



# The value produced in lending strategic problems as live cases in futures education

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## ARTICLE INFO

### Keywords:

Scenario planning  
Live case  
Futures education  
Future of education  
Rigour and relevance  
Business schools

## ABSTRACT

Strategists often employ consultants to gain insights from futures thinking. An alternative source is the lending of challenges to executive education participants. Here we assess the value derived by organisations who lend strategic challenges as live cases to business schools for the purpose of teaching scenario planning. We draw on data from 22 live cases spanning almost a decade. Lending organisations reap benefits commensurate to those expected of scenario planning in a cost-effective manner and over a short time-span. However, given the value drawn is dependent on critical reflection on behalf of stakeholders, it is important to set clear expectations and carefully manage the pedagogical engagement. This paper contributes to the literatures on rigour and relevance of knowledge co-production for futures education and the future of education. It offers practical guidance on how to improve the effectiveness of lending live cases in executive education.

## 1. Introduction

Strategists regularly engage with business schools to gain insights. They do so in several ways – hiring professors as consultants, offering projects to MBA students, or lending issues they are grappling with to executive education programmes. Yet, given the vast amount of monies spent on executive education, it is important to assess what broader value such programmes produce (Kets de Vries & Korotov, 2007). An assessment of the outcome of futures education (Kazemier et al., 2021), with a focus on practitioners rather than learners, can contribute to improving the value that business schools produce (Paton & Wagner, 2014), and provide insights for improving decision-making by practitioners (Ready et al., 1994; Pfeffer & Fong, 2002; Bennis & O'Toole, 2005; Culpin & Scott, 2012). Based on a practical rationality inquiry (Sandberg & Tsoukas, 2011), this paper helps explore “how organizational practices [in this case, practices resulting from the lending of live cases] are constituted and enacted by actors [i.e., those involved in the generation and use of live case studies]” (p. 339). As such, our study is driven by both scholarly and practical concerns.

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<https://doi.org/10.1016/j.futures.2023.103132>

Received 21 March 2022; Received in revised form 19 February 2023; Accepted 1 March 2023

Available online 9 March 2023

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Regarding the scholarly concerns, management education has been criticised for the learning it cultivates and the type of managers it produces, with many aspects of this criticism manifested in the rigour-relevance debate (Mintzberg, 2004; Chia, 2005; Bennis & O'Toole, 2005; Tushman et al., 2007; Durand & Dameron, 2011; Klimoski & Amos, 2012). Criticism in particular is about how business schools impact, or fail to impact positively, on business (Chia, 2005; Mintzberg, 2004), society (Friedland & Jain, 2020), and leaders (Blass & Hayward, 2015). Király and Géring, the editors of a special issue on the 'Futures of Higher Education' (2019) in this journal, suggested that in the face of an uncertain and high-risk future, universities should become more active in shaping their environment and being socially relevant. To do so, they proposed that higher education can revisit the methods they utilise in deciding how to teach. This is what this paper explores.

Regarding the practical concerns, for organisations seeking effective, quick, and cost-effective means to source professional advice, lending their challenges as live cases can be a cost-effective way to do so (Lebrón et al., 2020; Ramírez et al., 2020). Business schools have long attempted to bridge the academic-practitioner gap (De Man et al., 2020) by employing the case study method in their teaching (Copeland, 1958; Charlebois & von Massow, 2015) and sometimes also the live case study (Markulis, 1985; Kennedy et al., 2001; Rashford & De Figueiredo, 2010). Lebrón et al. (2020) assessed the implementation of the live case in an undergraduate capstone strategic management course on student learning outcomes. They suggested that company executives "valued high-quality, creative student recommendations from strategic analyses" and that the executives "reported positive experiences—specifically impressed with student performance quality and have wanted to participate again" (p.85). While, existing research has discussed the benefits of the live case method for the *learners* (e.g. Lincoln, 2006; McWilliams & Nahavandi, 2006; Lebrón et al., 2020; Cummins & Johnson, 2021), empirical research on what value such engagements produce for the *strategists* lending the live case has been so far limited and some of it rather anecdotal (e.g. Richardson & Ginter, 1998; Roth & Smith, 2009; Rashford & de Figueiredo, 2011; Hough et al., 2014); and thus it is in this way that this paper both breaks new ground and fills a gap in the literature.

We reflect on how strategists and business schools can cooperate to extract mutual advantage from an established pedagogical technique to improve futures education and at the same time offer greater impact on society by shaping the future of education. The research question we explored is: "What value is produced for organisations who lend strategic challenges as live cases to business schools?" To conduct our study, we investigated 22 live cases used in 15 iterations spread over nine years of an award-winning executive education programme in scenario planning (SP henceforth) offered at the business school of a large, research-intensive and internationally recognised university. We employed a mixed methods research strategy to assess the perceived outcomes from the use of SP learned by participants for the strategists who lent their organisation's live case study, and who themselves were not programme participants (i.e., students in the classroom). We report on the data that we collected at the individual level from the live case strategists and from this database, we extend our interpretation to the value they generated in terms of addressing the strategic challenges of their respective organisation.

Our paper contributes to the literature on rigour and relevance in management education (Tushman et al., 2007; Paton & Chia, & Burt, 2014), particularly within the context of strategic management and executive education. Firstly, we explore the effects on the live case lender in strategic education. Secondly, we extend the notion of the typical partnership model beyond consultant and client (Broschak et al., 2015; Rogan & Sorenson, 2014) to also include the live case provider and the business school. Finally, by studying the effects of this partnership on the provider, we contribute to the literature on co-production of value between customer and supplier as this is experienced by the supplier (Ramírez, 1999) and contextualise this within the process of co-creation of knowledge (Antonacopoulou, 2009) in executive education in a way that has both rigour and relevance.

Our paper is organised as follows: the next section reviews the literatures of two relevant streams of research – rigour and relevance in management education, and the teaching of strategy for impact. We then outline the methodology we used in our study and present the results drawn from quantitative and qualitative methods. This is followed by a discussion on the contribution our findings make to theory and practice, including suggestions for future research and key conclusions.

## 2. Literature review

### 2.1. The rigour-relevance gap in management education

Much has been written on how to increase the impact of business schools (e.g. Currie et al., 2010; Pettigrew, 2011; MacIntosh et al., 2017) and on how to better link rigour and relevance (e.g. Starkey & Madan, 2001; Hodgkinson & Starkey, 2011; Butler et al., 2015; Rajagopalan, 2020; Ramírez et al., 2020). Scholars have noted that management academics are failing to deploy the state-of-the-art research they produce in their teaching (Wren et al., 2007; Klimoski & Amos, 2012; Anderson et al., 2017a), despite the potential positive impacts this might accrue (e.g. Baruch, 2009; Gamble & Jelley, 2014; Lewicki, 2013).

One way to address this multi-faceted set of issues is to bring practice into education. Attempts to do so range from individual academics inviting practitioners to deliver talks in their classroom to much bigger initiatives such as the British Academy of Management's *Management Knowledge and Education* programme which has sought to advance innovative research and practices in management education and learning (Anderson et al., 2017a, 2017b). Huff and Huff (2001) called for greater business co-sponsorship of management education. The value of such a partnership can be significant. Innovation in teaching can lead to greater value and relevance for organisations (Bridgman et al., 2016). It can also have positive effects on stakeholders beyond those in academia (Bridgman et al., 2016; Pettigrew & Starkey, 2016). As such, Anderson et al. (2019a: 14) recommend that "we should aspire as a management learning community to have an impact on the broader, international socio-economic environment".

The rigour-relevance relationship debate has been informed with various perspectives, such as a critical realist approach (Syed et al., 2010), a social constructionist approach (Ramsey, 2011) and a co-creation or co-production approach (Antonacopoulou, 2009).

What is unique -we believe- about our study is that instead of focusing on the rigour and relevance relations on management research, we focus on the potential impact that the links between rigour and relevance can have in management education for external organisations (Antonacopoulou, 2009; Jarzabkowski et al., 2013; Anderson et al., 2017a). Our study comes to – at least partly – answer Anderson et al. (2019) call for management education that refocuses on relevance to practice. It also reinvigorates Raelin's (1994) suggestion to draw on the strengths of both professional education and action learning to improve the quality of management education.

The evaluation we offer in this paper is aligned with calls over the last two decades for more emphasis in studying impact in management education. This applies both within and beyond the boundaries of business schools. Examples include Pfeffer and Fong's (2002) call for carrying out more systematic assessments of business schools' 'products', and Turnbull and Denyer's (2009) plea for more papers on the design, delivery and evaluation of executive education and development. It can also serve as an exemplar for Pettigrew and Starkey's (2016) observed need for more studies that assess how management education can impact practitioners and practices beyond academia. Studies, such as ours, can help better define the future of higher education in generating evidence on the value of alternative forms of teaching methods and of organisational engagement with stakeholders in society (Blass & Hayward, 2015; Király & Géring, 2019).

Ready et al. (1994) assessed the need for executive development programmes to be more tightly integrated into enhancing corporate competitiveness. Other studies have attempted to unpack the gaps in management education relating to strategy and ways to address them. For instance, Bell and Loon (2015) investigated the effects of simulations of strategic change to develop critical thinking skills for students, as did Lovelace et al. (2016) – specifically in teaching strategy through SP. As it will be consequently presented, we have found that one subject through which management education can have a significant impact outside the business school boundaries is SP, as organisations increasingly question their role and competitiveness in multiple, uncertain futures (Ramírez et al., 2021).

The SP programme we study follows the intuitive logics approach (Bradfield et al., 2005). Scenarios are developed through a process of learning (van der Heijden et al., 2002), are created through disciplined imagination (Weick, 1989), are plausible and equally probable (Ramírez & Selin, 2014), and are described through creative storytelling, pictures, and video (Bradfield et al., 2005). In the intuitive logics approach a scenario team within the organisation generally carries out the scenario development process (Bradfield et al., 2005). After the team identifies critical factors, trends or uncertainties that impact on the transactional environment, the intuitive logics approach suggests the possibility of involving "remarkable people" who can provide insights into the identified factors and trends (Wright et al., 2013). Their job is to help the users to challenge their organisation's business-as-usual thinking (Wright et al., 2013). We further build on, and extend, work in this area.

## 2.2. Teaching strategy through the live case

The limits of teaching strategy with the traditional case study approach have been often noted in the strategy literature. Ginsberg and Morecroft (1997) observed that the traditional case study approach cannot grasp the complexity of strategy-making, particularly through a theoretically-focussed and abstract approach to learning (Greiner et al., 2003). Scholars have also expressed concerns about the value and validity of written case studies in management education (Argyris, 1980; Stonham, 1995; Shugan, 2006; Raelin, 2009; Bridgman et al., 2016; McDonald, 2017).

A less abstract approach and an alternative form to the so-called "Harvard case" one is the live case study method - a form of experiential (Kolb, 1984) or action-based approach to learning (Reynolds & Vince, 2007). Scholars have found that the live case can make management teaching a craft rooted in action (Bailey & Ford, 1996; Roth & Smith, 2009) to help diversify learning format (Stewart & Winn, 1996; Dean & Fornaciari, 2002; Garvin, 2007; Mesny, 2013; Alstete & Beutell, 2016). Different versions of live case studies (Markulis, 1985; Kennedy et al., 2001; Rashford & De Figueiredo, 2010) have appeared in academia. They include the project method approach (Malhotra et al., 1989), client-sponsored student projects (Ramocki, 1987), and experiential learning and teaching (Kolb, 1984, 2005; Kayes, 2002; Kolb & Reynolds & Vince, 2007).

The literature on the epistemology of learning in management suggests four components: action, cognition, reflection, and experience (Kayes, 2002). The action approach changes behaviour (Argyris & Schon, 1978; Schon, 1983); cognition changes thinking (Klein, 1998; Senge, 1990); reflection, like cognition, changes thinking but acts in a more holistic level and is sometimes more critical (Reynolds, 1999; Vince, 1998); and experience produces emotional change (Kolb, 1984; Nonaka, 1994). The programme we study ascribes largely to the experiential learning approach as outlined in Kolb's (1984) Experiential Learning Theory (ELT). ELT has influenced a diverse range of management topics (Kayes, 2002), strategy development (van der Heijden, 1996), and the design of management education (Lengnick-Hall & Sanders, 1997). For purposes of this study on the impact on live-case clients, we focus on the action-based component of ELT to centre on the learning which helps to address organisational problems so that it results in some specific and useful action.

Live cases have been applied in several subject areas, reportedly more frequently in marketing (e.g. Little et al., 2008; Bove & Davies, 2009; Hunt & Smith, 2018) and strategy (e.g. Richardson & Ginter, 1998; Rashford & de Figueiredo, 2011; Culpin & Scott, 2012; Hough et al., 2014) than in other business school subject areas. The effectiveness of live cases has been studied with regard to MBA and other Master's students (e.g. Charlebois & von Massow, 2015; Flynn & McCarthy, 2016), professional accounting students (e.g. Weil et al., 2004), executive MBAs (e.g. Rashford & de Figueiredo, 2011), executive education participants (e.g. Culpin & Scott, 2012) and undergraduate students (e.g. Elam & Spotts, 2004; Gundala et al., 2014). Yet, only a few studies have explored the perceived satisfaction of executives lending their organisational challenges as live cases. Ramocki (1987) studied the use of live cases in teaching marketing. Roth and Smith (2009) studied strategy and asked clients about the general usefulness of the engagement, concluding that

future research can assess “measurable results [that] can be achieved through the use of live cases” (p.64). Other writings on the use of the live case in teaching strategy (e.g. Richardson & Ginter, 1998; Rashford & de Figueiredo, 2011; Hough et al., 2014) offer only anecdotal evidence from live case clients on the value they have derived themselves.

Little has changed since Culpin and Scott: 567) (2012) suggested that “[a]t this current time there are no studies in the literature that report the effectiveness of using a live case study methodology with executive education participants”. For instance, Daly and Sequeira (2018) evaluated one specific live case – referring to it as the CEO intervention method – from the perspective of the students and facilitators as well as from the perspective of the CEO. Recent research (Ramírez et al., 2021) suggests that investments in education for strategists do pay off. However, this study was based on an executive education design which positioned both the live case lender and the other learners as being in the classroom together. Instead, here we assess the value that SP imparts to strategists who lend their challenge as live cases but are not themselves classroom participants. We develop the following propositions regarding the benefits offered to live case clients by SP:

P1. Strategists who lend their strategy challenges for use as live cases drew benefits commensurate with those cited in the scenario planning literature.

P2. The original purpose and expectations strategists had when they lent their live cases were met.

The first proposition lends to ascertaining whether the benefits deemed to be important in the literature were realised in these concrete cases, and the second proposition helps to assess to what extent the benefits were in fact actually realised. An investigation into these concerns helps to determine the actual value produced when using strategic challenges as live cases in futures education, with SP being one specific strategy methodology being taught in executive education. The investigation may also reveal insights into how to improve the future of education.

In summary, the above literature review allows one to conclude that there is only limited knowledge on what value live case strategists obtain from the outputs produced by participants in executive education programmes where learning is based on their live case. We therefore set out to assess the value of the live case method by exploring how executives who are not in the classroom, but ‘own and lend’ the live case study to those in the classroom, benefit from scholarly impact (Hutchings et al., 2011; Aguinis et al., 2012, 2014; Gamble & Jelley, 2014; Lovelace et al., 2016; Anderson et al., 2017a). Thus, this research studies impact, but does so by extending its focus beyond the closed boundaries of a business school classroom.

### 3. Methods

According to Pettigrew and Starkey (2016), a micro study, such as ours, on the design of teaching for impact on stakeholders outside the classroom can help scholars to extend the scope of management education impact. For the purpose of this study we conducted a post-programme evaluation of a SP programme through mixed methods.

#### 3.1. Study context

The Scenario Planning Programme (SpP henceforth) that we studied is an executive development course offered by an internationally leading Business School and attended by senior strategists and policy makers from national and international companies, government and inter-governmental agencies, NGO’s, as well as academics and consultants. It is specifically designed to have global outreach – a focus that more and more business schools have been expected to have in their teaching (Currie et al., 2010; Doh, 2010). The programme received a pedagogical award from a leading UK-based management research society for its original contribution to bridging knowledge and practice.

As the programme has followed the same format year-on-year, it offers a laboratory-like research setting which makes it possible to compare live cases with each other in each iteration of the programme (two or three live cases used each time) and across iterations. The learning setting remains highly comparable (same core faculty, same premises, same format), although each iteration does have some unique elements (different cases, different participants, and different group facilitators, new scholarship on SP being added each time). Each SpP iteration involves at least one public or non-profit organisation and one private firm. The profile of organisations is outlined in Table 1 (non-disclosure agreements limit our ability to divulge firm- or organisation-specific information). The live case requires the physical presence by at least two and up to five live case professionals (with a minimum of one per live case, per group), including the strategist who owns the challenge and who will do something with the input produced by SpP participants. Each live case study is worked on by one or two groups of seven participants over the course of a week. Each group is aided by a facilitator and the faculty. The same SP methodology is used across all cases to help them and the participants to better engage with the conundrum lent by the live case strategist. However, each challenge brought by each strategist is unique. Potential live cases are interviewed ahead of the programme by the faculty who outline the school’s expectations for learning and seek to understand the strategists’ expectations, too.

Prior to the programme, the strategists prepare a case brief of about 10–15 pages which is based on a template designed by the

**Table 1**  
Profile of strategists.

Profile		Profit	Non-profit	UK	Non-UK	Senior level	Mid-level
Approached	26 (31 minus 5 duplicates)	13	13	13	13	6	20
Responses	22 (26 minus 2 non-responses and 2 who moved on)	10	12	11	11	6	16

programme faculty and allowing to standardise the case structure. The strategists make an in-person presentation of the live case challenge to the participants on the first day of teaching (Monday). On the second half of that afternoon they share their appreciation of the context within which the challenge is placed and provide details about their organisation. This is followed by interaction with the participants over drinks and dinner that same evening. A follow-up one-hour teleconference is held on Wednesday afternoon, and then the strategists return on Friday morning (last day of SpP) to assess the results produced by participants. The engagement typically involves the transfer of SP outputs – in the form of scenarios as well as proposed strategic options – to the strategists, as developed by participants. (Table 2).

Fig. 1 outlines a depiction of the programme design showing the interactions between faculty, classroom participants and live case strategists. At the core of SpP is an intellectual ‘barter’ between the live case strategist, the faculty and the participants to form shared learning and an inquiring system. Throughout the programme, the barter involves engaged scholarship via continuous exchange of knowledge, reflection, and information between three key stakeholders (faculty, participants and live case strategists). This barter is centred on furthering practical and academic knowledge and is manifested as experiential learning (Kolb, 1984) for both the participants and the strategists who lend the live case.

### 3.2. Data collection

We employed a mixed methods approach utilising both quantitative and qualitative data. The data was sourced from the case briefs, from the live case presentations to students, from an online survey, and from follow-up telephone interviews. Our data set covers 31 live cases over 15 iterations of the programme over a nine-year period from 2007. The programme began being delivered in 2004 and by 2007 its pedagogical design had become established. From the 31 live cases, we removed duplicate live case strategists (five organisations who repeated the experience at least once with different live case challenges each time) resulting to a list of 26 unique organisations.

The informed consent for our data gathering assured all respondents that no information would be attributed to any specific organisation, which we have abided by in the presentation of the results. Eight cases requested to remain completely anonymous. Of the rest, we do not identify any of the findings to any specific company or organisation, but can say that they included blue chip FT, NYSE, and Dax companies, well known national and international NGO’s, and major health and public service providers.

For recruiting live case strategists for the purpose of this study, we sent a letter of invitation to participate in this research, an information sheet outlining the research and its objectives, a survey, and an interview protocol. For saturation purposes (Corbin & Strauss, 2008) we tried to include as many of these 26 live case strategists covering nine years of the programme. According to Saunders and Townsend (2016), for homogeneous populations, about 20–30 responses should offer meaningful insights. We followed up survey respondents over a six-month period and received responses from 22 out of 26 live case strategists, representing an 85% response rate. Four live cases were unresponsive because the company or division ceased to operate, or the strategist had changed jobs or left the organisation.

The online survey questionnaire (see Appendix) consisted of quantitative (Likert scale responses) as well as qualitative, open-ended questions addressed to the live case strategists. Respondents submitted their responses after providing informed consent, knowing that they could withdraw at any time. The closed questions focused on live case strategists’ expectations versus reported actual benefits as drawn from the experiential knowledge derived from the programme. In the survey we listed 13 benefits identified from the SP literature. Five SpP faculty and five facilitators reviewed and tested the first draft of the survey, which allowed to further refine the closed and open-ended questions as well as the scale. Both sets of questions about the expected and actual benefits derived from SP were asked at the same time during one sitting of administering the survey.

Through the open-ended questions, we solicited whether there were benefits that had not been covered in the closed-ended survey questions. These questions also provided respondents the opportunity to elaborate on their understanding of benefits they could have obtained from lending their live case. Responses addressed issues such as the original expectation of the SpP, how it was met or changed, the benefits drawn from the engagement, and the investments made in further SP work after the programme ended. In addition to the qualitative data drawn from the open-ended questions, we conducted follow-up telephone interviews with five live case

**Table 2**

Uses of scenario planning from the literature.

Use	Source
1. To help reframe your and / or your organisation’s understanding of issue or problem;	Wilkinson & Ramirez (2010)
2. To gather insights on your strategy and on the assumptions behind it;	Schoemaker (1993, 1995); Schwartz, 1996
3. To get a glimpse of what possible futures might look like;	Bunn & Salo (1993)
4. To improve the quality of your strategic conversations;	Bradfield et al. (2005); van der Heijden, 2005.
5. To better appreciate and manage ambiguity;	Wack (1985); Sutcliffe, Weber (2003)
6. To surface assumptions and make them discussable;	Wack (1985)
7. To correct decision-making biases;	Schoemaker (1993, 1995);Chermack (2004)
8. To help surface misleading judgements;	Finkelstein et al. (2009)
9. To expand or reconfigure your network of stakeholders;	Lang (2012)
10. To assess values that are in dispute;	Ramirez & Wilkinson (2016)
11. To support more effective learning;	De Geus (1988); van der Heijden, 2005
12. To contribute towards changing team roles;	Islei et al. (1999)
13. To build new social capital.	Lang (2012)



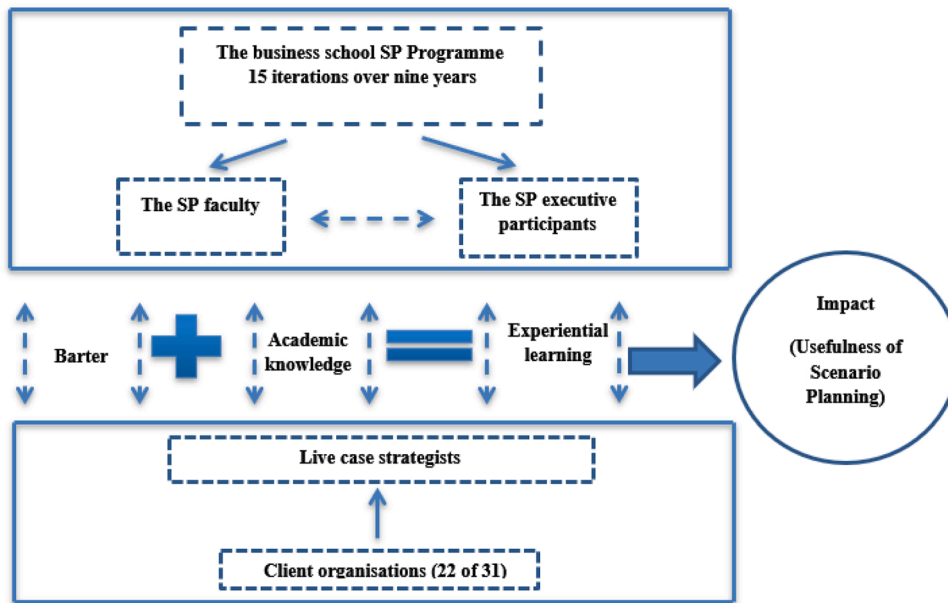


Fig. 1. Interactions in the SP programme.

strategists whose survey responses were unclear, ambiguous or difficult to understand (e.g. when a live case strategist reported overall high satisfaction with the programme yet gave low scores to it, or vice versa).

The qualitative data from the documents comprised of 221 pages from case briefs and 399 slides from presentation decks. The open-ended responses to the survey amounted to around 3500 words (approximately 12 pages), and the notes from the interviews amounted to about 1000 words (3 pages). The live case briefs were used to draw out the original purpose and expected benefits and these were matched with the list of 13 benefits evaluated in the survey. We also mapped the closed-ended responses with the open-ended responses to identify any discrepancies in completing the survey.

### 3.3. Survey design

The survey was designed to test the value for strategists from the outputs generated from the programme. SP, as a practice and a method, informs robust strategic thinking, decision making, and strategic implementation (Wack, 1985; Schoemaker, 1995; Bradfield et al., 2005), particularly under conditions of turbulence, uncertainty, novelty and/or ambiguity (Ramirez et al., 2010). The assessment of the benefits of SP can be difficult to establish, as SP has been credited by influential scenario practitioners and scholars as being more an art than science (Schwartz, 1996; van der Heijden, 2005). As mentioned earlier, to ascertain what value the executives actually obtained, we identified 13 possible benefits discussed in the SP literature as associated with the use of SP and incorporated these in our survey questionnaire. These are very diverse and range from correcting decision-making biases (Schoemaker, 1993, 1995; Chermack, 2004) to supporting more effective learning (De Geus, 1988; van der Heijden, 2005), and building new social capital (Lang, 2012).

## 4. Findings

Before we proceed to explain the results of our work, we wish to explain briefly what we mean by outputs, benefits, values, and outcomes. For the purpose of the study, we define *outputs* as the scenarios produced by students from their SP activity. We define *benefits* as the 13 uses of scenarios as per the SP literature. We define *values* as the degree to which the expectations of strategists were met. Finally, we define *outcomes* as the results of the pedagogical engagement for either the strategist's organisation, the learners in the classroom, or the business school.

Descriptive statistics for both the expected and actual responses from the 22 cases against 13 possible benefits are shown in Table 3. We present the results in two sections: first, the quantitative data from the survey and second, the qualitative data from the survey, the live case briefs, the presentations, and the telephone interviews.

### 4.1. Quantitative data

We sought to identify conceptual links among the 13 identified benefits from the literature and checked whether research participants' responses in the survey related to these categories. We conducted Principal Component Factor Analysis and Spearman correlations for ordinal data. The correlation matrices for expected and actual responses are shown in Tables 4a 4b. In the expected

**Table 3**

Descriptive statistics.

Statistic	1. To help reframe your and / or your organization's understanding of issue or problem;	2. To gather insights on your strategy and on the assumptions behind it;	3. To get a glimpse of what possible futures might look like;	4. To improve the quality of your strategic conversations;	5. To better appreciate and manage ambiguity;	6. To surface assumptions and make them discussable;	7. To correct decision- making biases;	8. To help surface misleading judgements;	9. To expand or reconfigure your network of stakeholders;	10. To assess values that are in dispute;	11. To support more effective learning;	12. To contribute towards changing team roles;	13. To build new social capital
Nbr. of observations	22	22	22	22	22	22	22	22	22	22	22	22	22
Minimum (expected)	2	2	2	2	1	2	1	1	1	1	1	1	1
Minimum (actual)	1	2	1	1	1	1	1	1	1	1	1	1	1
Maximum (expected)	5	5	5	5	5	5	4	4	5	5	5	4	5
Maximum (actual)	5	5	5	5	5	5	4	4	5	4	4	4	4
Freq. of min (expected)	4	2	1	1	1	2	2	3	2	3	3	4	1
Freq. of min (actual)	1	4	1	1	2	2	3	5	3	4	5	7	5
Freq. of max (expected)	2	2	8	5	1	2	5	7	1	1	1	3	1
Freq. of max (actual)	3	4	5	1	1	1	2	2	1	2	4	4	3
1st Quartile (expected)	3.00	3.00	4.00	3.00	2.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1st Quartile (actual)	3.00	3.00	3.25	3.00	2.00	2.25	2.00	2.00	2.00	2.00	2.00	1.00	2.00
Median (expected)	3.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00	3.00	2.00	2.50	2.00	3.00
Median (actual)	3.50	4.00	4.00	4.00	3.00	3.00	2.50	2.50	3.00	2.00	2.00	2.00	3.00
3rd Quartile (expected)	4.00	4.00	5.00	4.00	3.75	4.00	3.00	4.00	3.00	3.00	4.00	3.00	3.75
3rd Quartile (actual)	4.00	4.00	4.00	4.00	3.75	3.75	3.00	3.00	3.00	3.00	3.00	2.75	3.00
Mean (expected)	3.36	3.59	4.14	3.86	2.91	3.45	2.73	2.82	2.77	2.41	2.73	2.41	2.82
Mean (actual)	3.41	3.59	3.73	3.45	2.82	2.95	2.45	2.36	2.68	2.23	2.36	2.14	2.45
Standard deviation (n-1) (expected)	0.90	0.80	0.83	0.83	0.97	0.80	0.94	1.05	1.02	0.96	1.16	0.96	1.01
Standard deviation (n-1) (actual)	1.05	1.01	1.12	0.91	1.05	1.00	0.86	0.95	1.04	0.87	1.05	1.08	1.01

**Table 4a**  
Correlation matrix for expected responses.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1	<b>1</b>	<b>0.776</b>	<b>0.525</b>	0.130	0.084	0.064	0.102	0.097	0.156	-0.166	0.092	-0.041	0.033
2	<b>0.776</b>	<b>1</b>	<b>0.626</b>	0.368	0.102	0.297	0.256	0.095	0.236	-0.161	0.316	0.273	0.300
3	<b>0.525</b>	<b>0.626</b>	<b>1</b>	<b>0.475</b>	0.025	0.211	0.084	0.031	0.286	-0.306	0.247	-0.020	0.204
4	0.130	0.368	<b>0.475</b>	<b>1</b>	0.286	<b>0.428</b>	0.265	0.372	<b>0.565</b>	0.146	0.287	0.279	<b>0.672</b>
5	0.084	0.102	0.025	0.286	<b>1</b>	0.160	<b>0.759</b>	<b>0.730</b>	<b>0.502</b>	<b>0.534</b>	0.163	0.054	<b>0.425</b>
6	0.064	0.297	0.211	<b>0.428</b>	0.160	<b>1</b>	0.137	0.171	<b>0.574</b>	0.192	0.266	0.128	<b>0.424</b>
7	0.102	0.256	0.084	0.265	<b>0.759</b>	0.137	<b>1</b>	<b>0.753</b>	<b>0.479</b>	<b>0.578</b>	0.175	0.217	0.413
8	0.097	0.095	0.031	0.372	<b>0.730</b>	0.171	<b>0.753</b>	<b>1</b>	<b>0.606</b>	<b>0.815</b>	0.357	0.233	<b>0.547</b>
9	0.156	0.236	0.286	<b>0.565</b>	<b>0.502</b>	<b>0.574</b>	<b>0.479</b>	<b>0.606</b>	<b>1</b>	<b>0.538</b>	<b>0.442</b>	0.137	<b>0.631</b>
10	-0.166	-0.161	-0.306	0.146	<b>0.534</b>	0.192	<b>0.578</b>	<b>0.815</b>	<b>0.538</b>	<b>1</b>	0.328	0.357	<b>0.470</b>
11	0.092	0.316	0.247	0.287	0.163	0.266	0.175	0.357	<b>0.442</b>	0.328	<b>1</b>	<b>0.479</b>	<b>0.469</b>
12	-0.041	0.273	-0.020	0.279	0.054	0.128	0.217	0.233	0.137	0.357	<b>0.479</b>	<b>1</b>	0.353
13	0.033	0.300	0.204	<b>0.672</b>	<b>0.425</b>	<b>0.424</b>	0.413	<b>0.547</b>	<b>0.631</b>	<b>0.470</b>	<b>0.469</b>	0.353	<b>1</b>

correlations Table 4a, we can see that some of the correlations are quite high suggesting that these could be reduced to principal factors.

We identified four factors and found two of them to be significantly correlated to most of the variables. Further reduction using a Varimax rotation was made easier by maximizing the variance of the squared factors loadings by column. The loadings in Table 5a show that the main factors are F1 which we interpret as manifesting decision-making and F2 as relating to improved understanding. The factor pattern after the Varimax rotation for both expected and actual responses in Table 5b confirm this result. We thus found that two overarching themes matter the most for the live case strategists: better understanding the challenge (questions 1–4) and better decision-making (questions 5–13).

We compared the benefits expected before the programme began to the (reported) actual benefits realised after the SpP experience by evaluating change scores for each of the 13 variables. Table 6 shows the comparison between the expected and actual benefits from the responses of each live case strategist, indicating a difference or change of scores in percentage points, for each of the 13 individual benefits derived from the SP literature.

Due to our small sample size, we aggregated the data across all responses for each of the five options on the Likert scale, which allowed us to apply Chi-square test. Table 7a exhibits the non-parametric Chi-square test results from the comparison between aggregated expected benefits and actual benefits. The Chi-square was significant at the 5% level, suggesting a statistically significant difference between the expected and actual values. We then merged the scale 1 ('not at all') and scale 2 ('little') scores, which again revealed that the actual values were lower than the expected ones (see Table 7b). In the same way, merging the remaining scale 3, 4 and 5 scores together revealed that the actual values obtained were lower than the expected values.

The following findings stand out from Table 6: for three of the 13 different types of benefit obtained from SP, the scores the live case strategists gave when they filled out the survey or responded to interviews were equal to the scores they gave to expected benefits, meaning that the live case outcomes met their expectations; for ten of the 13 SP benefits the scores for the actual benefits were lower than those given for the expected benefits, meaning that the outcomes fell short of their expectations.

Three benefits where live case strategists felt SpP met their expectations relate to reframing and restructuring outcomes: helping them reframe their and/or their organisation's understanding of the issue at hand (Wilkinson & Ramirez, 2010); helped expand or reconfigure their stakeholder network (Lang, 2012); and helped them to build new social capital (Lang, 2012).

The four most sought-after expected types of SP benefits were: to get a glimpse of what possible futures might look like (Bunn & Salo, 1993), with 18 of the 22 live cases expecting such a benefit and 16 live case strategists actually experiencing it; to improve the quality of one's strategic conversation (Bradfield et al., 2005; van der Heijden, 2005), with 15 of the 22 live case strategists expecting

**Table 4b**  
Correlations matrix for actual responses.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1	<b>1</b>	<b>0.816</b>	<b>0.536</b>	<b>0.734</b>	<b>0.454</b>	0.366	0.412	0.383	0.154	0.258	0.258	<b>0.463</b>	0.108
2	<b>0.816</b>	<b>1</b>	<b>0.481</b>	<b>0.705</b>	0.393	0.404	<b>0.536</b>	<b>0.534</b>	0.065	0.387	0.316	<b>0.635</b>	0.017
3	<b>0.536</b>	<b>0.481</b>	<b>1</b>	<b>0.649</b>	<b>0.431</b>	0.285	0.233	0.219	0.129	0.198	0.399	0.251	0.133
4	<b>0.734</b>	<b>0.705</b>	<b>0.649</b>	<b>1</b>	<b>0.509</b>	0.191	0.335	0.256	0.284	0.124	0.402	0.369	0.301
5	<b>0.454</b>	0.393	<b>0.431</b>	<b>0.509</b>	<b>1</b>	<b>0.566</b>	<b>0.698</b>	<b>0.484</b>	0.234	<b>0.574</b>	0.337	0.302	0.338
6	0.366	0.404	0.285	0.191	<b>0.566</b>	<b>1</b>	<b>0.625</b>	<b>0.700</b>	0.400	<b>0.685</b>	<b>0.484</b>	<b>0.629</b>	<b>0.446</b>
7	0.412	<b>0.536</b>	0.233	0.335	<b>0.698</b>	<b>0.625</b>	<b>1</b>	<b>0.807</b>	0.382	<b>0.735</b>	0.389	<b>0.576</b>	0.276
8	0.383	<b>0.534</b>	0.219	0.256	<b>0.484</b>	<b>0.700</b>	<b>0.807</b>	<b>1</b>	0.397	<b>0.829</b>	0.281	<b>0.577</b>	0.339
9	0.154	0.065	0.129	0.284	0.234	0.400	0.382	0.397	<b>1</b>	0.145	<b>0.435</b>	0.325	<b>0.821</b>
10	0.258	0.387	0.198	0.124	<b>0.574</b>	<b>0.685</b>	<b>0.735</b>	<b>0.829</b>	0.145	<b>1</b>	0.254	<b>0.524</b>	0.234
11	0.258	0.316	0.399	0.402	0.337	<b>0.484</b>	0.389	0.281	<b>0.435</b>	0.254	<b>1</b>	<b>0.560</b>	<b>0.520</b>
12	<b>0.463</b>	<b>0.635</b>	0.251	0.369	0.302	<b>0.629</b>	<b>0.576</b>	<b>0.577</b>	0.325	<b>0.524</b>	<b>0.560</b>	<b>1</b>	0.302
13	0.108	0.017	0.133	0.301	0.338	<b>0.446</b>	0.276	0.339	<b>0.821</b>	0.234	<b>0.520</b>	0.302	<b>1</b>

Values in bold are different from 0 with a significance level  $\alpha=0.05$



**Table 5a**

Factor pattern using four principal components.

	F1	F2	F3	F4
1. To help reframe your and / or your organisation's understanding of issue or problem;	0.222	<b>-0.641</b>	0.379	0.174
2. To gather insights on your strategy and on the assumptions behind it;	0.446	<b>-0.827</b>	0.138	0.312
3. To get a glimpse of what possible futures might look like;	0.295	<b>-0.698</b>	0.080	-0.154
4. To improve the quality of your strategic conversations;	<b>0.625</b>	-0.276	-0.233	-0.274
5. To better appreciate and manage ambiguity;	<b>0.668</b>	0.283	0.403	-0.041
6. To surface assumptions and make them discussable;	<b>0.449</b>	-0.174	-0.233	-0.283
7. To correct decision-making biases;	<b>0.706</b>	0.230	0.380	0.146
8. To help surface misleading judgements;	<b>0.828</b>	0.360	0.246	0.082
9. To expand or reconfigure your network of stakeholders;	<b>0.806</b>	-0.011	-0.066	-0.346
10. To assess values that are in dispute;	<b>0.658</b>	0.603	-0.031	0.153
11. To support more effective learning;	<b>0.515</b>	-0.112	-0.327	0.161
12. To contribute towards changing team roles;	0.405	0.011	-0.520	<b>0.558</b>
13. To build new social capital; (for instance to help you create new connections or establish new common ground with others?)	<b>0.765</b>	-0.019	-0.272	-0.142

Values in bold correspond for each variable to the factor for which the squared cosine is the largest

**Table 5b**

Factor pattern after Varimax rotation for expected and actual responses.

	D1	D2	D1	D2
	Expected		Actual	
1. To help reframe your and / or your organisation's understanding of issue or problem;	-0.025	<b>0.678</b>	0.154	<b>0.837</b>
2. To gather insights on your strategy and on the assumptions behind it;	0.117	<b>0.933</b>	0.206	<b>0.877</b>
3. To get a glimpse of what possible futures might look like;	0.022	<b>0.758</b>	0.132	<b>0.612</b>
4. To improve the quality of your strategic conversations;	0.483	<b>0.484</b>	0.134	<b>0.834</b>
5. To better appreciate and manage ambiguity;	<b>0.725</b>	-0.023	<b>0.502</b>	0.456
6. To surface assumptions and make them discussable;	<b>0.356</b>	0.324	<b>0.759</b>	0.283
7. To correct decision-making biases;	<b>0.741</b>	0.041	<b>0.712</b>	0.412
8. To help surface misleading judgements;	<b>0.902</b>	-0.036	<b>0.758</b>	0.338
9. To expand or reconfigure your network of stakeholders;	<b>0.748</b>	0.302	<b>0.665</b>	-0.026
10. To assess values that are in dispute;	<b>0.832</b>	-0.324	<b>0.704</b>	0.265
11. To support more effective learning;	<b>0.440</b>	0.290	<b>0.502</b>	0.288
12. To contribute towards changing team roles;	<b>0.381</b>	0.136	<b>0.552</b>	0.445
13. To build new social capital; (for instance to help you create new connections or establish new common ground with others?)	<b>0.707</b>	0.294	<b>0.753</b>	-0.089

and 13 actually experiencing this benefit; to gather insights on one's strategy and on the assumptions behind it (Schoemaker, 1993, 1995; Schwartz, 1996), with 13 of the 22 cases expecting this benefit and an equal number experiencing this benefit; to surface assumptions and make them discussable (Wack, 1985), with 10 of the 22 cases expecting this benefit and 6 live case strategists experiencing it.

The three least valued benefits from SP in the classroom reported in the survey were: to assess values that are in dispute (Ramirez & Wilkinson, 2016), with two of 22 live case strategists expecting this benefit and one actually experiencing it; to contribute towards changing team roles (Islei et al., 1999), with three of 22 live case strategists expecting this benefit and four experiencing it; to correct decision-making biases (Schoemaker, 1993, 1995; Chermack, 2004), with five of 22 expecting this benefit and two actually experiencing it. Consequently, respondents reported having derived little value from the SpP in terms of assessing values that were in dispute, changing team roles, or correcting decision-making biases, but this is because this is not what they sought in the first place. Interestingly, this suggests that participants' least valued benefits were those where some sort of disruption incurred in terms of either the agreed values or team roles or decision-making direction.

Despite realising some lower than expected benefits, overall, the findings suggest that most live case lenders found having lent the case valuable. In keeping some of these benefits in mind, the majority (70%) of the respondents said they would be willing to "recommend others to lend their live case to the SP" and indeed, several live case strategists have returned to the programme with new organisational challenges. The results here support our Proposition 1: i.e., that live strategists did draw benefits commensurate with the benefits cited in the SP literature.

#### 4.2. Qualitative data

The qualitative data we gathered from the case briefs, presentation decks, the open-ended questions in the survey, and the five interviews helped us to corroborate and enrich the insights we drew from the quantitative findings. We mapped all open-ended responses from the survey in terms of how well they fit into each of the 13 possible values and set these out in Table 8. We found examples of 11 of the 13 benefits in the open-ended responses participants provided. As stated above, the two exceptions where no responses matched were: "To assess values that are in dispute" and "To contribute towards changing team roles" – again, not surprising given that

**Table 6**

Expected versus actual value for each benefit of scenario planning.

Use	Expected	Actual	Average	Change
1. To help reframe your and / or your organisation's understanding of issue or problem;	82%	82%	82%	0
2. To gather insights on your strategy and on the assumptions behind it;	91%	82%	87%	-9%
3. To get a glimpse of what possible futures might look like;	95%	82%	89%	-14%
4. To improve the quality of your strategic conversations;	95%	86%	91%	-9%
5. To better appreciate and manage ambiguity;	64%	59%	62%	-5%
6. To surface assumptions and make them discussable;	91%	73%	82%	-18%
7. To correct decision-making biases;	59%	50%	55%	-9%
8. To help surface misleading judgements;	64%	50%	57%	-14%
9. To expand or reconfigure your network of stakeholders;	59%	59%	59%	0
10. To assess values that are in dispute;	41%	32%	37%	-9%
11. To support more effective learning;	50%	41%	46%	-9%
12. To contribute towards changing team roles;	45%	27%	36%	-18%
13. To build new social capital; (for instance to help you create new connections or establish new common ground with others?)	55%	55%	55%	0

6, 12: – 18% decline in actual value experienced compared to expected

3, 8: – 14% decline in actual value experienced compared to expected

2, 4, 7, 10, 11: – 9% decline in actual value experienced compared to expected

5: – 5% decline in actual value experienced compared to expected

1, 9, 13: 0% No change

**Table 7a**

Aggregate responses for Chi-square Test.

13 Questions combined	Expected count	Actual count	Expected %	Actual %
1 Not at all	19	39	7%	14%
2 Little	71	76	25%	27%
3 Somewhat	89	85	31%	30%
4 Much	83	70	29%	24%
5 A great deal	24	16	8%	6%
<b>total</b>	<b>286</b>	<b>286</b>		

H0: There is no difference between the expected &amp; actual benefits realised from the SP

Chi Test:  $2.76911\text{E-}05\text{p} \leq 0.05$ ; Reject null; there is significant difference.**Table 7b**

Merged responses for Chi-square Test.

MERGED	Expected count	Actual count	Expected %	Actual %
No (1 and 2 options)	90	115	31%	40%
Yes (3–5 options)	196	171	69%	60%

Chi Test:  $0.001456208\text{p} \leq 0.05$  Reject null; again, suggests there is a significant difference between the expected and actual benefits.

these were not objectives that strategists lending the case sought in the first place. They also signify benefits that involved some level of disruption for their context and therefore perhaps not an avenue they would want to pursue.

Our analyses of the case briefs showed that the most numerous benefits sought in the original briefs –with 14 of the 22 cases having referenced these in their briefs– were “To gather insights on your strategy and on the assumptions behind it” followed by seven cases seeking “To get a glimpse of what possible futures might look like”; and three cases desiring to “To build new social capital”. On the open-ended survey question which solicited whether there were benefits that were not included in our literature-based survey (question 14, Table 3), we found no significant benefits obtained, or expected, beyond the 13 benefits already listed. This confirmed that our compilation of benefits to strategists based on our literature review produced a broad set of possible actual SP benefits. This further supports our Proposition 1 that strategists who lend their live cases and their organisations tend to draw benefits that are commensurate with the benefits from SP cited in the literature.

We also drew insights on our two research propositions from the open-ended responses, and from the follow-up interviews. Our study reveals that for the majority of live case strategists (20 of 22) the opportunity to lend a live case to SpP helped their organisations. It improved their understanding of the challenge which they lent to SpP, informed their decision-making by offering them insights into possible futures, improved their strategic conversations, and /or helped change assumptions or made them more salient. Live case strategists also reported that they found the live case experience helpful in reframing their issues, they became more energised about SP work, and – for some – SpP even changed how they work within their organisation. The live case strategists found the SpP – with its educational and experiential learning setting – to be a safe environment within which they considered the possibility of ‘failure’ (i.e., not to get something out of the experience) to be almost risk-free and considered lending their case to be an opportunity for being more

**Table 8**

Number of open-ended responses in support of uses of scenario planning.

Benefit	Example quote	No
1. To help reframe your and / or your organisation's understanding of issue or problem;	<i>Asking the question in a different way prompted colleagues to offer newer and more divergent insights on standard issues. We avoided the standard answer to a standard question routine.</i>	7
2. To gather insights on your strategy and on the assumptions behind it;	<i>To generate a strategic input to our executive team for long term company strategy</i>	13
3. To get a glimpse of what possible futures might look like;	<i>The framework of addressing the future now and then getting ready for it</i>	8
4. To improve the quality of your strategic conversations;	<i>To improve our communication on developing in-house prospective/foresight capacity</i>	7
5. To better appreciate and manage ambiguity;	<i>It was challenging to translate the scenarios activity and their impact to other Board members and senior staff - but people were fascinated and at the same time a little confused as to what to do with them.</i>	4
6. To surface assumptions and make them discussable;	<i>They were meant to provide us with different future context for how our issues and approach would fare in a changing world, given a variety of assumptions we had never considered.</i>	6
7. To correct decision-making biases;	<i>To challenge the boundaries of our thinking. To challenge the level of the Board's ambitions.</i>	6
8. To help surface misleading judgements;	<i>Thought we had cracked it, scenarios activity made us think again and be more radical</i>	5
9. To expand or reconfigure your network of stakeholders;	<i>Incredibly worthwhile - being exposed to such a range of extremely bright people from a mixture of different countries and different sectors produced an intensity of debate and challenge that was very powerful.</i>	6
10. To assess values that are in dispute;	–	–
11. To support more effective learning;	<i>Create a disciplined approach to thinking more deeply and writing up the development and impact of the programme</i>	7
12. To contribute towards changing team roles;	–	–
13. To build new social capital; (for instance to help you create new connections or establish new common ground with others?)	<i>I could see the connections within a wider network that I needed to engage.</i>	5

openly challenged without fear of organisational repercussions (Wright et al., 2013). For instance, one strategist said:

*"... we wanted the scenarios to stretch our thinking, to be a challenge to our strategy, and (these sessions) did that." (Case 4: large, UK-based, for-profit)*

New directions or opportunities which live case strategists undertook because of lending live cases to SpP include restructuring their planning, such as setting up a team dedicated to SP, a broadened scope of SP activities, and becoming more aware of plausible futures that were until then overlooked. For example, an organisation created a dedicated SP team. One of the participants explained:

*"The scenarios encouraged us to develop a team to focus on this function. The scenarios, with their focus on geo-strategic developments, also encouraged us to focus to a great extent on this dimension of foresight planning." (Case 1: large, non-UK, non-profit)*

A key strength from executives' experience of lending their organisation as a live case has been how cost-effective the SP activity became for most of them, as it required minimal cost as compared to employing expensive SP consultant advice. One strategist said:

*"In reality the investment in participating was fairly low compared to the value [received]. The cost was probably equivalent to running a consumer focus group. The benefit was both in training - understanding better the approaches and techniques of scenarios activity - and in having a group of senior execs applying their expertise to our problem." (Case 19: small, UK-based, non-profit)*

For another set of live case strategists, the value for money of this engagement related not only to avoiding the cost of consultancy fees but also the cost of management time. One strategist explained:

*"The alternative would have been many hours of very expensive consultancy and senior management time to get to those conclusions." (Case 22: large, non-UK, for-profit)*

What makes much of this engagement to be more affordable is the barter approach that underpins the interactions between the school and the live case strategist. It serves as a useful arrangement for engaging disparate stakeholders for mutual benefit, even if on a few occasions this appears to have been inadequate. One live case strategist felt that it:

*"... seemed as if there was not adequate engagement before the programme to correctly prepare for appropriate use of the work." (Case 12: large, non-UK, for-profit)*

Conversely, another strategist said that:

*"... the extensive preparation, the brief we prepared, the conversations prior to our presentations helped sharpen our focus. The scenarios (results) themselves gave our non-profit perspective a healthy dose of review by the for-profit world." (Case 10: large, non-UK, non-profit)*

In comparing expected benefits with actual ones, where our findings indicate that the two coincided, the live case strategists felt that these were benefits most often associated with reframing or better understanding the challenge due to the SP intervention. This only partly confirms our Proposition 2, that is, that the original purpose and expectations of the strategists were met.

This finding suggests that further improvement in the design and implementation of the live case method is warranted in order to better close the gap between live case strategists' initial purpose in lending cases and the actual results they obtain. An important finding in terms of potential for further improvement is that we found that where the purpose for lending a live case was clear, there was a higher correlation with a clear benefit having been derived from the lending of the case. Conversely, where the purpose was less clear or unclear, the actual benefits reportedly derived from lending the live case were also unclear and/or low. So, focusing on the exact purpose in lending a case seems to be accompanied with obtaining better results.

The question of whose purpose is being met immediately or for the long-term can change. It is either an event which stops after the scenarios have been developed or is a longer process which sustains through continuous iteration. Users must in any case be directly involved in the engagement for it to be useful to them and, if not, then the SP fails to be as useful as intended. One case was represented by someone on behalf of someone else in the company, with underwhelming results:

*"The real client (user) did not come and there was insufficient engagement both with the main person who was supposed to come and with me (who did come)." (Case 12: large, non-UK, for-profit)*

A further possible explanation regarding the gap between expected and actual benefits – beyond lack of clarity in the purpose of lending a case, as reported by some survey participants – appears to be the limited (one week-long) timespan devoted to the issue within an executive education setting. This time span is shorter than what would have been the case in a professional or commercial SP activity. One live case strategist said for instance that:

*"... the short preparation time the participants have to dive into the topic proves to be limiting for deriving tangible scenarios outcomes." (Case 3: large, non-UK, non-profit)*

It should be noted that there are merits, too, in compressing the live case in one week for teaching and learning particularly in executive education (Hough et al., 2014), such as reduced costs for organisations and for them to allow time-off for their busy executives to partake in dedicated learning programmes. The one-week duration also allows for quicker outputs to be available to strategists who lend challenges that require urgent attention.

In addition to the limited time, the greater focus on participants' learning rather than on developing complete and comprehensive outputs for the strategists may explain some other unmet expectations. An example of this is a live case strategist who said that:

*"... the outputs (we received) could have been more comprehensive to share with people back at the (home organisation)". (Case 17: large, UK-based, non-profit)*

Indeed, success is not always guaranteed, as is also the case in real-life scenario planning interventions (Healey & Hodgkinson, 2008). A couple of the clients deemed the scenarios were too far-fetched. Here, it looks like the programme participants did not fully understand what had been most relevant and important to the organisation. One of these clients claimed:

*"The whole exercise is helpful, in terms of considering multiple outcomes and to develop new mindset. However, difficulty was the extreme scenarios, which were too far-fetched and the participants' lack of knowledge of the complexity of the organisation." (Case 3: large, non-UK, non-profit)*

A non-profit organisation felt the time horizon was too drawn out into the future to be useful to them. A follow-up interview suggested the organisation was focused on short-term and/or specific questions which were not well-informed by the scenario set which the participants produced:

*"It was too horizon scanning to be useful for our immediate objectives. It was good to get the conversation going, but the content was not helpful. I think the limitation of this use to small charity comes from the nature of the scenarios process." (Case 20: small, UK-based, non-profit)*

Follow-up telephone calls with this charity and another one who did not find the outputs as useful as they had expected suggested they were focused on immediate strategy development concerns which failed to be informed by the insights that the scenario planning exercise provided. Tapinos (2011) pointed out that there is a clear distinction in the two stages when scenarios are developed and then strategy is developed thereafter. The one-week long duration of the SpP combined with the focus on developing scenarios suggests the expectations of the clients should be managed carefully.

In conclusion based on our quantitative and qualitative analysis we found that while our Proposition 1 has been confirmed (i.e., both the strategists who lend their live cases and their organisations appear to draw benefits commensurate with the benefits that the SP literature cites), our Proposition 2 (i.e., that the original purpose and expectations of the strategists were met) has been only partly confirmed.

## 5. Discussion

While Ramírez et al. (2021) showed that partnerships between business schools and outside organisations can bring value to all those who participate in the programme, including the consulting partner, here we have shown how this partnership can provide value specifically to those strategists who only lend live cases. The 10 out of 13 lower than expected results compared to expected benefits drawn from the programme also support Bradfield et al. (2015) suggestion that having a clear purpose can increase the potential value of an SP intervention. Although live case selection should favour those who are enthusiastic (Ramocki, 1987; Lopez & Lee, 2005), having live case strategists with unrealistic expectations or objectives is of course inadvisable.

The fact that expectations were on several occasions not met as much as had been desired in the programme that we examined reinforces the need to carry out assessments of executive education programmes to better understand how to improve them. Only in doing so, and in finding potential gaps and areas for improvement can genuine steps "be taken to revise the curriculum content or delivery methods" (Costigan & Brink, 2015: 274) and to overcome some of the criticisms business education faces.

The methodological orientation of intuitive logics indicates that the insights and learning arising from the scenario development process can sometimes be more important than the reliability of the scenarios themselves (Bradfield et al., 2005). Consequently, scenarios support the learning which in turn informs the process of decision-making – they do not directly result in decision-making (Wright et al., 2013). In the SpP, the scenarios offered insights that were deemed to be useful for reframing and re-perceiving (Ramírez & Wilkinson, 2016; Tapinos, 2011), which in turn help decision making and strategy development but had no direct causal link to decision-making.

A key difference in the SpP engagement which we studied in comparison to the broader set of intuitive logics approaches is that the client did not pre-determine critical factors, trends or uncertainties before involving "remarkable people" (Wright et al., 2013). In this study, the remarkable people are partly represented by the executive students in the classroom who are developing scenarios for the client. It does occasionally happen that midway through the programme, usually on the Wednesday during the second call between the client and the executives, that the client co-identifies or reinforces the critical factors identified by the executives.

Nevertheless, concerning the live case method as a pedagogic approach, our empirical findings provide evidence on the extended effects this method can offer, particularly to make rigorous strategy teaching more relevant. Respondents valued the insights from the outputs of SP to be largely commensurate with those we identified in the literature. However, for lending organisations two important benefits of the live case method are significant – cost-savings and quick outputs – compared to the considerable expenses of dedicating many person-days of their own staff and hiring outside consultants (Banjo, 2009). We discuss what implications these findings have for scholarship and practice.

### 5.1. Implications for scholars

As mentioned in the introduction, the ongoing debate about relating rigour and relevance in management education (Aram & Salpante, 2003; Tushman et al., 2007; Hodgkinson & Starkey, 2011; Thorpe et al., 2011; Aguinis et al., 2014) is here extended from a focus on research to one on pedagogy. By assessing the value from SP pedagogy to practitioners, we contribute to the literature on rigour-relevance in business education (Mintzberg, 2004; Starkey & Madan, 2011) by showcasing how and what can be obtained by those who engage with academia (Tushman et al., 2007; Paton & Chia, & Burt, 2014). This can inform the future of education and extend the impact beyond constrained visions of future needs (Gayá & Brydon-Miller, 2017), in this case by opening engagement models in management education to stakeholders outside the classroom and as such maximise the impact of management education beyond the traditional research and teaching paths. This can also inform different ways to impart futures education (Kazemier et al., 2021).

Our research suggests that rigour and relevance via teaching and learning (and not just in research) can help business schools to engage with and have an impact to a wider array of stakeholders. This matters as it is through greater community involvement that management education, and generally higher education, can serve as an active agent in shaping the future society (Király & Géring, 2019). Overall, this paper lends support on how it is possible to meet the increasing expectations from different stakeholders that management education can (and should) have enhanced practical impact for companies and society (Thomas & Ambrosini, 2021). As such, extending and enhancing the impact from pedagogical activities to strategists can help business schools gain greater legitimacy about their role in business and society (Wilson & Thomas, 2012; Alajoutsijärvi et al., 2015; Pettigrew & Starkey, 2016) and therefore help attract more clients to what they can offer (Kovoor-Misra, 2020).

We also contribute to the literature on co-production and co-creation of knowledge (Antonacopoulou, 2009; Thomas & Ambrosini, 2021) which may have a role in shaping alternative organisational forms for the future of higher education (Király & Géring, 2019). We have done this by extending the notion of the typical partnership model beyond consultant and client (Broschak et al., 2015; Rogan & Sorenson, 2014) into a tripartite relationship among faculty, learners and live case lenders (where the learners serve as consultants and the faculty as facilitators). Along the lines of intensive business-to-business partnerships (Bettencourt et al., 2002; Rogan & Sorenson, 2014), we have shown there is promise also in business-school-to-business partnerships (Broschak et al., 2015) centred on pedagogy, not just research.

Vaara (2011) and Aguinis et al. (2014) advocated for reflexive critique and a pluralist engagement between academics and business practitioners for knowledge co-production. SP is a strategy tool that requires both reflexivity and pluralism (Iden et al., 2017) and for both reasons is here found to be well-suited to live case pedagogy. Our findings support the idea that more transformational forms of learning can arise from new relationships between academia and the social environment (Toarniczky et al., 2019). We have demonstrated that live case studies are one pedagogic method through which such relationships and partnerships can form. Rigorous design of pedagogy in management education can make a difference to investments made by organisations who engage with business schools (Paton & Wagner, 2014), which our findings suggest benefit from clear definition of purpose ex-ante.

Engagements that are based on co-production or co-creation can impart value to strategists through partnerships in teaching (Ramírez et al., 2021). By design, the live case can help foster this partnership by mixing 'the relative merits of practice-based and theory-based approaches to teaching strategic management' (Grant, 2008: 276). Live cases can also help make teaching more innovative and can reduce the over-reliance on the traditional and static case method (Shugan, 2006; Mesny, 2013; Alstete & Beutell, 2016; McDonald, 2017). A greater impact assessment, as for instance we have attempted to do so here, through the evaluation of outputs generated – not just from research but also from the teaching and learning offered by business schools – is a *sine qua non* component of the greater effectiveness which novel pedagogic formats can bring about.



### 5.2. Implications for practice

Our study confirms that pedagogical engagements with external organisations need to be critically designed and delivered (Currie et al., 2010). The process of using live case studies for generating and measuring outputs requires particular attention. If done with careful planning and evaluation, strategists could be better convinced to lend their challenges to business schools to remain competitive in an increasingly uncertain and turbulent world and can do so more affordably and speedily than when contracting ‘professional’ consultants. We provide some suggestions to both programme designers and strategists wishing to embark on such pedagogic partnerships.

Our findings underline (as posited by Laukkanen et al., 2013; Daly et al., 2014; Charlebois & von Massow, 2015) that business school faculty and staff must invest a significant amount of time and effort in setting up and maintaining relationships with live case strategists to render the method effective. This requires that the leadership of business schools account for and acknowledge this added effort on behalf of faculty embarking on the use of the live case method and provide the necessary resources to do so. Managing tensions in such multi-stakeholder-based pedagogy is critical to success (Lebrón et al., 2020) and cocreation of possible solutions (Sharma et al., 2022). Our findings in this study suggest that in order to obtain effective results, the live case strategists and faculty need to co-design the collaboration effectively by setting expectations and objectives clearly in advance. This observation further confirms prior research (Ramírez et al., 2021). Indeed, in line with better “joint planning for managing successful partnerships” (Bettencourt et al., 2002: 104–5), we found that areas that would enhance the live case experience for those strategists lending the cases in business school settings include: rigorous engagement between faculty and live case strategists not only during but also before and after the programme, selecting live cases that are keen on participating and on owning the SP implementation, and managing live case strategists’ expectations by setting out that the primary objective of executive education is to enhance the learning of participants rather than to provide a state-of-the-art consulting intervention.

A further challenge in using the live case methodology pertains to the participants’ experience and maturity, or lack thereof. Although those lending cases might benefit from a free or low-cost student analysis of their conundrum, organisations may be doubtful of their return on investment in terms of time and energy (Hough et al., 2014) if the students do not know their activity well. We found this to be less of a concern for this SP programme as its participants are mid- to senior-level professionals and executives currently working full-time. Although Banjo (2009) suggested that small businesses are more willing to collaborate with business schools for client-sponsored projects, from the profile of the live case strategists participating in this SpP, we found that international and large organisations are no less keen on engaging with executive education programmes than other live case lenders are. This may be due to the seniority and profile of the SpP executive education participants but also perhaps because of the added benefit of learning from the experience and expertise of the reputed faculty members involved (Hough et al., 2014).

Finally, while much has been written and researched about the value of different educational offerings that employ the live case method, this has not been the primary focus of our paper. Yet, we do recognize that the live case method and the financial benefits accrued for the live case organisations by receiving free consulting by participants within an education setting, could be better negotiated between stakeholders and could take the form of scholarships for future iterations of the programme. On the flipside of this, in the case of non-profit organisations, the free consulting offered to them by lending their organisation as a case study accrues social benefits since many of these organisations may have not otherwise afforded such input, leading to the cocreation of possible solutions to some critical wicked problems (Sharma et al., 2022).

### 5.3. Critical reflection

It is important to reflect on the research process and this pedagogical engagement.

On the research process, the authors had roles in designing, delivering, and subsequently evaluating the executive education scenarios programme. We know from prior research that people “sometimes act first before deducing their reasons for action in a post hoc manner” (Cushman, 2020; in Yong et al., 2021, p.783). Our case of post-hoc rationalization should not be confused with the deliberate search for justification of conclusions one already believes in (Schwitzgebel & Ellis, 2017). Instead, it is aligned more with an abductive approach whereby our experience and observations inductively revealed hypotheses which we then sought to deductively test by collecting actual data, albeit retrospectively. Our theoretical assumptions about SP and its pedagogy, as outlined in the literature review, guided the research we report in this paper and before that, the pedagogical design of the programme itself. The intuitive logics approach of SP puts considerable emphasis on learning from the process, and relatively less on the use of the scenario outputs for direct decision-making (Bradfield et al., 2005), but our own work suggests that this is neither always the case nor necessarily the case, as is confirmed, in our data sample.

In a positivist epistemology, ideally, the research would have been outsourced to a neutral, objective, external team who had no prior involvement in the SpP. However, in social science, attending to the specifics of context matters, and this attention has been argued to be an important basis for understanding phenomena better (Flyvbjerg, 2001). Our epistemology is phenomenological (Ramírez et al., 2010) and we enjoy a long-standing understanding of the context in which the programme operated and evolved. The staggered involvement, with one co-author being part of the SpP throughout, the second joining several years later but then departing just around when the third co-author joined, and all three critically reflecting on each other’s experiences in co-authoring this paper affords fresh eyes over different time periods. This diversity of our own, contrasted, shared and examined experiences has helped us determine the programme’s strengths and improve its weaknesses.

We are very aware that we have focused in this study on organisational benefits and have mostly ignored the personal benefits to the live case clients. This study evaluates the perspectives of the non-classroom learners, and for simplicity and practicality, we focused



on the SpP's action-based approach to learning, entailing reframing and re-perceiving challenges to help addressing them. In paying attention to the action component of Kolb's (1984) experiential learning theory, other parts which involve cognition and reflection have been downplayed in this research to remain focussed on evaluating the benefits the live case clients reported for their organisations. As programme designers and deliverers, we are cognizant that the SpP's design also entails reflection among the executives in the classroom (students) and the important role conversation plays in the SP process (Kayes, 2002; van der Heijden, 2005). During the week-long programme, reflection and conversation are centered on the executives in the classroom and comparatively, there is limited conversation afforded between the executives and the live-case clients. A month-long virtual offering was introduced during the Covid-19 pandemic, with live cases which we did not include in the sample. Whether a week or month, it is not the same amount of reflection which takes place in actual client engagements with reflective practitioners (Schon, 1979). We are limited by the barter arrangement to demand too much time from the live case client professionals, lest it be deemed to too burdensome for them to even engage at all with the programme.

Proponents of more holistic pedagogical approaches (e.g. Reynolds, 1999; Vince, 1998; Nonaka, 1994) suggest the benefits of scenarios as outputs depend on the whole engagement between students, faculty, and the live case clients. Indeed, one senior professional employed in a non-profit organisation had said:

*"But one of the ideas that emerged from a follow-up scenario day with [faculty] and not with the students at [Business School]) did become central to the charity's next 3-year strategy." (Case 20: small, UK-based, non-profit).*

Such instances reinforce the validity of our key claims that live cases can contribute to both actual reframing in the clients as well as to futures education. The underlying insight from our first proposition is that the benefits to organisations were found to be, in large part, commensurate to those outlined in the SP literature. The live case can also contribute to the future of education where a key lesson is that the value drawn can be built by enabling critical reflection by all stakeholders. The underlying insight from our second proposition is that the value drawn by the live case clients is interpreted in varying degrees and even differently in each specific case. Based on our empirical findings that there is positive value for live case clients in such programmes, we further propose that companies are willing to engage with business schools in this manner for mutual advantage. Business schools and their faculty take on added responsibility when managing these learning collaborations, requiring the affordance of time and resources so that all parties benefit.

On the pedagogical engagement, managing the engagement is complicated and time-consuming for universities and business schools specifically. Business school students benefit from greater interaction with real organisations, but faculty must put in a lot of work to design and manage such interactions. The preceding quote shows that the onus of imparting value to live case clients is spread across both students and faculty, and that the timescale for impact does not end with the official end of pedagogy. Pre- and post-programme engagement by faculty may need to be accounted for in workload distributions, or at least acknowledged, by business school management.

Complications can also arise from different interpretations of the benefits to students, faculty, and companies. Who benefits more and who less? Questions around the ethical and moral aspects of the practice can arise if the interpretations become too divergent, with some stakeholders seen to be taking advantage of others. Non-profits and charities may be open to engagement as a form of outreach to the public through engagement with business schools, but they may struggle with short-term operational concerns and limited resources, putting them at greater risk of not being able to fully acquire the benefits of the SP activity (as exemplified in the quotations shared in the qualitative findings). The outreach may only therefore have limited benefits to the companies. For-profit organisations and large organisations may have plenty to benefit from the diversity of experiences offered by a class of experienced executives. But confidentiality concerns in respect of divulging weaknesses and/or secrets of success may stifle the amount of information-sharing needed to fully benefit from the engagement. Again, the role of faculty and the business schools to manage the engagement and the expectations of it becomes important here.

## 6. Limitations

This study has limitations with respect to the context and the research design. The SP executive education programme that we studied has a very specific design based on experiential learning, is brokered through a barter arrangement, and lasts only one-week (a five-week virtual version was produced during COVID-19, well after our sample period). It could well be that programmes with other designs may not provide the same benefits to the lending organisations. Then, our study is situated in a top ranked university, which might attract better students and more experienced faculty. A halo-effect may lead companies to perceive greater benefit from lending their case to a highly-ranked university. The survey was based on a small number of live case studies (22), which limits the statistical robustness of the findings even if we obtained a high response rate. As noted earlier, we approached all 26 strategists over the nine years of the programme, with some strategists having since moved on and hence, not being accessible. The cut-off for data collection was 2015 to introduce a time lag that allowed participants time to absorb, make decisions, and reflect on the long-term outcomes of any SP related decisions. We also wanted to ensure live case lenders had some time 'off' before burdening them with research-related requests beyond the regular programme feedback and marketing surveys business schools regularly send following any pedagogical engagement.

We are aware of possible concerns associated with common method and recollection biases in our data. Respondents completed the questionnaire in one sitting. They rated their expectations of benefits to be received and then went back to rate their actual benefits in the same sitting. The 'expectation' data were gathered ex-post-facto and not at the time in which the inputs from the programme were received. We designed the survey so that it could be completed within the very limited time busy executives can afford. Survey responses were completed by each client without direct influence from the researchers. Soliciting more in-depth data about each of the

13 benefits proved to be impractical, though we were able to partially overcome this by soliciting open-ended responses and follow-up interviews from respondents.

Prior literature has covered mostly the benefits of the live case method to the students sitting in the programme classroom. Instead, we focused our research on the benefits reported by the live case clients for their organisations and companies. This study has highlighted the central role of the faculty in setting this collaborative learning system and making it work. Research could next investigate the benefits to the faculty and how to maximise returns and rewards for them. In the effort to promote the impact of business schools for organisations and for society, the critical faculty role may end up being seen as unduly heavy for them.

## 7. Conclusions

Within an established strategy (scenario planning) programme in an executive education setting based on the live case method, we empirically assessed the benefits drawn by executive strategists from external organisations who lend their challenges to a business school to inform and ground experiential learning. To our knowledge, this is the first study with such a focus. We drew on the findings to suggest how scenario planning taught through the live case method can contribute to shaping the future of education as well as enhance the quality and add to the effectiveness of futures education.

We found the live case method to be a pedagogical method that can help business schools engage with external stakeholders in ways that bring various parties together to co-produce knowledge and solutions to organisational and societal problems and offer rigour in learning as well as offer relevance for practice. However, the varying degrees of and type of benefits reported to have been drawn suggest that faculty using this approach must carefully design as well as manage the engagement and expectations of the live case strategists.

## Ethics

The research was reviewed and undertaken according to the University of Oxford's Research Ethics Committee Checklist for the Social Sciences and Humanities Divisions. The authors declare no conflict of interest.

## Funding

Green Templeton College, Oxford and the Said Foundation provided research funds for data collection.

## Acknowledgements

We are grateful to comments from the reviewers and audience of conferences where previous versions of this paper were presented: The Academy of Management Annual Meeting, the British Academy of Management and the Operational Research Society sponsored conference on Scenarios. We are also very appreciative of the BAM Education Practice Award committee for encouraging us to publish and share this work.

## Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.futures.2023.103132](https://doi.org/10.1016/j.futures.2023.103132).

## References

- Aguinis, H., Suárez-González, I., Lannelongue, G., & Joo, H. (2012). Scholarly impact revisited. *The Academy of Management Perspectives*, 26(2), 105–132.
- Aguinis, H., Shapiro, D. L., Antonacopoulou, E. P., & Cummings, T. G. (2014). Scholarly impact: A pluralist conceptualization. *Academy of Management Learning and Education*, 13(4), 623–639.
- Alajoutsijärvi, K., Juusola, K., & Silttaoja, M. (2015). The legitimacy paradox of business schools: losing by gaining? *Academy of Management Learning and Education*, 14(2), 277–291.
- Alstete, J. W., & Beutell, N. J. (2016). Balancing instructional techniques and delivery formats in capstone business strategy courses. *Quality Assurance in Education*, 24(2), 173–193.
- Anderson, L., Ellwood, P., & Coleman, C. (2017a). The impactful academic: Relational management education as an intervention for impact. *British Journal of Management*, 28(1), 14–28.
- Anderson, L., Mason, K., Hibbert, P., & Rivers, C. (2017b). Management education in turbulent times: Journal of management education special issue. *Journal of Management Education*, 41(2), 303–306.
- Anderson, L., Thorpe, R., & Coleman, C. (2019). Reviewing management learning: The field and the journal. *Management Learning*, 0(0).
- Antonacopoulou, E. P. (2009). Impact and scholarship: Unlearning and practising to co-create actionable knowledge. *Management Learning*, 40(4), 421–430.
- Aram, J. D., & Salipante, P. F., Jr. (2003). Bridging scholarship in management: Epistemological reflections. *British Journal of Management*, 14(3), 189–205.
- Argyris, C. (1980). Some limitations of the case method: Experiences in a management development programme. *Academy of Management Review*, 5(2), 291–298.
- Argyris, C., & Schon, D. A. (1978). *Organizational learning*. Reading, MA: Addison-Wesley.
- Bailey, J., & Ford, C. (1996). Management as a science versus management as practice in postgraduate business education. *Business Strategy Review*, 7(4), 7–12.
- Banjo, S. (2009, February 23). Class action. *The Wall Street Journal*.
- Baruch, Y. (2009). To MBA or not to MBA. *Career Development International*, 14(4), 388–406.

- Bell, R., & Loon, M. (2015). The impact of critical thinking disposition on learning using business simulations. *The International Journal of Management Education*, 13(2), 119–127.
- Bennis, W. G., & O'Toole, J. (2005). How business schools lost their way. *Harvard Business Review*, 83(5), 96–104.
- Bettencourt, L. A., Ostrom, A. L., Brown, S. W., & Roundtree, R. I. (2002). Client co-production in knowledge-intensive business services. *California Management Review*, 44(4), 100–128.
- Blass, E., & Hayward, P. (2015). Developing globally responsible leaders: What role for business schools in the future? *Futures*, 66, 35–44.
- Bradfield, R., Wright, G., Burt, G., Cairns, G., & van der Heijden, K. (2005). The origins and evolution of scenario techniques in long range business planning. *Futures*, 37(8), 795–812.
- Bradfield, R., Cairns, G., & Wright, G. (2015). Teaching scenario analysis: an action learning pedagogy. *Technological Forecasting and Social Change*, 100(November), 44–52.
- Bridgman, T., Cummings, S., & McLaughlin, C. (2016). Restating the Case: How Revisiting the Development of the Case Method Can Help Us Think Differently About the Future of the Business School. *Academy of Management Learning and Education*, 15(4), 724–741.
- Broschak, J. P. (2015). Client Relationships. In L. Empson, D. Muzio, J. P. Broschak, & C. R. Hinings (Eds.), *Oxford Handbook of Professional Service Firms*. London: Oxford University Press.
- Bove, L. L., & Davies, W. M. (2009). A case study of teaching marketing research using client-sponsored projects: Method, challenges, and benefits. *Journal of Marketing Education*, 31(3), 230–239.
- Bunn, D. W., & Salo, A. A. (1993). Forecasting with scenario planning. *European Journal of Operational Research*, 68(3), 291–303.
- Butler, N., Delaney, H., & Spoelstra, S. (2015). Problematising 'relevance' in the business school: The case of leadership studies. *British Journal of Management*, 26(4), 731–744.
- Charlebois, S., & von Massow, M. (2015). The effectiveness of co-opetition in a live case study approach: Increasing knowledge of an industry while helping others in a competitive MBA classroom environment. *Journal of Applied Research in Higher Education*, 7(2), 164–179.
- Chermack, T. J. (2004). Improving decision-making with scenario planning. *Futures*, 36(3), 295–309.
- Chia, R. (2005). The aim of management education: Reflections on Mintzberg's managers not MBAs. *Organisation Studies*, 26(7), 1090–1092.
- Copeland, M. T. (1958). *And mark an era: The story of the Harvard Business School*. Boston, MA: Little Brown and Company.
- Costigan, R. D., & Brink, K. E. (2015). Another perspective on MBA programme alignment: An investigation of learning goals. *Academy of Management Learning and Education*, 14(2), 260–276.
- Culpin, V., & Scott, H. (2012). The effectiveness of a live case study approach: Increasing knowledge and understanding of 'hard' versus 'soft' skills in executive education. *Management Learning*, 43(5), 565–577.
- Cummins, S., & Johnson, J. S. (2021). The impact of live cases on student skill development in marketing courses. *Journal of Marketing Education*, 1.
- Currie, G., Knights, D., & Starkey, K. (2010). Introduction: A post-crisis critical reflection on business schools. *British Journal of Management*, 21, s1–s5.
- Cushman, F. (2020). Rationalization is rational. *Behavioral and Brain Sciences*, 43, Article e28.
- Daly, P. (2014). The live case study approach in business education. In E. Doyle, P. Buckley, & C. Carroll (Eds.), *Innovative Business School Teaching - Engaging the Millennial Generation* (pp. 86–97). Routledge.
- Daly, P., & Sequeira, I. (2018). Digital transformation at the New York Times: The usefulness of the live case intervention method. In J. Turner, & G. Mulholland (Eds.), *International Enterprise Education* (pp. 129–144). Routledge.
- De Geus, A. P. (1988). Planning as learning. *Harvard Business Review*, 66(2), 70–74.
- De Man, A. P., Luvison, D., & de Leeuw, T. (2020). A temporal view on the academic-practitioner gap. *Journal of Management Inquiry*, 1056492620982375.
- Dean, K. L., & Fornaciari, C. J. (2002). How to create and use experiential case-based exercises in a management classroom. *Journal of Management Education*, 26(5), 586–603.
- Doh, J. P. (2010). From the editors: Why aren't business schools more global and what can management educators do about it? *Academy of Management Learning and Education*, 9(2), 165–168.
- Durand, T., & Dameron, S. (2011). Where have all the business schools gone? *British Journal of Management*, 22(3), 559–563.
- Elam, E. L., & Spotts, H. E. (2004). Achieving marketing curriculum integration: A live case study approach. *Journal of Marketing Education*, 26(1), 50–65.
- Flyvbjerg, B. (2001). *Making Social Science Matter: Why Social Inquiry Fails and How it Can Succeed Again*. Cambridge, UK: Cambridge University Press.
- Flynn, A., & McCarthy, J. (2016). Exploring the Student Learning Experience in a 'Live' International Corporate Finance Course Project. In P. Daly, P. K. Reid, & P. Buckley (Eds.), *Innovative Business Education Design for 21st Century Learning* (pp. 55–68). Springer.
- Finkelstein, S., Whitehead, J., & Campbell, A. (2009). *Think Again: Why good leaders make bad decisions and how to keep it from happening to you*. Harvard Business Press.
- Friedland, J., & Jain, T. (2020). Reframing the purpose of business education: Crowding-in a culture of moral self-awareness. *Journal of Management Inquiry*, 1056492620940793.
- Gamble, E. N., & Jelley, R. B. (2014). The case for competition: Learning about evidence-based management through case competition. *Academy of Management Learning and Education*, 13(3), 433–445.
- Garvin, D. A. (2007). Teaching executives and teaching MBAs: Reflections on the case method. *Academy of Management Learning and Education*, 6(3), 364–374.
- Gayá, P., & Brydon-Miller, M. (2017). Carpe the academy: Dismantling higher education and prefiguring critical utopias through action research. *Futures*, 94, 34–44.
- Ginsberg, A., & Morecroft, J. (1997). Weaving feedback systems thinking into the case method: an application to corporate strategy. *Management Learning*, 28(4), 455–473.
- Greiner, L. E., Bhambri, A., & Cummings, T. G. (2003). Searching for a strategy to teach strategy. *Academy of Management Learning & Education*, 2(4), 402–420.
- Gundala, R. R., Singh, M., & Baldwin, A. (2014). Student perceptions on live-case projects: Undergraduate marketing research. *International Journal of Teaching and Learning in Higher Education*, 26(2), 260–267.
- Healey, M. P., & Hodgkinson, G. P. (2008). Troubling futures: Scenarios and scenario planning for organizational decision making. *The Oxford handbook of organizational decision making* (pp. 565–585). Oxford University Press.
- Hodgkinson, G. P., & Starkey, K. (2011). Not simply returning to the same answer over and over again: reframing relevance. *British Journal of Management*, 22(3), 355–369.
- Huff, A. S., & Huff, J. O. (2001). Re-focusing the business school agenda. *British Journal of Management*, 12, S49–S54.
- Hunt, D. M., & Smith, K. (2018). Iterative Live Case Projects. *Management Teaching Review*, 0(0), 1–10.
- Hough, M., Shulock, D., & Thanner, W. (2014). Exploring the Use of a Compressed Live Case Study Model (CLCS) to Enhance Student Learning and Organizational Effectiveness. Editorial Staff. *Journal of Business Leadership*, 2164–4454 (ISSN).
- Hutchings, P., Huber, M. T., & Ciccone, A. (2011). *The scholarship of teaching and learning reconsidered: Institutional integration and impact* (Vol. 21). John Wiley and Sons.
- Iden, J., Methlie, L. B., & Christensen, G. E. (2017). The nature of strategic foresight research: A systematic literature review. *Technological Forecasting and Social Change*, 116, 87–97.
- Islei, G., Lockett, G., & Naudé, P. (1999). Judgemental modelling as an aid to scenario planning and analysis. *Omega*, 27(1), 61–73.
- Jarzabkowski, P., Giulietti, M., Oliveira, B., & Amoo, N. (2013). "We don't need no education"—Or do we? Management education and alumni adoption of strategy tools. *Journal of Management Inquiry*, 22(1), 4–24.
- Kayes, D. C. (2002). Experiential learning and its critics: Preserving the role of experience in management learning and education. *Academy of Management Learning and Education*, 1(2), 137–149.
- Kazemier, E. M., Damhof, L., Gulmans, J., & Cremers, P. H. (2021). Mastering futures literacy in higher education: An evaluation of learning outcomes and instructional design of a faculty development program. *Futures*, 132, Article 102814.

- Kennedy, E. J., Lawton, L., & Walker, E. (2001). The case for using live cases: Shifting the paradigm in marketing education. *Journal of Marketing Education*, 23(2), 145–151.
- Király, G., & Géring, Z. (2019). Introduction to 'Futures of Higher Education' special issue. *Futures*, 111, 123–129.
- Klimoski, R., & Amos, B. (2012). Practicing evidence-based education in leadership development. *Academy of Management Learning and Education*, 11(4), 685–702.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development* (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning and Education*, 4, 193–212.
- Kovoor-Misra, S. (2020). The impetus for resilience and change in business education and management research. *Journal of Management Inquiry*, 29(2), 128–133.
- Kets de Vries, M. F., & Korotov, K. (2007). Creating transformational executive education programs. *Academy of Management Learning & Education*, 6(3), 375–387.
- Klein, G. (1998). *Sources of power: How people make decisions*. Cambridge, MA: The MIT Press.
- Lang, T.J. (2012). Essays on how scenario planning and the building of new social capital are related. Doctoral dissertation, University of Oxford, Said Business School.
- Laukkanen, M., Mattila, P., Salo, J., & Tikkanen, H. (2013). Using live cases for teaching, industry collaboration, and research. *Marketing Education Review*, 23(1), 65–72.
- Lengnick-Hall, C. A., & Sanders, M. M. (1997). Designing effective learning systems for management education: Student roles, requisite variety, and practicing what we teach. *Academy of Management*, 40, 1334–1368.
- Little, V., Brookes, R., & Palmer, R. (2008). Informed teaching and teaching-informed research: The Contemporary Marketing Practices (CMP) living case study approach to understanding marketing practice. *Journal of Business and Industrial Marketing*, 23(2), 124–134.
- Lovelace, K. J., Eggers, F., & Dyck, L. R. (2016). I do and I understand: Assessing the utility of web-based management simulations to develop critical thinking skills. *Academy of Management Learning and Education*, 15(1), 100–121.
- Lebrón, M. J., Brannon, D., Sanford, D., & Ellison, L. (2020). Applying theory to practice: Implementing a live case competition in a capstone strategic management course. *Journal of Management Education*, 44(1), 66–100.
- Lewicki, R. J. (2013). On the impact of AMLE: reflection on a decade. *Academy of Management Learning and Education*, 12(1), 104–107.
- Lincoln, D. J. (2006). Student authored cases: Combining benefits of traditional and live case methods of instruction. *Marketing Education Review*, 16(1), 1–7.
- Lopez, T. B., & Lee, R. G. (2005). Five principles for workable client-based projects: Lessons from the trenches. *Journal of Marketing Education*, 27(2), 172–188.
- Markulis, P. M. (1985). The live case study: Filling the gap between the case study and the experiential exercise. *Developments in Business Simulation and Experiential Learning*, 12.
- McDonald, D. (2017). *The Golden Passport. Harvard Business School, the Limits of Capitalism, and the Moral Failure of the MBA Elite*. New York: Harper Collins.
- MacIntosh, R., Beech, N., Bartunek, J., Mason, K., Cooke, B., & Denyer, D. (2017). Impact and management research: Exploring relationships between temporality, dialogue, reflexivity and praxis. *British Journal of Management*, 28(1), 3–13.
- Malhotra, N. K., Tashchian, A., & Jam, A. K. (1989). The project method approach: An integrated teaching tool in marketing research. *Journal of Marketing Education*, 11(2), 32–40.
- McWilliams, V., & Nahavandi, A. (2006). Using live cases to teach ethics. *Journal of Business Ethics*, 67(4), 421–433.
- Mesny, A. (2013). Taking stock of the century-long utilization of the case method in management education. *Canadian Journal of Administrative Sciences/Revue Canadienne Des Sciences De L'Administration*, 30(1), 56–66.
- Mintzberg, H. (2004). *Managers not MBAs. A hard look at the soft practice of managing and management development*. San Francisco, CA: Berrett-Koehler Publishers, Inc.
- Paton, S., Chia, R., & Burt, G. (2014). Relevance or “relevance”? How university business schools can add value through reflexively learning from strategic partnerships with business. *Management Learning*, 45(3), 267–288.
- Paton, R. A., & Wagner, R. (2014). Management education makes a difference: Enhancing German engineering performance. *Longest Range Planning*, 47(5), 277–298.
- Pettigrew, A. M. (2011). Scholarship with impact. *British Journal of Management*, 22(3), 347–354.
- Pettigrew, A., & Starkey, K. (2016). From the Guest Editors: The Legitimacy and Impact of Business Schools—Key Issues and a Research Agenda. In *Academy of Management Learning and Education*, 15 pp. 649–664.
- Pfeffer, J., & Fong, C. (2002). The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education*, 1(1), 78–95.
- Raelin, J. A. (1994). Whither management education? Professional education, action learning and beyond. *Management Learning*, 25(2), 301–317.
- Raelin, J. A. (2009). The practice turn-away: Forty years of spoon-feeding in management education. *Management Learning*, 40(4), 401–410.
- Rajagopalan, N. (2020). Rigor, relevance, and resilience in management research. *Journal of Management Inquiry*, 29(2), 150–153.
- Ramirez, R. (1999). Value co-production: intellectual origins and implications for practice and research. *Strategic Management Journal*, 20(1), 49–65.
- Ramirez, R., Selsky, J. W., & Van der Heijden, K. (2010). *Business planning for turbulent times: new methods for applying scenarios*. Routledge.
- Ramirez, R., & Selin, C. (2014). Plausibility and probability in scenario planning. *Foresight*, 16(1), 54–74.
- Ramirez, R., & Wilkinson, A. (2016). *Strategic reframing: The Oxford scenario planning approach*. Oxford University Press.
- Ramirez, R., Bhatti, Y., & Tapinos, E. (2020). Exploring how experience and learning curves decrease the time invested in scenario planning interventions. *Technological Forecasting and Social Change*, 151, Article 119785.
- Ramirez, R., Rowland, N. J., Spaniol, M. J., & White, A. (2021). Avoiding the valley of death in educating strategists. *Longest Range Planning*, 54(3), Article 102000.
- Ramsey, C. (2011). Provocative theory and a scholarship of practice. *Management Learning*, 42(5), 469–483.
- Ramocki, S. P. (1987). Measured effectiveness of client sponsored consulting projects in the marketing research course. *Journal of Marketing Education*, 9(1), 24–30.
- Rashford, N. S., & de Figueiredo, J. N. (2011). The live in-class CEO intervention: A capstone experiential technique for leadership development. *Journal of Management Education*, 35(5), 620–647.
- Ready, D. A., Vicere, A. A., & White, A. F. (1994). Linking executive education to strategic imperatives. *Management Learning*, 25(4), 563–578.
- Reynolds, M. (1999). Critical reflection and management education: Rehabilitating less hierarchical approaches. *Journal of Management Education*, 23, 537–553.
- Reynolds, M., & Vince, R. (2007). *Handbook of experiential learning and management education*. OUP.
- Richardson, W. D., & Ginter, P. M. (1998). Using living cases to teach the strategic planning process. *Journal of Education for Business*, 73(5), 269–273.
- Rogan, M., & Sorenson, O. (2014). Picking a (poor) partner: A relational perspective on acquisitions. *Administrative Science Quarterly*, 59(2), 301–329.
- Roth, K. J., & Smith, C. (2009). Live case analysis: Pedagogical problems and prospects in management education. *American Journal of Business Education*, 2(9), 59–66.
- Sandberg, J., & Tsoukas, H. (2011). Grasping the logic of practice: Theorizing through practical rationality. *Academy of Management Review*, 36(2), 338–360.
- Saunders, N. K. M., & Townsend, K. (2016). Reporting and justifying the number of interview participants in organizational and workplace research. *British Journal of Management*, 27(4), 836–852.
- Schoemaker, P. J. (1993). Multiple scenario development: Its conceptual and behavioral foundation. *Strategic Management Journal*, 14(3), 193–213.
- Schoemaker, P. J. (1995). Scenario planning: a tool for strategic thinking. *Sloan Management Review*, 36(2), 25.
- Schwitzgebel, E., & Ellis, J. (2017). Rationalization in moral and philosophical thought. *Moral inferences* (pp. 178–198). Psychology Press.
- Senge, P. M. (1990). *The fifth discipline: The art & practice of the learning organization*. New York: Currency Doubleday.
- Sharma, G., Greco, A., Grewatsch, S., & Bansal, P. (Tima) (2022). Cocreating forward: How researchers and managers can address problems together. *Academy of Management Learning & Education*, 21(3), 350–368.
- Shugan, S. M. (2006). Save research—Abandon the case method of teaching. *Marketing Science*, 25(2), 109–115.
- Starkey, K., & Madan, P. (2001). Bridging the relevance gap: Aligning stakeholders in the future of management research. *British Journal of Management*, 12, S3–S26.
- Stewart, K. A., & Winn, J. (1996). A new approach to case teaching. *Journal of Management Education*, 20(1), 48–59.
- Stonham, P. (1995). For and against the case method. *European Management Journal*, 13(2), 230–232.
- Sutcliffe, K. M., & Weber, K. (2003). The high cost of accurate knowledge. *Harvard Business Review*, 81(5), 74–82.
- Syed, J., Mingers, J., & Murray, P. A. (2010). Beyond rigour and relevance: A critical realist approach to business education. *Management Learning*, 41(1), 71–85.
- Tapinos, E. (2011). Perceived environmental uncertainty in scenario planning. *Futures*, 44, 338–345.



- Toarniczky, A., Matolay, R., & Gáspár, J. (2019). Responsive higher education through transformational practices—The case of a Hungarian business school. *Futures*, 111, 181–193.
- Thomas, L., & Ambrosini, V. (2021). The future role of the business school: A value cocreation perspective. *Academy of Management Learning & Education*, 20(2), 249–269.
- Thorpe, R., Eden, C., Bessant, J., & Ellwood, P. (2011). Rigour, relevance and reward: Introducing the knowledge translation value-chain. *British Journal of Management*, 22(3), 420–431.
- Turnbull, J. K., & Denyer, D. (2009). Historical roots and future directions: New challenges for management learning. *Management Learning*, 40(4), 363–370.
- Tushman, M. L., O'Reilly, C., Fenollosa, A., Kleinbaum, A. M., & McGrath, D. (2007). Relevance and rigor: Executive education as a lever in shaping practice and research. *Academy of Management Learning & Education*, 6(3), 345–362.
- Vaara, E. (2011). On the importance of broader critique: Discursive knowledge production in management education. *British Journal of Management*, 22(3), 564–566.
- van der Heijden, K. (1996). *Scenarios: The Art of Strategic Conversation*, 2005. Wiley.
- van der Heijden, K., Bradfield, R., Burt, G., Cairns, G., & Wright, G. (2002). *The Sixth Sense: Accelerating Organisational Learning with Scenarios*. Chichester, UK: Wiley.
- Vince, R. (1998). Behind and beyond Kolb's learning cycle. *Journal of Management Education*, 22, 304–319.
- Wack, P. (1985). *Scenario planning: uncharted waters ahead*. Harvard Business Review.
- Weil, S., Oyeler, P., & Rainsburg, E. (2004). The usefulness of case studies in developing core competencies in a professional accounting programme: A New Zealand case study. *Accounting Education*, 13(2), 139–169.
- Wilkinson, A., & Ramirez, R. (2010). Canaries in the mind: exploring how the financial crisis impacts 21st century future-mindfulness. *Journal of Futures Studies*, 14(3), 45–60.
- Weick, K. E. (1989). Theory construction as disciplined imagination. *Academy of Management Review*, 14(4), 516–531.
- Wilson, D. C., & Thomas, H. (2012). The legitimacy of the business of business schools: what's the future? *Journal of Management Development*, 31(4), 368–376.
- Wren, D. A., Halbesleben, J. B., & Buckley, M. R. (2007). The theory-application balance in management pedagogy: A longitudinal update. *Academy of Management Learning and Education*, 6(4), 484–492.
- Wright, G., Bradfield, R., & Cairns, G. (2013). Does the intuitive logics method—and its recent enhancements—produce “effective” scenarios? *Technological Forecasting and Social Change*, 80(4), 631–642.
- Yong, J. C., Li, N. P., & Satoshi, Kanazawa (2021). Not so much rational but rationalizing: Humans evolved as coherence-seeking, fiction-making animals. *American Psychologist*, 76(5), 781–793.



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