

Scenario planning: Reflecting on cases of actionable knowledge

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Abstract

Scenario planning has a long history of academic inquiry and practice in numerous fields and industries; however, its future as a tool to manage strategic uncertainty may well have reached an impasse. While the academic community perpetuates the view that the field is characterized by methodological chaos, the practitioner community is concerned only with how scenario planning can help solve an organizational problem. This paper argues that the academic community would benefit from adopting a philosophical orientation that is “pragmatic” where theoretical and methodological sophistication should be traded-off against the need to produce a practical outcome that addresses a specific organizational problem. This would enable more academics to generate new knowledge that was “useful” rather than “generalizable.” Adopting a Pragmatic Philosophy would also address three primary issues asserted in literature on the process, content, and implementation of scenario-informed strategizing. This position paper provides a reflective account of how the narrative on scenario planning theory can be moved more effectively into scenario planning practice by illustrating the author's commitment to developing scenario-based actionable knowledge, high levels of implementable validity, and instrumental impact with organizations. As such, it presents a reflection on interventions that demonstrate how scenario-informed strategies were developed and implemented with successful organizational outcomes.

KEYWORDS

actionable knowledge, implementable validity, pragmatic philosophy, scenario interventions, scenario planning

1 | INTRODUCTION

The world has never been more unpredictable according to the International Monetary Fund's World Uncertainty Index (2022). Indeed, the index indicates unprecedented levels of uncertainty with the Russia-Ukraine War compounding already elevated measures as a result of a number of macro factors, which include US-China trade tensions, US Presidential elections, and Brexit.

Given the level and range of these uncertainties, creating a long-term strategic direction for an organization may appear futile for many leadership teams. Furthermore, the increasingly dynamic and uncertain operating environment may also explain why there has been a surge of interest in “futures thinking” in recent years (Ramirez & Wilkinson, 2016; Schoemaker, 2022; Varum & Melo, 2010) with scenario planning now considered to be an essential management tool for our times.

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This paper reflects on 16 years of scenario planning practice, research, and executive training and argues that scenario planning theory development would benefit from the academic community adopting a Pragmatic Philosophy to their inquiries. This philosophical orientation is particularly relevant to the study of organizations where the principle aim is to produce knowledge that is “useful” and “actionable.” A fundamental tenet of this philosophy is that researchers working in organizational settings can make trade-offs between methodological sophistication and truth in the search for evidence that produces insight into real-world organizational issues that subsequently produce actionable outcomes. The roots of pragmatism are found in the work of John Dewey, the 19th Century American educationalist and philosopher, who argued that the only real sources of knowledge were to be found in action; a view that has been consistently endorsed in business and management literature over the past 25 years (Greenwood & Levin, 1998; Kemmis & McTaggart, 2000; Maarouf, 2019; Singer, 2010; Siow et al., 2015). Adopting a Pragmatic Philosophy means that researchers are more concerned with the appropriateness of the method and “what works” (Kivunja & Kuyini, 2017) for the researcher to produce data that results in a “purposeful outcome” rather than dwelling on theoretical evaluations of research design. Furthermore, the focus on producing scenario-informed evidence that addresses a specific organizational problem that yields a practical outcome moves the scenario planning debate away from theoretical and methodological sophistication and construct validity, to producing “actionable knowledge” where the consideration of validity is considered in terms of whether or not the ideas and findings produced in a scenario intervention results in “implementation” and indeed their subsequent “instrumental impact” in terms of influencing the development of organizational policy, strategy, or practice (Argyris, 2003; Kelly & Cordeiro, 2020; Oliver, 2020).

Framing scenario planning inquiries and practice interventions around a Pragmatic Philosophy and the central principle of “workability” in research would also address three primary concerns asserted in academic literature that relate to: the “process” of scenario planning lacking theoretical rigor as the result of practitioner-driven methodological approaches; the “content” of scenario planning in terms of developing strategic positions for different futures; and where the evidence of the successful “implementation” of scenario planning work on developing organizational strategy remains tenuous. This paper examines the academic literature on each of these issues and then provides a reflection on how adopting a Pragmatic Philosophy has helped address these concerns. It also reflects on the author’s commitment to developing scenario-informed actionable knowledge in the context of two previously published papers on practice interventions.

2 | LITERATURE REVIEW

As previously mentioned, a primary driver of the author’s activities has been to help practitioners manage strategic uncertainty through the use of scenario planning. By connecting practitioners with

theories to generate actionable knowledge, these concepts become useful rather than generalizable, and should, as a result, produce high levels of implementable validity and instrumental impact. The academic community is likely to benefit from examining “theory in use” to better understand and explain the theoretical concepts presented in scenario planning literature (Argyris, 2003; Oliver et al., 2023; Oliver, 2020; Oliver & Parrett, 2018), particularly in terms of the process, content, and implementation of scenario-informed strategies.

The resilience of scenario planning as a strategic management tool is illustrated in Bain & Company’s longitudinal survey of “Management Tools & Trends,” which frequently shows that Scenario Planning has been consistently ranked in the top 25 most popular management tools since their survey began in 1993 (Rigby & Bilodeau, 2007). Having said that “user satisfaction” of this management tool is variable according to the findings of Oliver (2013) whose survey of UK broadcast media executives indicated that whilst many used scenario planning, user satisfaction was not as high as other tools like strategic planning, customer relationship management, and customer segmentation. This disparity between the “usage” and “satisfaction” of scenario planning among executives raises important questions about whether practitioners have the appropriate levels of knowledge and skill to use scenario-based tools, and indeed, the capabilities to implement the strategic options identified in their scenario work.

2.1 | Scenario planning process: A multiplicity of methods that lack rigor

Scenario planning has a long and rich history that has been captured in business and management literature and evidenced in practice by organizations operating in many industries who have attempted to manage strategic uncertainty by proactively planning for it (Chermack et al., 2006; Keough & Shanahan, 2008; Peterson et al., 2003). There is no doubt that its longevity as a management tool has resulted in numerous methodological approaches that have been developed in different competitive contexts and in different eras. Ramirez and Wilkinson (2016, p. 5) offer a plausible explanation for methodological fragmentation by noting that in the absence of consistent terminology, the term “Scenario Planning” can mean “very different things in different organizations.” Having said that, we should acknowledge that whilst the “scenario process” may differ in theory and practice, the fundamental tenets of scenario planning remain the same. That is, it is a management tool that:

- is most appropriate for organizations operating in uncertain conditions;
- uses a highly structured analytical process that combines rigorous strategic analysis with creative thinking and intuition;
- allows its users to think about multiple futures to take action in the present.

Scenario planning as a management tool to develop organizational strategies in uncertain operating environments has been discussed extensively in this and many other academic journals for decades. Amer et al. (2013) reviewed an extensive range of scenario planning literature, identifying and providing critical commentary on three established Scenario Planning Schools (Intuitive Logics, Probabilistic Modified Trends, and La Prospective) concluding that “the process” consistently included a systematic approach to defining and prioritizing key organizational issues, identifying key trends and drivers for change, and building scenarios to manage a limited range of uncertainties.

The fragmentation in literature on the process of scenario planning has often been described as “methodological chaos” (Bradfield et al., 2005; Martelli, 2001; Phadnis et al., 2014; Phadnis & Darkow, 2021; Spaniol & Rowland, 2018; Varum & Melo, 2010) and whilst the academic community searches for theoretically rigorous studies to better understand how to manage future competitive dynamics, it is the practitioner community that is driving methodological development and implementation (Amer et al., 2013; Bowman & MacKay, 2020; Oliver & Parrett, 2018; Ramirez et al., 2010). The tension between scenario planning theory and practice should come as no surprise given the often-conflicting aims of these largely mutually exclusive groups. The “theorist” will regard the knowledge of the process of scenario planning as fragmented and unreliable, whilst the “practitioner” will evaluate the process in terms of whether it has helped them to solve an organizational problem.

2.1.1 | Reflecting on the scenario planning process

In 2006, I was scheduled to deliver executive training in *corporate strategy* to UK media executives. In preparation for this program, the key components of corporate-level thinking (e.g., mission, vision, strategic direction) would certainly feature prominently in the content. However, the UK Media Industry was undergoing rapid change due to the disruption and uncertainty caused by deregulation, new digital technologies, new business models, and new competitive entrants. The future size and shape of the industry in the long term was unknown and those executives responsible for managing media firms, developing strategy, delivering audiences, revenues, and profits faced a daunting challenge.

In the context of such a dynamic competitive environment, the training of media executives would address two key questions:

1. How could media executives ensure that their firms' corporate-level strategies remained relevant?
2. How could some long-term certainty be achieved in an uncertain future environment?

My search for a scenario planning approach to use in training media executives uncovered the fragmentation and methodological chaos often described in academic literature. There was no

“one” approach, no single “appropriate” method. Having reviewed several books and academic papers, I settled on a little-known framework developed by Harvard Business School (Garvin & Levesque, 2006), which appeared to offer a highly structured analytical process that combined rigorous strategic analysis, underpinned by brainstorming, creative thinking, and intuition. It seemed apt for media executives working in an industry that is known for its creativity.

As with many scenario planning approaches, the Garvin and Levesque (2006) method systematically guides users through a process that involves identifying the macro and micro forces that are creating the most uncertainty in relation to a “key focal issue” for an organization. These forces are then reduced to just two “critical uncertainties,” which are then presented in a 2 × 2 scenario framework with low and high degrees of future uncertainty. In each scenario, a “headline” is used to capture the fundamental nature of a supporting narrative that fleshes out the detail in each future world and their implications for a firm. Having established the implications for the firm in each scenario, the next stage involves the identification and discussion of strategic options that are relevant in each scenario. The final phase involves the identification of “early warning signals” to monitor and evaluate the emergence of one scenario over another.

My initial thoughts were that this approach was suitable for media executives working in the creative industries. However, since 2006, I have used the same approach in media and non-media scenario planning interventions and note that participants have benefitted from a highly structured analytical process that also combines a large degree of creative thinking. I have a long-standing interest in how organizations make strategy in dynamic and uncertain operating conditions (Oliver, 2014; Oliver, 2013, 2018, 2021) and my research and practice has enabled me to learn more about the scenario planning process in general, and how to effectively apply the Garvin and Levesque (2006) framework in particular. Whilst this approach was originally developed for case study teaching purposes, the authors have not submitted their conceptual framework for evaluation and peer review in any scientific journal. As such, the wider academic community has not had an opportunity to assess the credibility, robustness, and contribution it could make to scenario planning knowledge.

As a reflective practitioner, my process of insightful questioning and assumption breaking (Oliver, 2008a, 2008b) over the years has led me to conclude that scenario planning is a powerful tool that enables participants to explore, gain unique insights, and indeed manage the complex organizational problem of how to develop future business strategy in unpredictable operating conditions. Given that there is no unified theory on scenario planning method, adopting a Pragmatic Philosophy has enabled me to consider Garvin and Levesque's (2006) approach in terms of its “workability” in practice interventions and its “axiological value” in the context of delivering organizational benefits (Kivunja & Kuyini, 2017). In essence, this approach has been “tested in the heat of battle” and my conclusion is that it offers a systematic process, combined with the opportunity for

creative thinking that can help practitioners to better understand and manage future competitive dynamics.

There are two further points that are worth emphasizing in this reflection. First, the wording of the Key Focal Issue (KFI) is of paramount importance. Whilst it should be obvious that the KFI centers on a significant organizational decision or strategic uncertainty, the semantics of “how” this question is worded is significant. For example, starting the KFI with the word:

- “What” implies that the focus of the scenario planning project will be on *information gathering and evaluation*.
- “Should” implies that the focus of the scenario planning project will be on the participants providing *wide ranging opinions*.
- “How” implies that the focus of the scenario planning project will be on *taking action*.

Second, perhaps what is less obvious is that since the scenario framework is developed from the most uncertain driving forces (i.e., critical uncertainties) that are likely to affect the future and the development of organizational strategy, participants are put in the position of having to deal with the most uncertain operating environment possible. By having each of the critical uncertainties on a single spectrum of uncertainty (high and low), participants are “forced” to evaluate conflicting competitive environments and find strategic solutions. Whilst many scenario planning participants often enter the process with strong views about how “the future cant be predicted” and “things are changing so fast that there is no point in developing organizational plans and strategies,” they end the process with a better understanding of macro-trends and micro-trends that are likely to affect their organization and a sense of confidence and certainty in how to move forward as a leadership team. Importantly, they are also better informed on the two critical questions relating to ensuring that strategy remains relevant in uncertain competitive conditions, and how to achieve some long-term certainty in their strategic approach.

Finally, a few years ago I spoke to one of the authors, Lynne Levesque who was surprised that what was conceived as a “teaching aid” had been put into practice and to good effect. Today, Garvin and Levesque's (2006) original teaching brief is still for sale from Harvard Business Publishing at \$8.95; however, a cursory review of the MBA curriculum at Harvard Business School showed no obvious sign of substantive teaching of scenario planning.

2.2 | Scenario planning content: Developing strategic options for different futures

A consistent theme in literature illustrates the importance of connecting future scenarios to appropriate strategic actions (Schoemaker, 1993; Scoblic, 2020). However, detailed accounts of “how” these strategic options are developed and evaluated remain limited. Indeed, Bowman and MacKay (2020) argued for a detailed process analysis of each stage of a scenario planning

intervention to better understand “how” strategic conversations led to strategic options and their evaluation, development, and implementation. While they and other scholars (e.g., Chermack et al., 2006; Wright et al., 2013) acknowledge scenario planning is often an organic process, there is a “black box” when it comes to research papers providing a detailed narrative of how the interactions, conflicts, consensus, and information flow between participants occurred at each stage of the process. A good illustration of the tenuous link between the use of scenario planning, strategic implementation, and performance is illustrated in the work of Abuzaid (2018, p. 201), who found that in a sample of multinational firms “scenario planning can be used as a tool to improve financial performance.” The key issue here is, specifically “how” did the use of scenario planning contribute to improved organizational performance?

Furthermore, since the creation of future scenarios relies on creative thinking and intuition, the issue of human psychology and cognition comes into play in terms of how participants (and facilitators) process data, frame scenarios, address subjectivity and bias, group think, and relative stakeholder power in the creation and evaluation of strategic options (Cairns & Wright, 2019; Nestik, 2018; Rowland & Spaniol, 2021; Schirrmeister et al., 2020; Schoemaker, 1993). Interestingly, Jashari et al. (2022) speculate that research on the cognitive and behavioral aspects of the scenario process will increase in the future in the form of “behavioral futures” or “behavioral foresight” to provide a more nuanced understanding of what is essentially a process of social interaction between participants.

2.2.1 | Reflecting on scenario planning content: Developing strategic options for different futures

There is a range of critical perspectives in academic literature that debate the lack of studies, which provide detailed content descriptions and analysis on the way that future scenarios are developed and evaluated to produce future strategic actions. The previously mentioned published papers (Oliver et al., 2023; Oliver & Parrett, 2018) do indeed provide detailed accounts of how Garvin and Levesque's (2006) systematic process has been used to address and manage strategic organizational uncertainty. As such, issues of participant subjectivity, interaction, conflict, group think, and relative stakeholder power are framed by a Pragmatic Philosophy, which allows me to evaluate these matters in the context of “workability and axiology,” where the primary objective of the intervention is to help practitioners address an organizational issue in a way that produces new and useful knowledge that can be implemented. This, however, does not mean that the process that generates content on future scenarios and strategic actions is not robust; indeed, a number of key validation methods proposed by Miles and Huberman (1994) aim to enhance the trustworthiness of the data. These include: researcher reflexivity to identify my bias as a facilitator; member checking, where as a facilitator, I check ideas and findings with participants to provide a sense-check of the data; searching for

disconfirmation whereby I cross-check findings with previous comparable research; and looking for outliers in individual perspectives to address the tendency for group think. Furthermore, an “independent auditor” in the form of highly experienced experts is always used to help me validate the proceedings and ensure that all participants' views are fully explored and that the scenarios are realistic and plausible.

2.3 | Scenario planning implementation: The impact on organizational practice

The “holy grail” of academic endeavor is to produce a theory that is generalizable. As such, a theory on scenario planning process, content, and implementation would allow it to be hypothesized, tested, and substantiated. Given that the primary driver for the academic community is to produce new knowledge and evidence that supports theoretical propositions, the abundance of process frameworks, combined with a lack of rigorous theoretical testing, simply compounds the issue of evidencing causal links between scenario planning activities and implementing organizational strategy. Furthermore, Bowman and MacKay (2020) argue the inability of the academic community to connect scenario planning activity with changes in organizational strategy and performance has contributed to many researchers examining other aspects of strategic management theory. They go on to argue that scenario planning inquiry would be better placed in the “strategy-as-practice” perspective as a way to better frame theoretical and practice contributions. Indeed, Oliver and Parrett (2018) used the “strategy-as-practice” approach to good effect when developing future scenarios and corporate-level strategies for YouTube within the UK Media Industry. Adopting a strategy-as-practice perspective supports the notion of embracing a Pragmatic Philosophy where academic researchers dispense with issues of theoretical generalizability and adopt a scenario planning approach that aims to produce insight and recommendations for action. Furthermore, the efficacy of a scenario-based work is then assessed on issues of implementable validity and instrumental impact. Given these constraints, there are a limited number of empirical studies that illustrate the effects of using scenario planning in organizational settings. Broadly, these effects have been framed around the creation of new social capital during times of strategic uncertainty through engaging in “strategic conversations” that challenge existing assumptions and mental models to develop insight into plausible futures; and specific instances of “developing and implementing” organizational strategy.

2.3.1 | Strategic conversations that develop insight into plausible futures

Scenario planning is widely cited in literature as a tool that generates and captures strategic conversations on how to manage organizations in a dynamic operating environment. A scenario-based

approach to strategizing, therefore, enables leadership teams to “break away” from the repetitive cycle of routine strategic planning in favor of developing strategic conversations that challenge existing organizational thinking and develop “new insights” into future operating dynamics (Bowman et al., 2007; Grant, 2003; Healey et al., 2015; Porter, 1985; Schoemaker, 2022). These strategic conversations generate focused dialog on a strategic uncertainty that has the potential to create significant and long-term consequences for an organization and enable leadership teams to “figure out how to think about the future” in a way that involves challenging existing organizational thinking to develop new insights into future operating dynamics (Scoblic, 2020, p. 40).

The outcome of these strategic conversations should enable leadership teams to change the way they think about the future and “mentally prepare” for it by creating multiple scenarios and strategic responses that address future strategic challenges and uncertainties (Chermack et al., 2006; Lew et al., 2019; Oliver et al., 2023; Oliver & Parrett, 2018; Peterson et al., 2003; Schoemaker, 2022; Walton, 2008). Furthermore, research by Healey et al. (2015, p. 522) argued that the outcomes of scenario-based workshops could be organizational (e.g., strategic direction, vision, values, and strategy), and also “softer outcomes” in the form of interpersonal relations (e.g., team-building and organizational development) and cognitive (e.g., providing a better understanding of the strategic issues facing an organization).

2.3.2 | Scenario planning and its impact on developing and implementing organizational strategy

The benefits to leadership teams of using scenario planning are well articulated in literature with systematic and imaginative thinking providing an insight into multiple futures and appropriate strategic responses (Van Der Heijden, 2005; Walton, 2008). Yet, this final critical phase in the scenario process lacks extensive empirical evidence that demonstrates how scenario-based activities have actually driven strategy formulation and implementation (Bowman & MacKay, 2020; Cairns et al., 2004; Cairns & Wright, 2019; Godet, 2000; Healey et al., 2015; Phelps et al., 2001; Schoemaker, 1993, 2022).

Several recent empirical case studies of scenario-informed strategies being implemented noted the challenges of turning strategic foresight into strategic action (Abuzaid, 2018; Oliver et al., 2023; Phadnis et al., 2014). Interestingly, Jashari et al.'s (2022) co-citation analysis of 183 scenario planning articles identified six research clusters that had emerged in business and management literature since the 1960s. Remarkably, none referred to the implementation of scenario-informed organizational strategy. The scarcity of published empirical studies on “how” scenario planning has shaped organizational strategy is perhaps of no surprise since practitioners tend not to publish or are bound by issues of confidentiality and commercial sensitivity, whilst academic consultants engaged with practitioners may be constrained by non-disclosure agreements and unable to publish. Equally, it may

be because implementing scenario-informed strategic initiatives requires an organization to commit time and resources to multiple futures in the face of uncertainty (Schoemaker, 2022; Scoblic, 2020).

2.4 | Reflecting on scenario planning implementation: The impact on organizational practice

As noted earlier, a theme in scenario planning literature has centered on the inability of the academic community to evidence scenario planning interventions with changes in organizational strategy and performance. Once again, the argument for adopting a Pragmatic Philosophy with a focus on “action” means that researchers have an opportunity to produce insight and recommendations for operational change. Generating scenario-informed actionable knowledge to produce a purposeful outcome that is useful to organizations, therefore, provides an opportunity for academics to demonstrate high levels of implementable validity and instrumental impact. As mentioned previously, the scenario planning interventions captured in Oliver and Parrett (2018) and Oliver et al. (2023) provide evidence of organizational change and the brief summaries below will provide the reader with a sense of how scenario planning can impact on organizational practice.

2.4.1 | YouTube: Developing strategic options for different futures

As a leading media planning agency, OMD (UK) used scenario planning to develop a long-term corporate strategy for Google subsidiary YouTube. Given the high degree of turbulence and uncertainty in the UK Media Industry, the KFI was: *What will be the role of YouTube in the U.K. media industry in 2025?* This issue was of strategic importance to the media planning agency as the fast-changing business environment had created a high level of uncertainty for the firm and its client, and the strategic flexibility of YouTube's corporate-level strategy going forward was of paramount importance. The critical uncertainties centered on the ability of YouTube to *monetize its content* and the *extent of video content regulation*.

Garvin and Levesque's (2006) scenario framework had been effective in terms of managing business uncertainty and helping to develop a relevant corporate-level strategy for the long term. The systematic process also provided business executives with little or no experience in using scenario planning with a relatively straightforward way of representing future business environments and evaluating strategic options for different futures. Evaluating these options was also considered in the context of the strategic implications of each scenario and how YouTube could respond using well-known strategic recipes including: offensive and defensive strategies (Kotler & Singh, 1981); killer strategies (Stalk & Lachenauer, 2004); red and blue ocean strategy (Kim & Mauborgne, 2004); and adaptive strategies (Reeves et al., 2015).

The evidence of actionable outcomes on organizational practice from this scenario planning intervention came in the form of increased usage of scenario planning by strategic planners within the agency, who were better able to make sense of the competitive environment by identifying and prioritizing the forces that were creating the most uncertainty. Furthermore, the agency's clients showed an increased level of interest in the method as it provided strategic solutions in a rapidly changing business environment.

2.4.2 | UK Parliament: Developing mission, vision, and strategy

This scenario planning project sought to develop a vision, mission, and strategy for the House of Commons Library Service in UK Parliament. The service provides research and information services to the lower house of UK Parliament and publishes high-quality, politically impartial policy analysis, and statistical research for MPs and their staff, which is considered to be the “life blood” that underpins well-informed decisions that support a healthy democracy.

In the context of a major £6bn Restoration and Renewal (R&R) program, this scenario planning project was used to manage significant levels of uncertainty and develop a long-term strategic direction that sought to deliver high-quality library services provision over the next 10 years. There was considerable uncertainty regarding exactly how R&R would be undertaken and the associated impact of that on the physical library and its range of services. This uncertainty was likely to continue into the 2030s as the program of works were undertaken and it provided the leadership team with an opportunity to think strategically about a “new vision” for Library Services and how to deliver future high-quality service provision that was fit for purpose over the long term. Once again, Garvin and Levesque's (2006) scenario framework was used to good effect, and more detail on the process and outcomes can be found in Oliver et al. (2023).

Irrespective of what scenario planning method is used, a consistent outcome of scenario-informed strategic thinking is the “strategic options” that result from the conversations that evaluate the organizational implications of each scenario. This process often results in a strategic recipe for each scenario that “mentally prepares” leaders to take appropriate action. However, this process can be taken a stage further when there are “commonalities” in the strategic options across all scenarios. Given that the 2 × 2 scenario framework drives participants to consider the most critically uncertain scenarios of the future, one would expect each world to have different implications and strategic responses for the organization. Not so. In the case of the House of Commons Library Service, four strategic options were identified across all four scenarios:

Market research: to track emerging trends to identify innovative services and stakeholder views on what is considered to be of value.

Innovation: supporting innovation in services and processes.

Staff development: (Re)training, upskilling for a changing world.

Reputation management: Continual communication that re-enforced the message of the brand and its services.

These common strategic options were then used to develop a “strategic intent” (Hamel & Prahalad, 2005; O’Shannassy, 2016) for Library Services where the leadership team would not simply respond to each scenario with preplanned strategic options, but develop a high-level plan to achieve a new strategic vision and direction. The evidence of actionable outcomes on organizational practice from this scenario planning intervention was captured in the *Manifesto for Library Services*, which presented a long-term action plan and guided resource investment.

3 | CONCLUSIONS

This paper provides a reflective account of how scenario planning theory has moved into scenario planning practice that has subsequently produced a number of actionable outcomes for two organizations. The premise of this paper argues that by adopting a Pragmatic Philosophy, researchers can successfully address three primary concerns asserted in scenario planning literature on the process, content, and implementation of scenario-based interventions. As such, the following conclusions will hopefully provide useful insights for both the academic and practice communities to consider future directions in scenario planning theory and practice.

First, the debate in academic literature regarding the lack of theoretical rigor in the numerous practitioner-driven scenario planning methods is valid, but it is also a self-perpetuating view. After decades of academic inquiry, there is little in the way of consensus on the efficacy of different process methods that help anticipate and manage future operating dynamics. The search for a unified or even generalizable theory of the scenario planning process will no doubt continue as long as there is an academic community, but as Bowman and MacKay (2020) noted, interest in this question is beginning to wane amongst researchers and this line of academic inquiry seems to be nearing exhaustion. A useful metaphor to describe this long-standing problem is the “Gordian Knot”—a complex problem with no obvious solution. As with Alexander the Great, this paper argues that one solution is to look at the problem in a different way and cut through the complexity of the issue. Adopting a Pragmatic Philosophy is one such solution for the academic community. If the aim of a scenario planning intervention is to produce useful and actionable knowledge then “any” scenario planning process that results in high levels of implementable validity and instrumental impact is how the academic community should evaluate the efficacy of different scenario theories and methods. Theory in use, rather than theory for theory’s sake, is one way to cut through the Gordian Knot of scenario planning.

As such, future researchers in this field should consider the benefits of theoretical development and testing by working more often in tandem with the practitioner community to produce scenario-informed knowledge that is actionable in practice. For example, this paper has reflected on the practical use of Garvin and Levesque’s (2006) methodological approach and the discussion argues that leadership teams in many organizational settings have

been able to explore a number of creative solutions to developing a strategic direction for their firm in the most uncertain of operating conditions. It involves a systematic process that provides a large degree of flexibility in how executive teams can develop their own interpretation and use of this tool. To the best of my knowledge, this methodological process has not been evaluated by the academic community, nor used by practitioners, but as the practice interventions (Oliver et al., 2023; Oliver & Parrett, 2018) illustrated in this paper argue, it is a scenario planning process that has guided leadership and management teams to generate “useful” knowledge that has been actioned.

Second, the academic debate on the lack of studies that provide detailed descriptions of the process that generates future scenarios and strategic actions will no doubt continue. However, moving this debate forward is unlikely to occur without the academic community engaging more often with practitioners to address their organizational issues in a way that produces a purposeful outcome. Whilst the academic community wants to assess construct validity to measure the legitimacy of a method that produces scenarios and strategic actions, the practice community is only interested in useful and actionable knowledge. It is unlikely that this disparity in the goals of each community will be overcome to any great extent unless more academic researchers engage with practitioners and publish more evidence-based case studies of scenario planning interventions.

Third, academic researchers have largely been unsuccessful in evidencing causal links between scenario planning activities and implementing organizational strategy. In many ways, this is no surprise since the primary driver of this community is to produce new knowledge, not new practice. Given that many research funding organizations now require a “bigger bang for their buck” in the form of instrumental impact, the academic community will need to evidence how their research findings have influenced policy, legislation, organizational practice, and demonstrate the contribution to society and the economy. As such, the “strategy-as-practice” perspective of strategic management may offer futures and foresight researchers a way to frame theoretical and practice outcomes of scenario planning interventions whilst also affording an opportunity to develop and refine methodological approaches. Moving the conversation from scenario planning theory to scenario planning practice will hopefully produce more empirical studies that evidence the successful “implementation” of scenario planning work on organizational strategy and performance.

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