Strategizing Under Uncertainty

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Abstract

The business strategy field covers business practice and academic research - but the two are not strongly related. A history of the topic is presented and two views are contrasted. One is the academic discipline’s view that strategizing is the rigorously driven pursuit of optimal performance. The other, a practitioner’s view, sees strategizing as addressing the “What do we do now?” question, that is ever-present as business strategists inhabit uncertain situations. We follow Knight’s intuition that profit only arises as strategists engage real world uncertainties through their firm’s practice.

Keywords

strategy, strategizing, uncertainty, judgment, practice, constraints, entrepreneur, profit, Carl von Clausewitz, Frank H. Knight, Edith T. Penrose, Herbert A. Simon.
Introduction

Business strategy is a field of management practice and of academic research and its history reveals the tension between them. The research field developed after WW2 and quickly rejected historical methods in favor of rigorous quantitative methods. The results have not proven very useful to managers who turned, instead, to consultants who continue to develop an impressive range of 'strategic tools' that academics have generally disparaged. A review of the strategy literature shows researchers have expanded the variety of sub-topics to the point the academic field appears disorganized, even chaotic. Persistent attempts to uncover its defining problematics, methods, and concepts have failed, and some feel it is time for something completely different.

A different approach can be based on the ideas of von Clausewitz, Frank Knight, Herbert Simon, and Edith Penrose that complement the present mainstream research agenda (see the bibliography). The overwhelming majority of mainstream researchers regard strategy as a plan or resource arrangement that maximizes performance or competitive advantage. They presume the knowledge necessary to make this approach work is available and computable. A different approach focuses on how strategists respond imaginatively to knowledge-absences. Strategizing is re-defined as the application of entrepreneurial judgment, complementing rigorous analysis. It is an imaginative form of organizational improvisation or bricolage. This approach is not really novel, it is more a matter of recovering what seems to have been forgotten about how real practice always takes place within an incomplete understanding of the world and action’s consequences. Rather than framing strategizing as rigorous computation this approach proposes five steps of entrepreneurial practice that embrace discovery, judgment, persuasion, practice, and learning.

The Strategy Field's History

As strategy textbook authors are quick to point out, strategizing is an ancient topic. Prior to WW2 the business strategy field was dominated by its historical methods and senior managers' 'war stories'. After WW2 and the successful application of rational planning methods, 'strategic planning' spread through business, often led by consultants though increasingly supported and theorized in business schools. But there
was no practical difference between strategic decisions and other types of managerial decision. Strategy was defined by decision content, not process, and became synonymous with 'long-term' or 'big'. Strategic decisions also implied a 'relevant environment' that was difficult to identify. The research literature reveals increasing anxiety about these definitions because it is obviously difficult to be sure what part of the environment is 'not relevant', plus major changes often start out with precedents that seem small at the time. It is tricky to know any action's consequences ahead of time. Wrigley's use of chewing gum as advertising giveaways in its cereals being one example, it put them into a new line of business; Post-It notes being another. Ideas like 'long-term' and 'big' miss the happenstanzes and opportunism of business life; Freddie Laker's involvement in the Berlin air-lift and Steve Job's visit to PARC for example.

There was some relationship to the military strategic tradition, and some differences too. Von Clausewitz clearly subordinated military strategy to the nation's politics, 'war is politics by other means'. Thus military strategizing was external to the war-operation while tactics were within it. The private-sector firm is likewise constrained by external 'stakeholders' but its managers generally have more strategic latitude and responsibility. But classroom notions that a firm's environment could be understood well enough for real-world 'strategic' resource allocations to be computed rigorously misses what is trickiest and most consequential about senior management's choosing - which part of the world and what resources? Child's influential 1972 article showed real business owners have considerable freedom of 'strategic choice' (Child, 1972).

The beginnings of a more formal theoretical approach came with Chandler's analysis of the relationship between 'strategy' as the firm's chosen market engagements and 'structure' as its chosen administrative organization (Chandler, 1962). He presumed a functionally efficient 'fit' between environment and firm, between strategy and structure, a view that is so taken-for-granted today that it is difficult to find any other definition of business strategy. The EIF (external-internal-fit) paradigm dominates the strategy textbooks - for instance, as in the external assessment of threats and opportunities and the internal assessment of strengths and weaknesses (SWOT). The EIF paradigm was considerably elaborated as post-WW2 firms became larger and more complex, often by acquiring dissimilar operations and effecting vertical and horizontal integration, alliances, and other inter-firm relations. The resulting portfolio of separable operations opened up additional strategic questions about their governance, and managing the
funds flow and risk allocations between them. Consultants responded by developing strategic tools like the BCG, GE, and Ansoff matrices.

The EIF paradigm was severely jolted by Porter's 'competitive strategy' analysis - though the majority of strategy texts leave EIF in its dominant place, untouched (Porter, 1980). Porter's thinking derived from monopoly theory and industrial organization (IO) economics and paid little attention to the EIF notions of fit or efficiency. Rather it focused on protecting the firm's rent-streams (above average monopolistic returns) from those economic actors able to disturb or appropriate them. Though inter-firm rivalry is considered, Porter's is not an industry analysis, as many assume, since four of the players represented in the familiar 5-box model are actually outside the focal firm's industry. The underlying presence of market power ('force' in Porter's terminology) showed that firms are not the passive adapters implied in the EIF analysis but can push back aggressively against those actually eroding their rent-streams or threatening to - with re-pricing, R&D, new products, negotiating, and signaling, for example. Porter summarized his competitive approach by contrasting (a) differentiation, the rent-protection paradigm, and (b) cost leadership, restating the EIF paradigm - though he noted later his 'generic strategies' analysis was an 'afterthought' (Spender & Kraaijenbrink, 2011). The shift from efficiency to rents was also in tune with changing politics, given the Reagan and Thatcher attitudes to Anti-Trust legislation, which was rolled back to give monopolists freer rein.

By the end of the 1980s strategy researchers were looking for ways to explain how firms might acquire and protect their rent-streams in dynamic competitive situations (Rumelt, Schendel, & Teece, 1991). The EIF paradigm disappeared almost completely from the research journals, leading to a curious split between what researchers were thinking about (rent management) and what students were being taught (EIF). One of the principal conjectures about rent seeking was that a firm's rents would derive only from its ownership of those valuable, rare, and inimitable (VRIN) resources that could be integrated into the firm's operations, a view labeled the RBV (resource-based view). Missing, though, was any explanation of how firms might (a) acquire VRIN resources without their rent-potential being stripped in the factor markets or (b) transform these resources into economic value - a restatement of the 'strategy' problem in RBV terminology. Answering either question would escape the tautology that valuable resources beget value - and we know they are valuable only because they beget value. Wildly popular among strategy academics, in spite of being little supported by empirical
research or evident managerial implications, the RBV provoked a second conjecture, sometimes dubbed the KBV (knowledge-based view) (Kraaijenbrink, Spender, & Groen, 2010). The intuition was that the firm’s ‘learning’ can produce new rent-yielding VRIN resources internally, where they will be shielded from market forces and be inimitable.

The popularity of these two conjectures meant that strategy researchers converged on ‘organizational learning’. Missing was a theory of what was being learned and by whom or how it translated into competitive advantage or value. Does the organization learn by building a more effective inventory of 'organizational routines', or is it only people who learn? Theorists also borrowed earlier notions of firms as 'bundles of resources, competences, and capabilities'. There was greater attention to the dynamics of learning with notions like 'dynamic capabilities' (DCs), resources that would enable firms to generate new rents when changing circumstances eroded their existing rent-streams. Missing, as with the RBV, were appropriate ‘theories of the firm’ as comprising resources, competences, or capabilities - dynamic or otherwise.

In recent decades this strategic discourse was increasingly re-shaped by microeconomics. The shift to the IO economics paradigm made connections with post-WW2 microeconomics research, especially those responding to Coase’s 1937 questions about the 'nature of the firm': "Why do firms exist, why are their boundaries where they are, why are their internal arrangements as they are, and why is their performance so varied?" Any answers to these questions would have major implications. Consequently researchers began to incorporate transaction cost analysis, principal-agent theory, information asymmetry, moral hazards, contracts, and allocation of property rights into the strategy discussion. There was empirical research into vertical and horizontal integration, inter-firm alliances, mergers and acquisitions, IPOs, networks, and alternative modes of financing and governance. But countering the shift towards microeconomic thinking was renewed attention to the EIF paradigm and strategizing as planning for the long-term. This revitalization focused on the intra-organizational processes of strategic plan formulation (strategy process, strategy-as-practice, case analysis), their behavioral and psychological aspects (top management teams, HR strategy, incentive and pay schemes, organizational communication, knowledge management, behavioral strategy) and on improved environmental analysis (business intelligence, data mining, scenario planning, risk analysis). There was also a pushback against the RBV and DC focus on resources alone, with greater attention to
the strategic problem as that of resource integration and combination - land, labor, and capital in Adam Smith's formulation, or the different kinds of knowledge evident in the value chain.

What Problem? What Answer?

The sheer number of strategy authors and the variety of their initiatives led to deepening confusion about business strategy's nature and the problems it addresses. Mintzberg listed 10 relatively distinct schools (Mintzberg, 1990). At the same time the consultant's inventory of strategic tools expanded, especially after the introduction of the Balanced Scorecard in the 1990s. But no tool met all needs. Researchers complained the field was fragmented and looked urgently for its defining characteristics and overarching concepts. There were parallel analyses of the field's history to uncover its persistent themes. All to little avail, the confusion grows apace. While strategy teaching has changed little, with the EIF remaining dominant, researchers have left the EIF's simplicities far behind. Today we have a rich variety of academic strategy discourses; (a) economic, international, political, psychological, and institutional theories, underpinned by models of human decision-making - and (b) mathematical, game theoretic, options theory, small world phenomena, chaos theory, emergent, biological, agent-based, and neuro-scientific - and more - associated with formalizable systems. Strategic Management Journal puts out 13 issues a year and the list of business strategy journals, both academic and professional, expands relentlessly.

Looking over our core literature, it suggests the meaning of 'strategy' can be distinguished from managerial decision-making in general via one or other of the distinctions between (a) planning versus action, (b) big and long-term versus delegable, (c) efficiency and fit versus inefficiency, (d) rent protection versus inattentiveness to erosion, (e) focusing on VRIN resources versus those without rent-potential, (f) second-order VRINs (such dynamic capabilities) that can generate new rents versus inattention to learning and innovation, and (g) a handful of more recent structural, behavioral, institutional, and psychological process notions that revisit the planning paradigm. Competitive advantage, of course, can derive from any or all of the above and is an empty concept until the mode of advantage is specified. At the same time the literature admits a confusion of objective functions; profit or sustainability, certainly, but also measures of ecological or ethical performance, or social benefits such as
spillovers. There is no indication of the discussion converging on a coherent theory able to underpin the business strategy field as, for example, rational choice underpins economics - nor is there even a clear theory of the firm or its relation to strategy.

Given the confusion, some call for the ‘theory police’. But it may be more useful to take stock. To what problem is strategizing the answer? What makes the strategist's task non-trivial? The planning paradigm takes the strategic problem to be to reach the firm's goal as efficiently as possible. So data or evidence-based planning should shape the activity. The difficulty is computational, first data collection and analysis, then solve the problem and draft a plan; though note goal selection and plan implementation are both left out of the analysis. Strategic planning is at some conceptual distance from strategic practice or strategy implementation. Note too the variety of performance criteria - cost, direct or social, time, reliability, etc. But inasmuch as a suitable programmed computer can complete the strategist's task, it is ‘trivial’. Naturally strategy researchers see the field as distinctive and non-trivial; but on what basis? In the EIF paradigm the problem is to fit the firm's structure to its chosen markets. This requires gathering additional information about organizational structure and market segmentation, and is likely to be more difficult and ambiguous than a simple goal-oriented planning task. Plus the facts may trickier because they are dynamic and may be influenced by the actions of others.

In the IO-rent paradigm the information requirements are even more problematic. Which are the focal firm's rent-streams and can they be distinguished from the firm's fund-flows? The IO analysis also requires that the relevant actors - those able to disturb the firm's rent-streams - be identified and their market power determined. The power-use situation is further complicated by the different timings involved; contractual arrangements with customers and suppliers can be quickly managed, the signaling and price-setting rivalry against others in the industry and signaling to intending entrants is longer-term, even longer-term is the development of 'substitutes'.

When it comes to the RBV it is easy to talk abstractly about VRIN resources but can they be disentangled from the firm's other resources and related to a rigorous analysis of the firm's situation? Plus what is a resource’s value without the knowledge of how to use it? The analysis is even more difficult when it comes to dynamic capabilities (DCs). How can learning be managed; who or what learns, and about what? In general, then, even if today’s strategic analyses can seem workable in the abstract they get difficult in practice - perhaps impossibly so - and so have little appeal to the business community.
Our discipline seems to be putting considerable effort into mind-games with these abstractions, such as DCs, agent-based modeling, and game theory, but failing to persuade practitioners of their practical merit.

In the background is a single over-riding methodological metaphor - the image of the strategist viewing the firm's situation objectively, gathering definitive information and processing it rationally to a rigorous and actionable conclusion. This metaphor dominates our research and helps explain why our journals are packed with quantitative empirical data that probes for discoverable causal relationships between outcomes, as the dependent variable, and situational information as independent variables. Typically the data are drawn from multi-firm samples, presuming firms are comparable rather than unique.

There are plenty of reasons to doubt this metaphor's usefulness. First, the data implied may be difficult to acquire and to compute. Second, the relationship between the data and the objective function may not be fully known. The variances explained may be low. Third, the different timings may be important and unknown. Simon's notion of 'bounded rationality' looms over the discussion. No one really thinks of business people - or academics - as 'perfectly rational'. But if the strategist is 'boundedly rational' this should probably figure somewhere in the analysis. Yet it does not. No doubt many think these issues unimportant. Our discipline's textbooks and research articles are generally written as if the data are available, meaningful, and computable; for these authors, theory is the thing in question, the data to be computed is not - and thus practice does not figure at all.

A Different Approach

Our discipline's principal research metaphor presumes rational decision-making in an objectively comprehensible situation. But bounded rationality (BR) throws this into doubt and, in truth, leaves little of the mainstream literature standing. What if strategy actually indicates those situations that do not fall under this dominant rationalist metaphor? How then to proceed? BR is generally more cited than understood, in part because it points towards an absence of rationality and says little about "What next?" or, as Lenin asked, "What is to be done?" Yet this 'not-knowing' is our normal condition, endemic uncertainty as we wonder what to do next. Can we ever be certain about
acting in the world? In the security of the classroom, it is fine to imagine knowing everything and acting rationally, but real-world practice exposes us to realities we never know for certain. We are exposed to surprise.

There is a connection between ‘uncertainty’ as Knight defined it, BR, and profit. Knight argued real profit (rather than accounting profit) can only be generated by engaging uncertainty, by acting intentionally ‘under uncertainty’ through the application of judgment. Because perfect markets are perfectly competitive they admit no judgment nor is profit available in them - yet profit is the whole point of strategizing and competitive advantage. So is strategizing the process of (a) analyzing knowable situations, or the very different matter of (b) helping people towards value-adding profit-seeking practice when the situational analysis is inconclusive? Under uncertainty the situation cannot be known objectively, consequently the analysis shifts from the situation and towards the actor - and towards her/his entrepreneurial and imaginative responses to knowledge-absence. Simon argued BR is a state of uncertainty deriving from our inability to collect enough data to be certain about our situation, or to compute rigorously the data we have. Drawing reasoned conclusions in BR situations means introducing something else beyond the situation's incomplete description - the data. What is this something else?

One of Simon's early statements about his BR project was “Two persons, given the same skills, objectives and values, the same knowledge and information, can rationally decide only on the same course of action. Hence administrative theory must be interested in the factors that will determine with what skills, values and knowledge the organization member undertakes his work” (Simon, 1946:64). In other words, what has to be added to the facts to make the firm manageable? Administrative Behavior is an exploration of the idea that under BR the something else to be added was ‘values’ and with that additional input, the conclusion would determine practice, the firm would be manageable. The implication is that real-world strategic analysis should focuses on these supplementing values, the entrepreneurial vision needed in addition to the data-intensive processes mentioned above, more so than on the situation's facts. Indeed the values also determine the value and practical meaning of the facts and so have strategic and logical priority over the data. Rather than the numbers determining the practice, it is the values and meanings the actors attach to the numbers that matter. This was Penrose's great insight and led directly to her theory of the growth of the firm (Penrose, 1995). Strategy means little absent uncertainty and profit results from
judgment. Under certainty the data drive the action and the strategic task is independent of the strategist's values, and so trivialized. Under uncertainty, in contrast, strategizing turns on the values the strategist chooses to impose on the uncertain situation. Strategy is personal and entrepreneurial.

There is a risk of tautology here, for to suggest that what is non-trivial about strategy derives from the impact of the strategist's values may do no more than substitute one unknown (strategic choosing) for another (personal values). Values may well be beliefs and ideals, guidelines to behavior, but their key characteristic is that are freely chosen by the actor in a situation that is otherwise under-determined, the situation allows the actor a measure of choice. The results are not externally determined but are acts of personal (strategic) judgment. Most importantly, judgment’s application is specific to the situation. If values applied generally they would be just another kind of data driving the conclusion. They are values precisely because their application is not given or externally determined, they are instances of personal choice that particularize the interaction of actor and situation.

Strategy is thus the antithesis of what is general about either situations or actors. It is bound up with the challenge of acting 'mindfully' in situations whose essential character is their one-of-a-kind uniqueness or, more specifically, situations that are open to being made unique by the strategist's choice. Thus the notion of strategy dissolves as we move from the unique particularities of practice under uncertainty towards the bland generalities of theory. Strategy deals with how human beings pursuing their individually chosen goals identify what is specific to their situation, those features of the situation that are material to their action but can neither be generalized, and so covered by theory, nor ignored. There is a connection to Polanyi’s notion of tacit knowing; strategy points directly to the tacit dimensions of human action rather than to its explicit rational dimensions.

Strategic judgment particularizes the firm's situation. We are not comfortable analyzing uniqueness for we normally analyze situations by bringing them under some covering law so that they can be described as an instance of a general relationship. But having dismissed the conventional metaphor of strategizing as an objective analysis of the strategist's situation, the search for an appropriate covering law, we frame it here as a particular choice or judgment in a lived situation bounded by the (a) strategist's sense of identity (the source of her/his particular judgment), (b) her/his intention (the firm's
chosen strategic objective), and (c) those aspects of the situation that are determined (constrained) and are not open to being freely chosen. The laws of physics are examples of the last, as are the legal apparatus governing business or the inventory of some scarce factor of production.

There are a couple of things going on here. One is that these dimensions of strategic constraint - values, intentions, facts - are of multiple natures, axiomatically distinct from each other, chalk and cheese. So strategic judgment is both synthetic and particularizing as it brings these contrary-dimensioned values, ideas, and information together into reasoned action. Second, a very different model of the reasoning individual is implied. This is the crux of this article. The conventional metaphor sees the strategist as Rational Man, having only powers of logical computation, being able to process data rationally (even limitedly so). The model of the individual who has judgment enough to act under uncertainty is very different. This individual must have powers of judgment that complement her/his powers of reason when these are overpowered by knowledge-absence. This switch of models of the individual goes back to Simon's much quoted "There is nothing more fundamental in setting our research agenda and informing our research methods than our view of the nature of the human beings whose behavior we are studying" (Simon, 1985:303).

Strategy, then, means little in an analysis based on rational man for the problems strategy poses call for a quite different model of the individual that is, of course, completely familiar to us from our own experience as we negotiate our way through a life of under-determined situations. This alternative model of the person - the one that gives strategy its brutally distinctive meaning - is actually that adopted in the 17th century by the Enlightenment philosophers, especially John Locke (Dunn, 2003). For them, rationality is always complemented by entrepreneurial judgment. Strategy can then be understood as a matter of personal judgment about acting in under-determined situations. Note it is also ethically burdened since it concerns actions that affect the lives of others. But how can we talk informatively about something as vague as strategic judgment?

The switch of individual at the base of strategy research changes the uncertainties considered. Probing these sheds light on the nature of acts of judgment - rather than follow the money, we must follow the practice. Our discipline's conventional metaphor is positivist and presumes a rational knowing person in a knowable world, the
disciplined scientist confronting a logically constructed world methodically; the market researcher confronting a market segment using analytics. The only kind of uncertainty positivism admits is 'ignorance' of what, in principle, can be known. This metaphor drives scientific practice, what we mean by disciplined research. But BR shifts the discussion into a different epistemology that admits different kinds of uncertainty and uncertainty-resolving practice. First, people are no longer generalized, for each person's values and judgments differ. Values mark a person's identity. Identity is specific, not general. As strategy is about ethically burdened action in an uncertain world it must be humanized not abstracted from the world. Strategy is inevitably permeated with human values.

Second, people differ so the world of human action is social, dynamic and under-determined, not stable and discoverable like passive Nature. Thus socially generated uncertainty or 'indeterminacy' is always present as people interact and impact each other's lives. This is the founding metaphor for game theory. Indeterminacy only collapses into 'ignorance' when the actor's knows the opposing player's thinking completely - which also presumes players know their own strategy completely and are secure from surprise. But this formulation is seldom relevant to real-world action. There strategizing practice revolves around either (a) acting to insure against specific others’ imagined or possible actions or (b) negotiating with them to reduce the mutual indeterminacy, practices that are very different from those of researching Nature to resolve ignorance.

Third, under BR people's judgments and their views of the world differ. The resulting 'incommensurability' is a reflection of how the limited knowledge we have of the world is inconsistent, of different types. Often this is because what we feel we know stands on different axioms, as IO analyses differ from equilibrium analyses, as individual learning differs from organizational learning. Dealing with incommensurability means bringing inconsistent ideas together into new combinations, along the lines familiar from Schumpeter. This is the most fundamental kind of learning. Ignorance shows the accumulation of facts is one type of learning. Indeterminacy suggests 'getting to yes' is another type of learning about the world because it stabilizes the field of social action. But the most profound forms of learning are transformational and lead to new insights into everything that was known before. It follows that the first level of strategic judgment lies in choosing whether to view the uncertain situation as a matter of (a) ignorance, or (b) indeterminacy, or (c) incommensurability. Note judgments are always about
something specific, intentional. Judgment cannot float free of practical engagement with the world. It is specific to a situation.

To sum up this section: shifting the underlying model of the human individual from rational man to Lockean man leads to two distinct meanings of strategizing. One presumes a rational individual doing her/his best to objectify a situation, gather data about it, and compute plan a way to reach a chosen goal. The other takes Knightian uncertainty (and BR) seriously and presumes analyzing action as a matter of personal judgment synthesized together with reasoning as rigorously and objectively as possible. The second presumes an individual with complementary powers of reasoning and judgment.

Given the nature of business and the pervasiveness of uncertainty, it may be difficult to understand why our discipline has devoted so much effort to the first when the presuppositions adopted make it more or less irrelevant to practitioners. The story here is that rationalism became a powerful political and cultural force after WW2 and eventually pushed its way into the social sciences. Business schools, in particular, were 'politicized' by the rationalism we now associate with neoliberalism through the impact of the 1959 Foundation Reports. The result was to prefer positivist research methods over all other kinds of social enquiry (Khurana & Spender, 2012). There is a strong practical argument to be made that strategizing deals with engaging uncertainty and knowledge-absences in the pursuit of added value, the epitome of entrepreneurial judgment, so it suffered grievously in the political process. But the effects were long-term (strategic from the BSchool point of view) for researchers looking towards their career interests were obliged to ignore Knightian uncertainty and, along with that, the very entrepreneurial aspects that make strategizing non-trivial. These are our discipline's self-inflicted wounds and irrevocably separate strategy researchers from strategic practitioners.

A final nuance is that the strategic analyst's role depends on the model of the individual the researcher adopts. Note this is an act of judgment for the researcher, as Simon indicated. The rational man approach presumes objective theory of the situation can be developed and that every right-thinking strategist will then follow its dictates. Rational man is prioritized, lionized and handed the strategic initiative. The second approach has the analyst in a quite different and humbler role. It presumes strategic choice remains the strategist's responsibility and that the analyst's role is to support rather
than control her/him by developing prescriptive theory. The analyst contributes by outlining a strategizing process that clarifies, as far as possible, the particular judgments the strategic executive must make in her/his particular situation. The strategist is humanized - and judged accountable. Note this process has nothing to do with that explored by writers on 'strategy process' or 'strategy-as-practice' for those literatures are firmly embedded in the rational man tradition and pay no attention to human coping with Knightian uncertainty. But what would a useful approach to strategizing under uncertainty look like?

**Engaging the Unique**

This section may feel unfamiliar because it deals with engaging a situation's uniqueness, the specifics on which the strategist's judgment acts. Instead of arriving at a 'strategic decision', trivial under certainty, the strategist must arrive at a judged choice under uncertainty, selective, subjective, and personal. The question then is how is this can be justified, since it is not a matter of logic or objectivity. In practice, since the strategist's world is uncertain in all of the three ways suggested - replete with ignorance, indeterminacy, and incommensurability - the strategist must construct an acceptable reasoning that supports her/his judgments. Borrowing the practice of law, justifying a choice means making a competent case that convinces the others involved. This might be considered a story or a language from within which the choice seems perfectly logical along the lines "If you take these things into account ... the action seems perfectly sensible".

The construction takes several steps (Spender, 2014). First - Step 1 - the strategist must discover the degree or manner in which the situation (knowledge-absence chosen) is under-determined and open to her/his judgments. This is the strategist's 'option space'. The positivisit way of thinking is that independent variables must fully determine the strategist's decision. This article's way of thinking is that real-world choice is always constrained by some 'facts' but never to the point of being fully determined. We always have choices, even under the most constraining circumstances. It follows that the facts to be taken into account must be selected, they are never conclusively self-evident and beyond doubt. They are not generic features of the situation for they depend on the strategist's choice of objective. What is germane to one objective may be irrelevant to another. What must be attended to? Simon argued
that managerial attention was the organizational resource in shortest supply, so the
nub of strategic choice lies in knowing what to pay attention to and what to ignore, on
the presumption that much is irrelevant, but not everything.

In the private sector some of the matters over which the business strategist has little
choice may be government regulations affecting the firm's good and services, patents
and other forms of valuable knowledge that the firm has no access to, labor contracts
made on an industry-wide basis, constraints to the supply of the relevant factors of
production, many costs, such as transportation costs and taxes, and so on. Each
situation is likely to be shaped by different constraints. There cannot be an overarching
'theory of the situation' or 'theory of strategizing' so long as there is no complete model
of the world, so long as uncertainty prevails. This leads to appreciating that each firm
or, rather, its business model, is unique and that no two firms can be the same
strategically - nor occupy the same socio-economic space.

Obviously there is a question about how many constraints need to be taken into
account, for the list threatens to be endless, almost anything might matter. The strength
of strategic consulting tools is their confidence that the strategic problem can be boiled
down to a few essentials; strengths, weaknesses, opportunities and threats (SWOT) or
cash cows, question marks, and stars (BCG) or, in the case of the Balanced Scorecard
- matters financial, marketing, internal, and growth. There is good reason to doubt the
wisdom of simplifying things to this extent, for a lot of the salient details are likely to get
squeezed out and some of them may later prove strategically crucial. But every
analysis begins by making simplifications. Thus there is no mention of regulation or
politics in Porter's analysis, no mention of supplier credit or external funds sources in
the BCG analysis, and so on. What to ignore, what to take into account? Empirical
research by the present author suggested most business models address around a
dozen strategic issues (Spender, 1989). It is a practical matter of sensing when the
makings of a reasonable case are in place and the more urgent need is to conclude, to
move to closure.

With an inventory of constraints in place the strategic opportunity space is not
adequately framed until the nature of each constraint has been explored. This is Step
2, exploring whether the specific constraint is a matter of ignorance, of indeterminacy,
or of incommensurability. In practice the constraints to a firm's strategic maneuvering
are seldom known as brute facts, but always as matters open to interpretation and
manipulation. Constraints of ignorance can be shifted to the firm’s strategic advantage by applying its research powers. Perhaps R&D can have an impact, or 'data mining', or 'business intelligence', or 'industrial espionage'. The firm’s activity is here directed towards the 'what can be known'. But sometimes others, such as competitors or regulators, have put the constraints in place. These are not knowable in the same way, but can still be moved to strategic advantage by exercising the firm’s social powers, such as negotiating directly or indirectly with the others, including lobbying, signaling, bribery, and using well-connected intermediaries. Finally, if the constraint in question is a matter of incommensurability it might surface as a 'sense-making' challenge; "How do these facts or relationships fit together?" as Perry Mason reveals with a flourish or, more mundanely, the puzzles air-crash investigators struggle to solve. The strategist’s capacity to deal with incommensurability might be labeled intellectual power. Overall the strategist and the firm have various powers to act on or refashion their chosen knowledge-absence or strategic opportunity space, to address it proactively rather than be overwhelmed into passivity.

Step 3 is the raw act of arriving at a strategic judgment, and this cannot be theorized, of course, no more than it is possible to prove why a Picasso painting is the way it is rather than otherwise - even after the constraints of the materials, subject, and timing are appreciated. Nonetheless there are some useful things to be said about the act of judgment. Von Clausewitz wrote of personal preparation for military strategizing, deep study of military history and biography, study of the facts such as the terrain and the military resources available, but also of the need to clear the mind so that strategic insights can arrive. Some say "sleep on a major decision", or go for a walk to clear the head, and so on. There is the more subtle psychological preparation, sensing the time for choosing, checking the validity of the intentions behind the choice, and so on. Von Clausewitz was especially interested in strategizing as choosing the place, time and manner of engagement. Timing may well be everything.

With Step 3 the story or business model comes together and the language created becomes the means to justify the choice of constraints and how they are interpreted. With Step 3 comes innovation, bringing something into the world as a result of the practice that ensues. Any action on the world is an innovation, of course, that is the nature of human practice for we are agents and are constantly changing the world. But the current business focus is on changing the business situation to secure competitive advantage by acting proactively on it rather than simply adapting or responding to it as
competitors can. The most profound and advantage-yielding innovation strategists can generate is a new business model, a new way of adding value in the world. Its novelty may be modest, a new way of dealing with the same set of constraints (incremental), or more innovative, provoking an entirely new way of dealing with them (radical). But the most significant innovations arise from changing or repositioning constraints, especially those impacting others' business models (game changing).

With a coherent business model in place Step 4 follows and leads towards strategic practice. The ultimate test of strategizing is "Does it work?" The relationship between analysis and practice hinges on the possibility of an analysis that tests the business model's viability ahead of implementing it, before the strategist has to cross the Styx from reasoning to action, to commit resources irreversibly. So long as BR is taken seriously there can be no possibility of taking everything into account, no preparation can secure the actors from surprise. The doing is always different from the thinking about it. But like reaching closure and selecting the constraints to attend to, there comes that crucial point when the actor must 'jump in with both feet' and expose her/himself to the unconsidered. In business situations the rawness of this act can be ameliorated because most business activity is collaborative. Others can help. So the essence of Step 4 is strategic conversation with those others whose judgment might bear usefully on the situation, increasing the strategist's confidence without, of course, ever entirely eliminating the risk. The strategist remains responsible.

**Engaging Others**

With Steps 1, 2, 3 done, at least for now, and Step 4 in hand, the strategizing process focuses on the creation of the firm. The bridge between ideas and the real world is crossed by actualization. Instead of viewing the firm as a taken-for-granted command and control machine to be directed this way or that, this article treats it as problematic, something to be constructed in the strategizing process. It is a dynamic and tentative nest of collaborative practices - never entirely tidy, with elements of error and potential intermingled in the basic apparatus. Value is created in the world of practice, instantiated. Planning and thinking are fine, but the firm's purpose is added value and this only arises through its practices and their specificities. These have to be managed and strategizing is toward that end. The result is the firm and, as close as one can get to speak of its nest of activities, is a situationally specific language that embraces and
justifies the practices of those involved. The business model is a discursive life-space the firm's actors inhabit as they apply their skills and generate value. But who gets told what in this language?

The difference between analysis and synthesis has a huge impact on communications within the firm and in the network of those who can influence the strategist's choosing. There are the external agents indicated in stakeholder theory. There are the moneymen, customer action groups, and focus groups. There are the R&D people. There are the employees, especially valuable sources of judgment when adding value calls for skills in the transformation of inputs into outputs or dealing with customers' wishes. There are the lead users, open innovators, and market makers. All may have important judgments to contribute to the enterprise. The wise strategist resists the temptation that comes with responsibility, to cut her/himself off and hide out in isolation. Judgment is necessary to manage the delicate balance between being present for others as a leader, remaining in charge and responsible, and being a listener, open to others' opinions, being aware of what is going on in and around the situation being strategized. The judgments to be made about who and what to listen to are complementary to the process of promulgating the strategic choices arrived at. Who should be heard and who told? If everyone is told all there is to say that may undercut the position of other managers who also have to maintain positions of power in their relationship with their subordinates. Organizational communications, especially about strategy, matter greatly and interact with the patterns of power and authority that are essential to the firm's smooth functioning.

The difference between analysis and synthesis bears on communication. Given the strategist's primary function is to lead the firm towards engaging knowledge-absences and uncertainties in ways that result in added value, strategic communication has little to do with broadcasting conclusions or giving directions. The uncertainties chosen must be grasped and resolved if the firm is to hold together, function, and prosper. When the leader absorbs all the uncertainty those acting in the situation are aware of, the result may not be entirely beneficial. The leader's principal contribution is to shape the workplace - which includes the firm's network of external arrangements and distribution and purchasing channels - so that the remaining uncertainties can be engaged and resolved by those doing the work. No matter how thorough the leader's strategizing, there will be uncertainties remaining that can only be resolved as the work is being done.
But the worker's judgment and synthesizing capabilities must be applied in ways that reflect the strategist's choice of objective. On the one hand the experience of working is enriched when there are uncertainties to be resolved and judgments to be made in addition to completing the task. For many this marks the difference between empowering work and mind-less labor. But if too much of the uncertainty remains unresolved or too little support is provided, the work situation becomes overly stressful, discouraging, and maybe un-doable. On the other hand if too little uncertainty remains this may dull the subordinates’ work. They find little that engages their creative capabilities, whose exercise binds them into the activity.

Strategizing goes way beyond developing a plan of action to address a chosen objective. It is the core of building the social apparatus with which the strategist grasps and engages selected knowledge-absences that are only resolved through creative practice, and so yield added value. It is the vital core of the firm as the most important social apparatus we have invented to progress the human condition. Highly specific language is key to the firm as a managed set of inter-personal practices. The business model - as the firm's specific language - is the principal means to build the firm by communicating with those whose judgment and activities bring it to life. Direction and instruction can be contrasted against encouraging proactive creative engagement. Direction and instruction, especially when both necessary and sufficient to completing the task, positions the worker as the strategist's passive instrument, channeling the strategist's thinking - versus the different relationship implied when the strategist passes specific uncertainties to others to resolve, seeking their judgment in their resolution, to deal with uncertainties the strategist was not able to resolve. The one presumes a submissive authority relation, the other presumes respectful creative collaboration; and the non-trivial strategizing discussed here demands the second because the strategist cannot arrive at a full and final resolution of all the uncertainties arising from the knowledge-absences chosen. How is this collaboration of diverse judgment achieved?

Much of the literature on organizational communication presumes the firm is like an electrical network with instruction signals passed without loss through the administrative apparatus to individual work-roles that are thereby fully controlled - while accountability and performance signals flow back to the strategic nerve-center. The firm is envisaged as the rigorous solution to a communication system design problem. Strategy has little relationship to this metaphor. The distinction made earlier between
strategically trivial decision-making in circumstances in which full data is available and the non-trivial situations in which uncertainties are engaged, is paralleled by the distinction between instructions and the human communications that result in creative engagement. If the strategic task is non-trivial it follows the firm is more than a design problem. Rather, strategizing works by capturing the vitality of the firm’s participants, and thereby the firm gains the capacity to absorb and resolve uncertainty, and make profit. The firm is a group of creative people unified by a firm-specific language. They collaborate, applying their judgment to engage chosen uncertainties far beyond those that can be handled by the individuals alone - a movie production, perhaps, or an expedition to the Moon, or a modern hospital. The key to managing the distribution of uncertainties is not to pass them to others to deal with as they wish. To the contrary, the others’ judgment has to be harnessed and channeled towards the objectives the strategist has chosen.

It is useful to contrast mechanical or electrical communication - such as takes place between computers - with the broad range of human communications considered within the study of rhetoric. Machine communication depends on the presence or absence of a signal, of data. The meaning of the data is not at issue. Because of our bounded rationality and doubts about facts, human communication always concerns both data and meaning. Meanings are what we attach to data and managing them is as much of a challenge as is getting data. Human communication is generally less about data than about meaning, as when we argue in a bar about politics or listen to ‘talking heads’. Paying attention the distinction between data and meaning separates the strategic task into two complementary spheres. On the one hand there are Steps 1, 2, and 3 - discovery, applying judgment and getting to grips with an uncertain situation, selecting and creating the business model’s facts and meanings. On the other, Step 4, the process of drawing other peoples’ judging capacity into the firm by managing the meanings they attach to the data they consider in their work.

Rhetoric shows how meanings are managed, for they cannot be communicated as data. Ultimately meanings are what we create and add in order to make sense of the data we receive. As Aristotle told us, human communication has three parts or ‘modes’ that are incommensurate - logos, ethos, and pathos, the different types of human communication that reflect the different ways in which human beings know, understand, and debate meaning. Logos concerns communication that appeals to an audience’s rationality and objectivity and is the mode of communicating that works well
with data, when meanings are not problematic and can be taken for granted - time of day, number of points in a basketball game. Ethos concerns an appeal to the social relationship between audience and rhetor (leader/strategist) and draws people towards letting their meanings change. When an admired person speaks, we listen; we may be persuaded to think in a new way because we respect the speaker. Pathos appeals to the audience's emotions. Emotion is the driver to human action; persuasion alone is insufficient. Getting people to agree is not the same as getting them to act as you wish. Rhetoric tells us that effective communication towards chosen actions synthesizes all three modes into a situated discourse.

Strategizing arcs from the realm of thinking into intentional practice. It cannot be separated from its action dimensions. The language that the leader/strategist needs to harness the judgment of others towards the firm's chosen goals in Step 4, and thereby transform the chosen strategy into the added value sought, stands on the constraints explored in Steps 1, 2 and 3. The language developed persuades the other actors to support the strategist by pointing out (a) what to pay attention to, and (b) how to interpret and act on what they discover. There is an additional wrinkle here in that human communication is far from being bounded by data and meaning - often taken together to comprise 'information'. Strategizing reaches beyond this, and the various forms of non-verbal signaling and into the firm's tacit knowledge resources. The strategist seeks to harness the others' skills, often tacit, as well as their explicit information resources, for their support is crucial to implementing the strategy successfully. Rhetoric's focus on practice reaches beyond merely shaping how people think and delves into engaging others to act resourcefully and imaginatively in the specific context of their action.

At the same time, since these supportive and skillful others are being drawn into contributing imaginatively and immersed in the value adding practices - the antithesis of participating dumbly - they become aware of the nature of the uncertainties being engaged and of subtlety of their relationship with 'the leadership'. Whose judgment rules? The balance is constantly open to question. But what questions? Rhetoric can help clarify these for one branch of rhetoric covers 'question theory'. Most know of rhetoric as the process of persuasion, a speaker engages the audience and moves them to act. Those in the audience are thereby transformed into people they were not previously - they get 'with the program'. They are immersed in a new way of living and, because that is also under uncertainty, a new set of existential questions arises for
each of them. So everyone involved and committed to the firm looks to the strategist/s to reassure them that the firm (a) has a viable business model able to survive because it adds value, (b) has a means of estimating its viability ahead of implementing it, (c) appreciates the principal threats to its viability, (d) has a sense of how to change the firm's business model as needed, and (e) has a sense of how long it will remain viable.

This places the business model between the strategist's identity, intentions, and context in two different ways. First, it encapsulates the firm's identity and intentions as sources of the judgments articulated into its strategy. These shape how those involved view the firm and its context. But the way the actors view their experience of these is likewise shaped. Learning is mediated and conditioned by what is known already. The business model is both a bridge out from thinking to practice, and a bridge back from practice to better thinking. Thus Step 5 of the strategizing process does not stop with measuring the firm's performance against its strategic intentions. It also embraces managing what those involved have learned from the practices that resulted from the previous steps. Step 5 completes the cycle of strategizing and finalizes the business model as a dynamic pattern of managed responses in an ongoing and incompletely predictable context.

**Conclusion**

This article reviews business strategy as a field of research and as a managerial practice. It begins with a short history of the field. The last few decades of academic research have done little to inform business practice; though there are important exceptions in highly specialized areas that bring large scale computing and data analytics to business decision-making. Beyond these it seems clear that researchers and practitioners have moved in separate directions. Academic research has flourished nonetheless; to the point the field now comprises a large variety of mutually inconsistent ways of looking at its central problematic - the generation of theory that explains firm performance and competitive advantage. Attempts to rein in this proliferation have failed and show no prospect of succeeding.

Instead of hoping for the emergence of some overarching theory of business strategy that would underpin research and show businesses how best to meet their goals and gain competitive advantage, this article suggests a different way of proceeding. It turns
on the distinction between decision-making in (a) circumstances that are knowable versus (b) situations of Knightian uncertainty. The first, our discipline’s dominant metaphor, is the realm of rational man theorizing, objective and rigorous, or as much so as possible. There is no consideration of Knightian uncertainty or bounded rationality. The analysis proceeds on the assumption that the ‘answer’, the optimum action solution, lies in the data. Strategizing here is ‘trivial’ in the sense that it does not manifest the identity, intention, imagination, and values of the strategist. It is not humanized and brought into the world of socio-economic action. More fundamentally, it does not take the pursuit of added value and profit seriously. The whole point of business practice is to generate value, and seize some part of it. The second analysis takes off from Knight’s supposition that profit only arises through successfully engaging uncertainty. Strategizing becomes essentially subjective, the process of applying human judgment to generate and manage practices under uncertainty that manifest the will of the actors.

In both analyses strategy, as a concept seeking a definition, is less useful than strategizing, the process the strategist, leader, or entrepreneur goes through in the pursuit of profit. The difference between the two metaphors is stark. The first engages only what is known. The second engages selected knowledge-absences that seem to offer opportunities for profit. The first metaphor’s process is well understood. Facts are gathered and computed. The conclusion is articulated into instructions that are issued to subordinates whose function is to implement them as closely as they are able. Their progress is monitored; problems are handed to specialists to ‘re-engineer’ the process and its controls. The second metaphor’s process is very different. Aside from the exercise of judgment about what to pay attention to, how to interpret what is known in the light of the firm’s goals, and how to manage the resulting activity, the relationship between those making the choices and those transforming them into value are utterly different. The subordinates’ judgment is drawn into the process rather than being dismissed.

Overall then, strategizing is the process of getting all hands to the pumps when the firm’s situation is full of uncertainties but also of potential, when it can be seen as a glass half full, awaiting being filled with new value, rather than a glass half empty, a result of being not fully known and predictable.
References


