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Introduction

Coping with the future: developing organizational foresightfulness

In a celebrated lecture given at the Harvard Business School in 1931, Alfred North Whitehead identified “foresight” as the crucial feature of the competent business mind. Anticipating contemporary notions of “sensemaking”, “double-loop learning”, and “scenario planning”, Whitehead perspicuously saw that business organizations need to cultivate foresight in order to cope with the relentless change that modernity generates. Foresight is rooted in deep understanding, remarked the distinguished philosopher. In his words: “the habit of foreseeing is elicited by the habit of understanding. [...] Foresight is the product of Insight” [1]. Foresight marks the ability to see through the apparent confusion, to spot developments before they become trends, to see patterns before they fully emerge, and to grasp the relevant features of social currents that are likely to shape the direction of future events [1].

Although Whitehead was primarily referring to individual business minds, his argument can easily be extended to include collective entities, such as organizations and governments. Foresight can be, and need be, if an organization is to survive at all in a market economy, an organizational capability—a socially embedded competence. But what is so special about a market economy that spurs business organizations to develop foresight?

A market economy is a particularly dynamic system in which self-motivated actors exercise formally independent choices as to what economic activity they will engage in and how best they will organize their productive resources. In such a system of decentralised activity and institutionalised initiative, the consequences of the actions undertaken by economic actors are, to a large extent, unintended (hence unpredictable), give rise to responses from other economic actors, whose consequences are, again, not fully intended, and so on. In other words, as several Austrian and institutional economists so clearly saw, in a market system, change is incessant and not fully describable or predictable—it is an unfolding process [2–5]. One cannot predict what the future will hold in a market economy partly because of the dynamic complexity of interactions to be found within it, and partly because of the inherently distributed character of relevant economic knowledge - no one can know everything that is necessary to know concerning the motives of as well as the factual knowledge possessed by economic actors [2].

Despite the limits of predicting economic changes in a system as dynamic as a

market economy is, anticipating important developments in a firm's environment is possible and of profound importance for economic actors. Wouldn't IBM have been much better off if it had foreseen the move away from mainframes towards PCs in the late 1980s? Would not Apple have been in a much better shape today had it licensed its operating system as IBM did, in the 1980s? Or, to take an example from politics, isn't Europe much better off today as a result of Churchill's astounding ability to foresee the dangers of Hitler's rise to power in the late 1930s and his fierce insistence that Britain should stand up to him [6]? If that is so, what makes certain individuals and organizations more foresightful than others? More generally, what is organizational foresight? How should it be conceptualised? What organizational systems and processes strengthen (or impede) organizational foresight? What are the social practices in organizations that sustain foresight?

Foresight is the ability to anticipate events before they happen. The notion of time is crucial in any account of foresight, since, through foresight, an actor anticipates events that will take place at some future point in time. Designing action in the present with an eye to the future is thus important. But bringing future time to bear onto present action or reasoning is not good enough. Not any act of speculation about the future will do—foresightfulness is different from prophesizing or fortune telling. Is it also different from forecasting? It is in so far as forecasting is the use of scientific techniques for predicting specific events on the basis, usually, of past evidence [7]. Foresightfulness, however, is a broader notion: it is the ability to cope with the future—the institutionalised capacity of unobtrusively responding to an organization's circumstances so that the organization may get around in the world.

The notion of coping, drawn from Heideggerian philosophy (see [8,9]), implies that dealing with the future is a background organizational skill, not a focal act. In executing its primary task, be it treating patients, serving customers, teaching students, or whatever, an organization acts necessarily in the present. The future is not some entity to engage with in the same way, say, a bank engages with a customer. A bank sells its services in the present and organizes itself to be able to carry out this task as effectively as it can. To be able, however, to continue selling services to customers, it needs to be concerned not just with the present but with the future as well. The bank, if it is to be foresightful, is subsidiarily aware of the future while focally engaging in the present [10]—it is aware of the fact that it ought to be able to continue being attractive to customers in the future, while serving them in the present. While engaging in its primary task, it is unobtrusively adjusting its service to carry on drawing in customers in the future.

This is what Ingvar [11] means with the much-quoted expression “memories of the future”. Actors anticipate the future and prepare mentally for it in the present. If I am going for a job interview I can normally anticipate some questions. That is, I can picture a series of questions in my mind and, should these questions be asked, I will be well prepared to answer them. Similarly, while executing its primary task, an organization can anticipate certain developments and start preparing for them now. Ethnographic research has shown that photocopy repair technicians go about their work in a way which indicates that, while they are attentive to the machine at hand, they are mindful of the implications of their repair work for their standing in

the community of technicians and for their relations with the customer in the future [12]. Action is undertaken in the present with an eye to the future.

To return to the example of the bank, the way a bank sells its services in the present is conditioned by its past, which sets limits to what the bank can do in the future. This is the reason why futurology – merely speculating about the future – will not be good enough for organizations: anything may be possible in theory but the space of possibilities is rather more delimited in practice. For possibilities to be converted to probabilities, the history of the organization will have to be taken into account. In so far as all actors are conditioned by the past – that is, by the particular trajectories they have historically followed — what is possible in the present and in the future cannot ignore what has gone on before — social systems have memory. Presumably this is what Whitehead had in mind when talking about foresight being rooted in deep understanding.

An actor is foresightful when it has the propensity to act in a manner that coherently connects past, present and future [13,14]. At an elementary level, this happens when an organization forecasts, for example, demand for next year and adjusts accordingly its policies (e.g. production capability, prices, marketing campaign) in anticipation of the new demand. Forecasting techniques tackle this sort of problem rather well. For this simple form of foresightfulness to be effective, organizations need to have a memory in which past incidents are recorded, and to have deciphered certain relations between the items stored in memory, which enable the organization to anticipate future incidents.

A second, more complex, way of relating past, present and future is for an organization to hypothesize that certain events will take place in the future and work backwards to the present state to decide what it would need to do should these prognostications come true. It is a form of “what, if” analysis.

Thirdly, an organization develops the background skill of foresightfulness when it is shown that, through its actions, it treats time as a stream, namely when it forges a coherent relationship between past, present and future or, between memory, attention, and expectation respectively [13,14]. The pitfall for organizations here is threefold. Too heavy an influence by the past results in incapacity to see what has changed in the present and what is the likely shape of things to come. This is a problem inherent in bureaucratic organization. The latter tends to perceive the world predominantly in terms of its own cognitive categories. The world may be changing but the cognitive system underlying bureaucratic organization, a system that reflects and is based on past experiences, changes slowly.

Too much concentration on the present task makes the organization unappreciative of all the small changes that are taking place in the wider environment. Van der Heijden [7] mentions a major company in the mainframe computer industry in the 1980s that had found it nearly impossible to notice the huge changes that were taking place in the computing industry. They were very capable of forecasting demand for computing power (tellingly, expressed in “millions of instructions per second” – a key term in the mainframe business) but unable to work out the form the market was slowly taking before their own eyes (i.e. the emergence of distributed computing).

And too tight a focus on the future risks making the organization a victim of

fashions. As Mintzberg [15] has pointed out, moving in and out of diverse markets, following the fashion of the day, without properly considering the organizational capabilities a firm has historically developed, may lead a company to reckless investments. Diversifying into new businesses should not be a mere exercise in linguistic redescription (“reinvent your business”) but a balanced consideration of a firm’s capabilities. ‘Knowing thyself’ is as important as ‘dare to be different’.

If thinking in timestreams is a prerequisite for developing the background skill of organizational foresightfulness, what exactly does “thinking in timestreams” involve? Commenting on the ability of several eminent US policy makers to think in timestreams, Neustadt and May [16] point out the following:

“Thinking of time in such a way appears from our examples to have three components. One is recognition that the future has no place to come from but the past, hence the past has predictive value. Another element is recognition that what matters for the future in the present is departures from the past, alterations, changes, which prospectively or actually divert familiar flows from accustomed channels, thus affecting that predictive value and much else besides. A third component is continuous comparison, an almost constant oscillation from present to future to past and back, heedful of prospective change, concerned to expedite, limit, guide, counter, or accept it as the fruits of such comparison suggest”.

The key issue in this definition is the organizational ability to read the environment – to observe, to perceive – to spot subtle differences. Such ability is conditioned by the way the past is perceived and by the sensory alertness to spot departures from the past and fresh developments in the present. Notice that, according to this view, what is important is not predicting what will happen but being more prepared to engage with whatever may happen. Just like although some of the questions I had imagined for my job interview were never asked, I was nonetheless better prepared for the interview, so an organization, by envisaging “alternative pathways to the future” [7], expands its area of vision and sharpens its ability to perceive differences. In other words, foresightfulness becomes a systemic capability, as opposed to being an activity for the experts alone, to the extent that the organization institutionalises a process of collective inquiry and learning [17–19], whereby it actively seeks to connect memory and expectation with present attention. How this process is practiced and organised, with what results is, partly at least, an empirical question, which is explored in this special issue of *Futures*.

All papers included here explore the notion of organizational foresightfulness. They were initially presented at the First International Conference on Probing the Future: Developing Organizational Foresight in the Knowledge Economy, which was organized by the guest editors at the University of Strathclyde, Graduate School of Business, in Glasgow, between 11–13 July 2002. The papers were subsequently reviewed and revised for this special issue.

In his paper “Can internally generated futures accelerate organizational learning?”, Kees van der Heijden, one of the most distinguished exponents of “scenario plan-

ning” worldwide, reflects on the value of scenario planning for organizations. Scenario planning, he argues, enriches the language of an organization to deal with the future and sharpens its perceptual skills so that more skilful action by the organization within its environment becomes possible. The author describes the four reasons for the use of scenario planning within organizations and urges managers to be clear about which one is appropriate for their organizations.

R. Bradley MacKay and Peter McKiernan, in “The role of hindsight in foresight: refining strategic reasoning”, explore the relationship between foresight and hindsight. If, as we said earlier, foresightfulness involves, among other things, bringing memory to bear on the present, the way hindsight is used is critical. This paper promotes the use of counter-factual analysis of historical data to reveal how past thinking alters our ability to understand the future. Counter-factual analysis involves looking at history and asking ‘what if’ questions. In essence, it is scenario planning applied to the past. MacKay and McKiernan suggest that the dynamics of this process, and the nature of the alternative pasts the exercise creates, can be used to determine how to overcome, or at least reduce, the effect of psychological biases within hindsight on futures creation. These biases tend, the authors suggest, to make the future a continuation of the past rather than a more inventive inspirational place to aim for.

The notion of hindsight is prominent in Maria L. Nathan’s analysis of the Columbine Crisis, an act of high school student violence that occurred in the USA in April 1999, and left 15 people dead. Drawing on Weick’s [20] notion of “sensemaking”, Nathan investigates the critical relationship between past and future, and explores how the school and its diverse external stakeholders used their understanding of the terrible tragedy to learn and prevent similar crises from occurring again. The link between hindsight and foresight is important, she notes, for the past is looked upon with a prudent regard for the future. The wisdom of the hindsight/foresight link, observes thoughtfully the author, is accepting the imperfection, yet trying to rise above it. Using the past with foresight is the best we can do in an imperfect world and, in that sense, the past is potentially prologue to a better (and in this case, safer, future).

In high-velocity environments, proactiveness is important. How can organizations anticipate important shifts in the environment and what can they do once they occur? This is the central question explored by Sandro Mendonca, Miguel Pina e Cunha, Jari Kaivo-oja and Frank Ruff in their paper “Wild cards, weak signals and organizational improvisation.” Wild cards are descriptions of occurrences that, although assumed to be improbable, they could have huge consequences for organizations, should they take place. For the authors, managing wild cards is the most challenging issue in future studies and they set out to provide a “wild card management system”, which consists of two components: a weak signal methodology and organizational improvisation. The first component aims at identifying wild cards before they occur. The second component deals with the management of unanticipated events once they have occurred. Surprises will always hit the organization, the authors argue, and what is important is for organizational members to be empowered to detect and deal with weak signals through legitimate improvisation. Detecting centrally weak signals

is not enough: it is also important to act upon them in a way that makes use of individuals' local knowledge and adaptive capacity.

High-velocity environments are also the focus of the paper by Laura A. Constanzo, "Strategic foresight in a high-speed environment". Drawing on a rich case study of how a top management team decided to launch an Internet bank, Constanzo shows that the development of organizational foresight is a learning process that takes place within the bounds of a broad vision. The future is enacted, argues the author, through probing and learning – conducting small-scale experiments, taking bold action, and muddling through. In dynamic environments there is not even time to think about the future, only to act and be prepared to revise your action, depending on outcomes. A future-oriented organization must be nimble, communication-rich, and experimental. The future is co-created through innovative action.

While peering into foresightful organizations is no doubt instructive and useful, it is enlightening to explore also foresightlessness – the lack of foresight. Drawing on several in-depth interviews with executives from MNEs currently operating in China, David M. Reid and Stelios Zyglidopoulos explore, in their paper "Causes and consequences of the lack of strategic foresight in the decisions of multinational enterprises to enter China", what caused the foresightlessness exhibited by several MNEs in their strategies to enter the Chinese market, and outline the consequences. The lack of foresight is attributed to two factors: failure of understanding and failure of anticipation. Failure of understanding included, above all, the perceived need not to be the one to miss this 'lifetime opportunity', which led to competitive isomorphism and a rush to enter the market without much analysis of the true market size of this huge country. Failure of anticipation – an over-simplistic view of the likely problems to be encountered — resulted in badly judged investments which contributed to oversupply issues, rushed partnership decisions, and inappropriate marketing decisions. The situation, claim Reid and Zyglidopoulos, was made worse by cultural and managerial arrogance about the inevitable uniqueness of the Chinese economy and society.

What makes organizations lack foresight and how might this be addressed is the topic of the final paper "How foresight creates unforeseen futures: The role of doubting" by Deborah A. Blackman and Steven Henderson. The underlying premise of the paper is that, to avoid unproductive futures, organizations must spend more time attempting to refute current mental models and less on information gathering that is, in any case, subjected to those same mental models. Without this shift in emphasis, reflection on new information is, the authors uphold, too dominated by mental models that encourage organizational closure and hence futures that are in discord with the future. To prevent organizational closure, Blackman and Henderson introduce two notions of doubting – single-loop doubting and double-loop doubting - which help keep the organization open to surprise and novelty.

Key concepts used by the papers included in this Special Issue are those of sense-making, strategic conversation, improvisation, organizational knowledge and learning, complex adaptive systems, and mental models. A key issue is the speed of turnover of the hindsight-foresight relationship, or rather the time lag between inventing the future and reflecting upon it. The reasons why that turnover needs to

be of a certain speed (Costanzo), why that relationship might be bounded (MacKay and McKiernan, Blackman and Henderson, Reid and Zyglidopoulos) as well as what events in the environment might trigger its closer examination (Nathan) are considered. As one might expect, scenario planning features strongly in the papers. Van der Heijden looks at the different purposes scenario planning can serve. He comments on the frequency with which organizations embark on the exercise without being clear as to what the organization is trying to achieve. MacKay and McKiernan use scenario planning in a ‘back to the future’ mode by introducing the concept of counter-factual reasoning, which, they suggest, allows the surfacing of psychological bias that might affect any imagining of the future. Finally, Mendonca et al introduce the notion of wild-cards into scenario planning as way of preparing for radical change.

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