organizations

A follow-on to the previous item would be to share the results with foresight education programs to open a dialog on what, if any, changes might be made in how foresight is being taught and the skills that need to be practiced to better meet the needs of the organizational futurist role. The results could also be shared the results with the Association of Professional Futurists to explore how it might help to nurture this role, and in turn grow its membership, as well as assist with its professionalization efforts.

5.3. Explore social constructionist approach and tool kit

Moving on to the specific responses suggested in the previous section, this next item would study how social constructionism might provide a useful guiding approach for the organizational futurists in the process of foresight integration. This one is likely to be challenging to explore, in that one must likely “be present” in order to observe the process. It may suggest an ethnographic or action research approach in which the practitioner as researcher designs an approach to test the utility of employing social constructionism in the collaboration of designing and using particular rhetorical resources and ways of talking.

As a follow-on, if the results proved promising, it might suggest developing new or additional skills and tool-kits for training professional futurists, involving, dialog, skilful listening, rhetoric, narrative, and argumentation.

5.4. Investigate the Integration framework

The next item might be to test the validity of the Integration framework. It would involve enlisting organizations doing foresight work in some capacity and tracing its path. This would most likely involve interviews and a case study approach. It might also involve designing an “ideal” process with clients interested in introducing foresight to their organizations but also collaboration between futurists to develop such a process.

5.5. Test and refine “responsiveness” instruments

A general theme emerging from this work is a need for futurists to increase the incorporation of client perspective. A specific research project could be to refine existing “responsiveness” instruments described in Table 3 above. The results could also be incorporated into an updated Organizational Futurist Audit.

5.6. Compare different approaches to integration

The final item proposes to compare the integration of foresight using the a discursive approach to institutionalization, which from the periphery to the core of the organization, to cases where foresight is introduced by other means, such as by CEO mandate, or a “skunk works” approach where the capability is explicitly removed from organizational politics. The goal here would be to discern if there any noticeable differences in the effectiveness of the programs depending on how they emerged.

It is hoped that this paper has made a case for incorporating learning from practice with more conventional approaches to academic research. It provides a starting point to more deeply explore the usefulness of the proposed organizational futurist role for assisting with the integration of foresight into organizations. The literature review confirmed a common set of challenges to integration, and the bulk of the paper focused on how the organizational futurist role might address them. These suggested responses, however, remain to be more rigorously tested. Thus, the paper concludes with a research agenda to more fully explore the question of if or how the organizational futurist role can help with the integration of foresight into organizations.

References

- [1] R. Slaughter, The state of play in the futures field: a metascanning overview, *Foresight* 11 (5) (2009) 17.
- [2] R. Rohrbeck, H. Gemünden, Corporate foresight: its three roles in enhancing the innovation capacity of a firm, *Technol. Forecast. Soc. Chang.* 78 (2) (2011) 233.
- [3] A. Hines, The foresight amphibian in the corporate world, *Hinesight, Foresight* 1 (4) (1999) 382–384; A. Hines, Translating futures work, *Hinesight, Foresight* 4 (6) (2002).
- [4] A. Hines, An audit for organisational futurists: ten questions every organizational futurist should be able to answer, *Foresight* 5 (1) (2003) 20.
- [5] D. Schon, *The Reflective Practitioner: How Professionals Think in Action*, Basic Books, NY, 1983.
- [6] J. Lofland, L. Lofland, *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*, 3rd ed. Wadsworth, Belmont, CA, 1995.
- [7] E. Gummesson, *Qualitative Methods in Management Research*, 2nd edn. Sage, London, 2000.
- [8] D. Schon, The new scholarship requires a new epistemology, in: D. DeZure (Ed.), *Learning from Change: Landmarks in Teaching and Learning in Higher Education*, Stylus Publishing, London, 2000, pp. 34–35.
- [9] A. Hines, L. Trudeau, Futurists on the “inside:” the state of practice of organizational futurists, *Futur. Res. Q.* 15 (4) (Winter 1999) 49–62.
- [10] A. Hines, K. Kelly, S. Noesen, Viral futures at Dow, *Futur. Res. Q.* 59 (Fall 2001) 66.
- [11] A. Hines, A practitioner's view of the future of futures studies, *Futures* 34 (3–4) (2002) 337–347.
- [12] A. Hines, P. Bishop, *Thinking about the Future: Guidelines for Strategic Foresight*, Social Technologies, Washington, DC, 2007.
- [13] A. Hines, J. Coates, J. Mahaffie, Technological forecasting: 1970–1993, *Technol. Forecast. Soc. Chang.* 47 (1) (1994) 23–33.
- [14] A. Hines, The futures of futures: a scenario salon, *Foresight* 5 (4) (2003) 28–35.
- [15] A. Hines, The history and development of the Association of Professional Futurists, in: R. Slaughter (Ed.), *The Knowledge Base of Futures Studies*, Professional Edition, Indooroopilly, AU, Foresight International, 2004.
- [16] A. Hines, P. Bishop, T. Collins, The current state of scenario development: an overview of techniques, *Foresight* 9 (1) (2007) 5–25.
- [17] A. Hines, How accurate are your forecasts? More accurate than you might think, *World Future Rev.* 1 (5) (October/November 2009) 5–22.
- [18] J. Gavigan, F. Scapolo, Matching methods to the mission: a comparison of national foresight exercises, *Foresight* 1 (6) (1999) 495–517.
- [19] G.T.T. Molitor, Scenarios: worth the effort? *J. Futur. Stud.* 13 (3) (2009) 81.
- [20] A. Hines, Enhancing our personal practice by revitalizing our approach and tool kits, Presentation to the Association of Professional Futurists Annual Gathering, Futures Insurrection, April 10, 2005, Miami, FL, April 10, 2005. (Available at: <<http://www.andyhinesight.com/wp-content/uploads/2014/02/Personal-Brand.pdf>>).
- [21] P. Bishop, A. Hines, *Teaching about the Future*, Palgrave Macmillan, Houndmills, UK, 2012. 207–211.
- [22] M. van der Steen, M. van Twist, M. van der Vlist, R. Demkes, Integrating futures studies with organizational development: design options for the scenario project ‘RWS2020’, *Futures* 43 (2011) 337.
- [23] A. Hines, J. Gold, Professionalizing foresight: why do it, where it stands, and what needs to be done, *J. Futur. Stud.* 17 (4) (2013) 35–54.
- [24] M. Amsteus, Managerial foresight: concept and measurement, *Foresight* 10 (1) (2008) 53.
- [25] R. van der Helm, Towards a clarification of probability, possibility and plausibility: how semantics could help futures practice to improve, *Foresight* 8 (3) (2006) 17.
- [26] M. Dietrich, J. Roberts, Beyond the economics of professionalism, in: J. Broadbent, M. Dietrich, J. Roberts (Eds.), *The End of the Professions?* Routledge, London, 1997.
- [27] T. Karp, Building foresight abilities in organizations: a future opportunity for futures studies, *Futur. Res. Q.* 5 (Summer 2004) 30; citing: G. Hamel, C.K. Prahalad, *Competing for the Future*, Harvard Business Press, Cambridge, MA, 1996.
- [28] M. Amsteus, Managers’ foresight matters, *Foresight* 13 (2) (2011) 65.
- [29] G. May, Foresight and futures in Europe: an overview, *Foresight* 11 (5) (2009) 63.
- [30] M. Godet, The art of scenarios and strategic planning: tools and pitfalls, *Technol. Forecast. Soc. Chang.* 65 (2000) 20.
- [31] R. Slaughter, The state of play in the futures field: a metascanning overview, *Foresight* 11 (5) (2009) 9.
- [32] R. Vecchiato, C. Roveda, Strategic foresight in corporate organizations: handling the effect and response uncertainty of technology and social drivers of change, *Technol. Forecast. Soc. Chang.* 77 (2010) 1528.
- [33] I. Wilson, The state of strategic planning: what went wrong? What goes right? *Technol. Forecast. Soc. Chang.* 37 (1990) 104–106.
- [34] D. Loveridge, G. Woodling, Through a glass darkly: the future and business revisited, *Foresight* 5 (2) (2003) 24–32.
- [35] J. Schwarz, Assessing the future of futures studies in management, *Futures* 40 (3) (2008) 241–244.
- [36] R. Rohrbeck, S. Mahdjour, S. Knab, T. Frese, *Benchmarking Report: Strategic Foresight in Multinational Companies*, European Corporate Foresight Group, 2008. 22–24.
- [37] J. Jarratt, J.B. Mahaffie, Reframing the future, *J. Futur. Stud.* 13 (4) (2009) 8.
- [38] E. Schein, Organizational culture, *Am. Psychol.* 45 (2) (1990) 109–119.
- [39] C. Bezold, Lessons from using scenarios for strategic foresight, *Technol. Forecast. Soc. Chang.* 77 (2010) 1515.
- [40] H. Tsoukas, Coping with the future: developing organizational foresightfulness, *Futures* 36 (2) (2004) 139.
- [41] T. Graves, Stealth foresight for innovation: creating support for creative change in large organisations in Australia, *J. Futur. Stud.* 12 (2) (2007) 121–128.
- [42] I. Wilson, From scenario thinking to strategic action, *Technol. Forecast. Soc. Chang.* 65 (1) (2000) 24.
- [43] D. Michael, On growth and the limits of organizational responsiveness, *Technol. Forecast. Soc. Chang.* 10 (1977) 4.
- [44] A. Curry, From foresight to insight: using scenarios well, *J. Futur. Stud.* 13 (3) (2009) 119–122.
- [45] D. Schon, *Beyond the Stable State*, Penguin, Harmondsworth, UK, 1973. 31.
- [46] *World Future Rev.*, Separating foresight wheat from foresight chaff: An interview with Future Savvy author Adam Gordon, *World Future Rev.* 2009, May. 57.
- [47] H. Linstone, On discounting the future, *Technol. Forecast. Soc. Chang.* 4 (4) (1973) 335–338.

- [48] U. von Reibnitz, From anticipation to action: how to put foresight and future thinking into concrete action, *Futur. Res. Q.* (Summer 2006) 9.
- [49] J. Glenn, T. Gordon, J. Dator, Closing the deal: how to make organizations act on futures research, *Foresight* 3 (3) (2001) 178.
- [50] P. Hayward, Resolving the moral impediments to foresight action, *Foresight* 5 (1) (2003) 4–10.
- [51] J. Coates, A chreothamy of flawed forecasts, *Technol. Forecast. Soc. Chang.* 45 (1994) 307.
- [52] I. Buchen, Finding time for the future and overcoming future avoidance, *Foresight* 7 (6) (2005) 3.
- [53] J. Bootz, Strategic foresight and organizational learning: a survey and critical analysis, *Technol. Forecast. Soc. Chang.* 77 (9) (2010) 1589; citing: P. Baumard, *La prospective à l'usage du manager*, Editions du Litec, Paris, 1996.
- [54] J. Ratcliffe, Challenges for corporate foresight: towards strategic prospective through scenario thinking, *Foresight* 8 (1) (2006) 42.
- [55] J. Coates, Anti-intellectualism and other plagues on managing the future, *Technol. Forecast. Soc. Chang.* 4 (1973) 243–264.
- [56] M. Maruyama, Paradigms and communication, *Technol. Forecast. Soc. Chang.* 6 (1974) 3.
- [57] H. Linstone, The multiple perspective concept: with applications to technology assessment and other decision areas, *Technol. Forecast. Soc. Chang.* 20 (4) (1981) 275–325.
- [58] A. Hines, What does business need from futurists? *Hinesight, Foresight* 1 (1) (1999) 110–111.
- [59] A. Hines, How foresight is being positioned inside today's organization *Hinesight, Foresight* 2 (1) (2000) 5–7.
- [60] H. von der Gracht, C.R. Vennemann, I. Darkow, Corporate foresight and innovation management: a portfolio-approach in evaluating organizational development, *Futures* 42 (4) (2010) 380–393.
- [61] J. Schwarz, Assessing the future of futures studies in management, *Futures* 40 (3) (2008) 237–246.
- [62] T. Chermack, Assessing the quality of scenarios in scenario planning, *Futur. Res. Q.* 23 (Winter 2006) 35.
- [63] R. Rohrbeck, Corporate Foresight: Towards a Maturity Model for the Future Orientation of a Firm, *Physica-Verlag, Berlin*, 2011. 177.
- [64] S. Inayatullah, Tips and pitfalls of the futures studies trade, *Foresight* 2 (4) (2000) 373.
- [65] D. Hosking, Telling tales of relations: appreciating relational constructionism, in: S. Deetz, T. Newton, M. Reed (Eds.), *Special Issue: Responses to Social Constructionism and Critical Realism in Organization Studies*, *Organization Stud.*, 32(1), 2011, p. 55.
- [66] J. Schwarz, Pitfalls in implementing a strategic early warning system, *Foresight* 7 (4) (2005) 26.
- [67] J. Dator, Alternative futures at the Manoa School, *J. Futur. Stud.* 14 (2009) 3.
- [68] P. Hayward, Facilitating foresight: where the foresight function is placed in organisations, *Foresight* 6 (1) (2004) 19–30.
- [69] J. Voros, A generic foresight process framework, *Foresight* 5 (3) (2003) 12.
- [70] E. Von Hippel, J. Churchill, M. Sonnack, *Lead User Project Handbook: A Practical Guide for Lead User Project Teams*, Available at <http://evhippel.files.wordpress.com/2013/08/lead-user-project-handbook-full-version.pdf> October 2009.
- [71] A. Hines, Growing the professional futures field, in: R. Slaughter, *The Knowledge Base of Futures Studies*, Professional Edition CD-ROM, Foresight International, Indorooopilly, Australia, 2004.
- [72] V. Burr, *Social Constructionism*, Routledge, London, 2003.
- [73] K. Gergen, The social constructionist movement in modern psychology, *Am. Psychol.* 40 (3) (1985) 266–275.
- [74] S. Inayatullah, Epistemological pluralism in futures studies: the CLA–Integral debates, *Futures* 42 (2) (2010) 99–102.
- [75] P. Berger, T. Luckmann, *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Anchor Books, Garden City, NY, 1967.
- [76] B. Waehrens, J. Riis, Failures to enact the future – a social practice perspective, *Futures* 42 (4) (2010) 329.
- [77] J. Bootz, Strategic foresight and organizational learning: a survey and critical analysis, *Technol. Forecast. Soc. Chang.* 77 (9) (2010) 1590.
- [78] T. Fuller, K. Loogma, Constructing futures: a social constructionist perspective on foresight methodology, *Futures* 41 (2) (2009) 71.
- [79] R. Cooper, *Winning at New Products: Creating Value through Innovation*, 4th ed. Basic Books, New York, 2011.
- [80] I. Parker, *Discourse Dynamics: Critical Analysis for Social and Individual Psychology*, Routledge, London, 1992.; J.R. Taylor, E.J. Van Every, *The Vulnerable Fortress: Bureaucratic Organization in the Information Age*, University of Toronto, Toronto, 1993. 109.
- [81] J. Shotter, *Conversational Realities: Constructing Life through Language*, Sage, London, 1993.
- [82] L. Zucker, Institutional theories of organization, *Annu. Rev. Sociol.* 13 (1987) 443–464.
- [83] T.B. Lawrence, M. Winn, P.D. Jennings, The temporal dynamics of institutionalization, *Acad. Manag. Rev.* 26 (2001) 624–644.
- [84] T. Mack, Organizational and management dynamics in foresight, *J. Futur. Stud.* 9 (3) (2005) 75.
- [85] N. Dian, Foresight styles assessment: a theory based study in competency and change, *J. Futur. Stud.* 13 (3) (2009) 59–74.
- [86] J. Gary, Foresight styles assessment: testing a new tool for consulting futurists, *J. Futur. Stud.* 14 (1) (2009) 1–26.
- [87] S. Cook-Greuter, *Ego Development – The Nine Levels of Increasing Embrace*, Integral Institute, Louisville, CO, 1985.
- [88] R. Miles, C. Snow, *Organization Strategy, Structure, and Process*, McGraw-Hill, NY, 1978.
- [89] D. Beck, C. Cowan, *Spiral dynamics: mastering values, Leadership and Change*, Blackwell Publishing, Malden, MA, 1996.
- [90] A. Hines, *ConsumerShift: How Changing Values Are Reshaping the Consumer Landscape*, No Limit Publishing, Tucson, AZ, 2011.
- [91] N. Fairclough, *Discourse and Social Change*, Polity Press, Cambridge, 1992.
- [92] N. Phillips, T. Lawrence, C. Hardy, *Discourse and institutions*, *Acad. Manag. Rev.* 29 (4) (2004) 644.
- [93] K. Weick, Organizational culture as a source of high reliability, *Calif. Manag. Rev.* 29 (2) (1987) 112–127.
- [94] A. Hines, To managers: how foresight can help you, *Hinesight, Foresight* (October 1999) 487–488; A. Hines, A practitioner's view of the future of futures studies, *Futures* 34 (3) (2002) 337–347.
- [95] J.R. Taylor, E.J. Van Every, *The Vulnerable Fortress: Bureaucratic Organization in the Information Age*, University of Toronto, Toronto, 1993. 292.
- [96] J. Lave, E. Wenger, *Situated Learning: Legitimate Peripheral Participation*, Cambridge University Press, Cambridge, UK, 1991.
- [97] F. Barrett, Creativity and improvisation in jazz and organizations; implications for organizational learning, *Organ. Sci.* 9 (5) (1998) 616.
- [98] T. Watson, Rhetoric, discourse, and argument in organizational sense making: a reflexive tale, *Org. Stud.* 16 (5) (1995) 805–821.
- [99] K. Van der Heijden, R. Bradfield, G. Burt, G. Cairns, G. Wright, *The Sixth Sense: Accelerating Organizational Learning with Scenarios*, John Wiley & Sons, West Sussex, UK, 2002. 166.
- [100] D. Boje, *Narrative Methods for Organizational and Communication Research*, Sage, London, 2001.
- [101] D. Hosking, P. Haslam, Managing to relate: organizing as a social process, *Career Dev. Int.* 2 (2) (1997) 85–89.
- [102] P. Becker, Corporate foresight in Europe: a first overview, Working Paper, 18, Institute for Science and Technology Studies, University of Bielefeld, Germany, 2002. 18–19.
- [103] C. Daheim, G. Uerz, Corporate foresight in Europe: ready for the next step? Second International Seville Seminar on Future-Oriented Technology Analysis, Impact of FTA Approaches on Policy and Decision-Making, 28–29. September, 2006, Seville, Spain, September, 28–29 2006.
- [104] M.A. Öner, S. Beser, Assessment of corporate foresight project results: case of a multinational company in Turkey, *Foresight* 13 (2) (2011) 49–63.

Andy Hines is Program Coordinator at the University of Houston's Graduate Program in Foresight and is also speaking, workshoping, and consulting through his firm *Hinesight*. His 20 plus years of professional futurist experience includes a decade's experience working inside first the Kellogg Company and later Dow Chemical, and consulting work with Coates & Jarratt, Inc. and Social Technologies. His books include *Teaching about the Future*, *ConsumerShift: How Changing Values Are Reshaping the Consumer Landscape*, *Thinking about the Future*, and *2025: Science and Technology Reshapes US and Global Society*.

Jeff Gold is Professor of Organization Learning at Leeds Business School, Leeds Metropolitan University and Visiting Professor at Leeds University where he co-ordinates the Northern Leadership Academy. With Prof Jim Stewart, he is the founder of the HRD and Leadership Research Unit at Leeds Business School. He has designed and delivered a wide range of seminars, programs and workshops on change, strategic learning, management and leadership with a particular emphasis on participation and distribution.