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## Scenario planning interventions in organizations: An analysis of the causes of success and failure

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#### Abstract

This paper presents a case analysis of a successful scenario intervention in an organization. This intervention is compared and contrasted with an unsuccessful one reported in Hodgkinson and Wright [Confronting strategic inertia in a top management team: learning from failure, Organization Studies 23 (2002)949–977]. We demonstrate that analysis of the answers given by workshop participants in a pre-intervention interview can be helpful in determining the receptiveness of an organization to a subsequent scenario intervention. We theorize that strategic inertia-characterized by coping patterns of bolstering failing strategy, procrastination (over a strategic dilemma) and buck-passing (the responsibility for the dilemma's resolution), can be caused by the psychological attenuation of the perceived level of environmental threat to the organization, culminating in unconflicted adherence to the currently followed strategy. We contend that the expression of such coping behaviour is antithetical to a subsequent successful scenario exercise since, if the exercise fails to identify an unconflicted strategic alternative, the sharp focus of the scenarios on futures unfavourable to business-as-usual strategy will re-activate the cognitive stress-reduction mechanisms. Strategic inertia will thus be reinforced. We conclude with a review of the implications of our diagnosis for reflective practitioners.

Our paper is divided into four sections. In Section 1, we overview writings on inertia in strategic decision making. We pay especial attention to identifying potential causes of inertia. Next, we present Janis and Mann's [Decision Making, Free Press, New York, 1979] views of the psychological processes invoked by conflicted decisions and analyse the relevance of this laboratory-based theory to provide a psychological explanation of strategic inertia. Finally, we briefly describe the scenario intervention process and argue that it contains the potential to overcome strategic inertia. In Section 2, we review an already-published study of an unsuccessful scenario planning intervention, which illustrates the operation of components of Janis and Mann's model. Next, in Section 3, we focus on our own case investigation of a successful scenario planning intervention. The early part of this section documents the "success", whilst the latter part analyses the causes of the success—again using the components of Janis and Mann's model. We conclude in Section 4, where we compare and contrast the application of Janis and Mann's model to both cases and we demonstrate that application of the model to preintervention interview data can aid the practitioner determine, at the outset, whether or not the organizational context will be receptive to the intervention.

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## 1. Inertia in strategic decision making

Writers on strategic management have argued that for continued survival an organization's strategic decision making must achieve the retention of the organization's alignment with the external environment [1–5]. Failure to achieve this results in strategic drift [6]. Huff et al. [7] contend that inertia in such (re)alignment, defined as the degree of the level of commitment to the organization's current strategy, will grow over time as current ways of operating become deeply embedded in an organization, regardless of, and generally without reference to, developments in the environment. Commitment to the status quo will, they argue, escalate in a smooth, undisturbed fashion over time with incremental adjustments to the current strategy and little conscious attention to strategic choice, so long as organizational performance is satisfactory. However, if and when it becomes evident within the organization that there is no longer an appropriate alignment between its strategy and the requirements of the environment, "pressure for change" will inevitably develop. While the causes of degree of pressure for change are not fully developed in their paper, reference is made to specific events such as 'inventions', 'executive succession', and 'poor performance reports' (p. 58).

Barr et al. [8] address the issue of why some organizations are able to realign their strategy with a changing environment, whilst others are not, offering a cognitive explanation for the lack of organizational renewal. They argue that 'human (cognitive) frailties' mean that managers' mental models of the competitive environment may be incomplete or inaccurate, and that these models 'often fail to change in a timely manner in response to a changing environment' (p. 17). Wack [9] suggests that in times or relative environmental stability there is generally a reasonably good match between the mental models of successful decision-makers and "unfolding reality". In times of rapid change however, the decision makers' mental models become "a dangerously mixed bag; rich detail and understanding can co-exist with dubious assumptions, selective inattention to alternative interpretations of evidence and projections that are pretense". For example, Porac et al. [10] studied competitive models of senior managers in the Scottish knitwear industry. Although Scottish knitwear producers account for less than 5% of world production, when knitwear industry managers were asked to define their competitors, the serious competitors were almost exclusively nominated as Scottish. Hodgkinson [11] meanwhile found that UK residential estate agents' mental representation of competition remained stable despite a significant downturn in the market over the 12–18 month period of his study.

The problem is that incomplete, inaccurate and otherwise inappropriate mental models may 'prevent managers from sensing problems, delay changes in strategy, and lead to action that is ineffective in a new environment. [8]. In times of rapid change, Wack [9] contends, strategic failure "is often caused by a crisis of perception, that is, the inability to see an emergent novel reality by being locked inside obsolete assumptions, particularly in large, well-run companies".

Barr et al. [8] suggest that munificent environments may confirm outdated mental models in that organizational weaknesses, even if recognized within organizations, may go unaddressed if the organizations continue to enjoy profitability (see also [12]). Perhaps more importantly, firms that survive or flourish in environments that become inhospitable will, they argue, evidence change in their managers' mental models. In an empirical study of these hypotheses, Barr et al. [8] content-analysed the letters to shareholders published by two railroad companies over a 25-year period. The surviving firm created new strategy to more closely match a changing environment; the failing firm, in contrast, did not make any fundamental changes to its strategy until it was near bankruptcy at which point, a discontinuous change in strategy occurred, but came too late to save the company. Miller and Chen [13] found that 'competitive inertia', defined as the (low) level of activity that a firm exhibits when altering its competitive stance, was driven by good past performance and counteracted by diversity in a firm's markets.

Further evidence of strategic inertia comes from Johnson's [14] single longitudinal case study of the UK retail clothing industry. The focus of the study was on the (mis)match between changes in the firm's strategy as it sought to succeed in a changing environment, the objective of the study being to identify whether incremental changes in strategy were beneficial or harmful to overall survival and success. The study concluded that market signals of a failing strategy were not interpreted as such within the organization, and that managers in a previously successful business sought to reduce the perceived importance of dissonant information, such that the prevailing strategy was not threatened. Johnson showed that resultant incremental change in strategy did not keep pace with environmental change, leading ultimately to strategic drift.

The sensing of external signals, it was reasoned, is muted within the organization because the signals are not meaningful in themselves but take on relevance from the viewpoint of the managers' metal model. At the same time, political pressures within the organization act to quell dissonant or 'deviant' opinion, which recognize the true, paradigm-threatening nature of the information (see also [15]).

The above studies point to the negative characteristics of inertia and incrementalism in strategic decision making. However, as Hannan and Freeman [16], Miller and Friesen [15] and Miller and Chen [13] have argued, in simpler less turbulent environments, inertia in some aspects of strategy may allow managers to focus on the most important issues and avoid costly blunders that come through making ill-considered stepchanges in a well-aligned strategy. Clearly then, the appropriateness of strategic inertia and incrementalism need to be evaluated in light of the nature and degree of environmental change.

Note that the causal mechanisms behind strategic inertia have not been well described or documented in the strategic management literature. Rumelt [17] has argued that motivational dampers (including direct costs of change, cannibalization costs, and cross-subsidiary comforts), failed creative response (including reactive mindset and inadequate strategic vision), overwhelming pride in past success, potential deadlocks (including organizational politics and vested interests), and action disconnects (including leadership inaction and capability gaps) underpin inertia. Kisfalvi [18] has argued that the personalities of the chief executive can underpin inappropriate strategic persistence, (see also [19], for discussion of the demographic characteristic of top teams and organizational performance). Barr et al. [20] have argued that "... strategic change becomes more and more probable as the ... pressure for change ... resulting from various stimuli exceeds the current level of inertia (pressure to maintain the status quo" (p. 342). However, as Huff and Huff [21]) have argued, "... there is little guidance from the literature ... to suggest when response ... will focus an incremental homeostatic adjustments (to strategy) and when more dramatic ... change in direction traditionally of interest to strategy researchers is likely to occur" (p. 84).

#### 1.1. Janis and Mann's psychological theory as an explanation of strategic inertia

In this section, we locate one cause of strategic inertia to the action of psychological processes, which can attenuate the pressure for strategic change. Janis and Mann's [2] 'Conflict Theory' model provides a comprehensive account of decision processes that are engendered in response to decision dilemmas, and as such their theory could, potentially account for the case findings of strategic inertia. The theory describes a number of basic patterns of coping with a challenge, be it a threat or an opportunity. Intense conflicts, Janis and Mann argue, are likely to arise whenever an individual has to make an important decision. Such conflicts become acute as the decision maker becomes aware of the risk of suffering serious losses from whatever course of action is selected. Decisional conflicts in this context refer to simultaneous opposing tendencies within the individual to accept or reject a given course of action. The most prominent symptoms of such conflicts are hesitation, vacillation, feelings of uncertainty, and signs of acute emotional stress whenever a decision comes within the focus of attention.

According to Janis and Mann, several types of decisional behaviour called 'coping patterns' are the direct result of the conflict. Only one coping pattern, vigilance, results in the careful search for and use of information in the face of a challenge. A precondition for vigilance is that the decision makers must have concluded that amongst other things, a better solution(s) does exist and that there is adequate time to debate and search for it, the result of which is a moderate level of stress. Hypervigilance, a second coping pattern, results when the decision makers are aware that a better solution probably does exist, but perceive that they have insufficient time to engage in a search for it. Meanwhile defensive avoidance behaviour, a third coping pattern, arises when the perception is that no better solution exists other than the current course of action, and can take one of three forms: procrastination which involves postponing the decision; buck passing which involves shifting the responsibility of the decision to someone else; and bolstering which includes exaggerating the favourable consequences of a course of action and minimizing the unfavourable consequences. Bolstering, as an observable behaviour, shares characteristics with non-rational escalation of commitment but the mechanisms that are theorized to induce this behaviour are separable.

Both hypervigilance and defensive avoidance are preceded by high stress, since there is recognition that the risks associated with adhering to the current option(s) are serious. Unconflicted adherence, a fourth coping

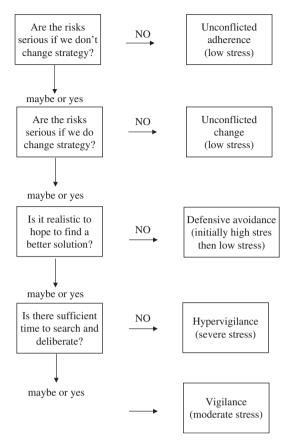


Fig. 1. Janis and Mann's (1977) conflict theory of decision making, as applied to the processes of strategy-making.

pattern, is preceded by low stress, since here the decision maker views the current course of action as unthreatened and the outcomes associated with alternative courses of action as inconsequential. Search for information regarding the consequences of changing a decision is minimal and, since no risks are thought to be associated with it, the current course of action is adhered to. Such a coping pattern can be seen as analogous to inertia in strategic decision making. *Unconflicted change*, a fifth coping pattern, is also preceded by low stress since here a threatened current course of action can be replaced by an alternative, unthreatened course of action. Fig. 1 details the essential elements of this theoretical model, as related to the current context of strategic decision making.

#### 1.2. Overcoming strategic inertia with scenario planning

The process of scenario planning provides an apt framework through which the appropriateness of a particular strategy or range of strategic options can be tested for environmental fit and robustness. Additionally, since the essence of scenario thinking is to examine a range of plausible, alternative futures, the process intervention facilitates the expression of dissenting opinion within the organization as to what the future may hold and challenges potentially inappropriate confidence in terms of both a single point future and a single, tried-and-trusted strategy. Simple extrapolations of the past and single point best guesses about the evolving state of the external environment are thus attenuated, and the degree of alignment between strategy and a range of futures becomes the focus of attention [22]. For a fuller account of scenarios and the scenario process, see [5, 22–25].

The most appropriate point for a scenario planning intervention in an organization is, theoretically, after there is recognition that the environmental threat to the organization's current strategy is high, but before the psychological processes inherent in coping behaviour described above are activated. As yet, however, little is known about whether or not there is a time delay, and if so, how long, between management's recognition of a

serious environmental threat to current strategy and the activation of coping patterns. Janis and Mann's model infers that the engagement and deployment of coping patterns are automatic and subconscious, such that individual managers will not recognize their deployment. Once the coping patterns have been deployed, recognition of the need for, and the value of, scenario planning may be lost.

The next section summarizes the results of a failed scenario planning intervention and links this to the operation of the Janis and Mann's conflict model of decision making, previously outlined.

## 2. Hodgkinson and Wright's study of a management team facing a decision dilemma

Hodgkinson and Wright [1] interviewed nine individuals comprising the senior management team of a major corporation (Beta Co) facing a crucial strategic decision dilemma. The interviews were conducted prior to a scenario planning exercise in which all of the interviewees were subsequently active participants. There was clear evidence that the organization's current strategic direction was failing and the management team was experiencing difficulty in developing acceptable, alternative strategies. Although it was apparent that the Beta Co. organization had strong competencies underpinning its existing business idea, or recipe for success, it was equally apparent that there was no longer alignment between this recipe and the requirements of a changing environment. Quotations from the management team interview data collected were categorized under Janis and Mann's headings.

The following exemplar quotations illustrate that the management team perceived the risks to be serious if the organization failed to change its current strategy:

- The business needs more income streams ... therefore, diversification is crucial now to build significant other income streams. (Participant 1)
- A key danger is that there is too much emphasis on our core business activity . . . New technology could result in the death of [Beta Co's main offering] by 2005, 2010, 2015. Who knows when? We need to move to new areas that will result in new revenue streams ... The failure of [Beta Co] to develop alternative revenue streams would be another bad scenario. (Participant 2)
- If we go on as we are, in 10 years from now we won't be here. (Participant 3)
- There is a perception around here that [Beta Co] has very much got all its eggs together in one basket. If one of [Beta Co's major customers] pulled out ... At a personal level, I am very much concerned that we have job security. (Participant 5)

At the same time, the risks were also perceived to be serious if the organization did change its strategy, as is illustrated by the following quotations:

- We are a group of talented amateurs rather than experienced in areas of potential diversification. (Participant 4)
- [Beta's latest experimental venture] has been a protracted and salutary experience. There are very few short-term gains to be made. (Participant 6)
- We are naïve on the business side [Beta Co's latest experiment venture] is necessary for our future, but we have had a slightly unrealistic view of how easy or difficult it would be to break into an existing market in which potential customers have settled relationships and [Beta Co] has no track record. (Participant 7)

It was also clear, as evidenced from the quotations below, that the senior management team was also attempting to shift responsibility (i.e. 'passing the buck') to the board of directors of the company for adhering to a strategy that was obviously failing:

- Our main board director is on the record as having said that [Beta Co] should make an attempt to adapt to changing market conditions. (Participant 1)
- The board faces a key decision, not us. They need to take a keen interest in terms of what shape [Beta Co] should take in the future. (Participant 3)
- We have to try and resolve the diversification issue one way or the other, but I am not sure that this is a decision we can take. (Participant 7)

Equally, there was also compelling evidence of delay and procrastination amongst the management team, as demonstrated by the following quotations:

- The failure to diversify would probably mean the business would still be OK in 10 years from now, but after 15 years it would be starting to decline. (Participant 1)
- There is still mileage in [Beta Co's offering] for the next 10 years. (Participant 5)
- Things will be slower than most people think ... We are 20 years away from complete change i.e. our business will still be serviceable in 20 years' time. (Participant 6)
- There is no real rush to adapt ... 5 to 10 years away there will still be a healthy market for [Beta Co's main offering]. (Participant 7)

Finally, there was evidence of bolstering the current failing strategy:

- The slow part of change in our industry is of benefit to us ... if [Beta Co] becomes the only [provider of its current main offering] there will be less pressure on us to develop other products . . . [Beta Co's] current performance and historic record are its key strength. (Participant 2)
- One of the problems we face in respect of new product is customer inertia ... Customers are generally conservative because they don't want the hassle of changing (suppliers). These same forces are potentially prolonging the life of [Beta Co's current main offering] ... within the next 2 to 3 years. (Participant 2)
- Ultimately, I was brought in [to Beta Co] to play a key role in enabling the organization to diversify and/or add to its core business, though diversification may not be needed if [Beta Co.] becomes [the major player within the market of its current main offering] within the next 2 to 3 years. (Participant 2)

To summarize to this point: the company's strategy was failing and the management team was having difficulty developing a new strategy; they were aware that failure to change the strategy, i.e. 'do nothing', was a high risk option but, equally, perceived risks in making changes; and evidence of all three defensive avoidance behaviours (buck passing, procrastination and bolstering) were present.

At the same time, the following quotations indicate that in addition to the above, there was clearly a deficiency in terms of information search and contingency planning.

- I believe you can always buy the skill you need. You may have to pay a bit more or wait a bit. (Participant 1)
- We don't know enough about the real strategic aims of [Beta Co's main customers]. (Participant 4)
- We lack understanding of real customer requirements ... We know even less about potential customers. (Participant 4)
- There is a learning process we need to go through, but I am sure we can do it and beat the competition. (Participant 5)
- Another key requirement is for investment in R&D to secure the organization's future through the creation of new revenue streams, but how should this be done? (Participant 2)
- I guess we ought to be doing other things to protect ourselves. (Participant 5)

Hodgkinson and Wright [1] concluded that the subsequent scenario planning exercise put the nature of the future into sharp focus for Beta Co. It revealed that several technological changes, regarded by the participants as pre-determined factors rather than critical uncertainties, would eventually replace the company's main offering. Unfortunately, none of the strategic alternatives devised by the participants were robust against the range of futures constructed in the scenarios and, essentially, the company could only continue with its current strategy. Consequently, this scenario exercise was considered an unsuccessful intervention. According to the Janis and Mann model, if an appropriate alternative strategy cannot be devised, unconflicted change is not possible; in such a situation the pre-intervention stress level rises further to an unacceptable level, and again, a range of psychological defence mechanisms come into effect, ultimately inhibiting the change management process itself (cf. [26–28,18]). This, we contend, is precisely what happened in the Beta Co case-in that the scenario process served only to 'rub salt into a wound' that had been superficially healed by the earlier enactment of psychological coping processes.

Additionally, the context in which this particular organization was embedded at the time of the intervention may also have mitigated against Hodgkinson and Wright's effort to conduct a 'successful' scenario intervention-in that the historical situation facing Beta Co. closely accords with the conditions described by the punctuated equilibrium model of change [29,30], i.e., long periods of small, incremental change, interrupted by much shorter periods of discontinuous, radical change.

Hodgkinson and Wright argued that until further case analyses of the success and failure of scenario exercises in a range of organizations are systematically documented, the ability to predict the appropriateness of scenario techniques as intervention in particular organizational contexts, must remain limited. In short, further case analyses are necessary to enable us to understand organizational contexts that are differentially receptive to scenario interventions. The following case study presents such an analysis—in which a scenario intervention resulted in an unconflicted change of strategy, and is therefore regarded as a 'success'. The focus of our investigation is on the causes of such unconflicted change.

#### 3. Our case investigation

The first part of this section gives a brief outline of the case company and its pre-intervention business situation. The second part documents: (i) the beliefs and recipe of the case organization prior to the intervention; and (ii), initial reactions to the challenge to management thinking induced by the scenario intervention. In a final section, we document the company's response to the challenges engendered by the scenario planning intervention.

### 3.1. Background to the case

The company, ABC Co., is part of a privately owned company operating in the 'drinks' industry, and its primary produce is brand name alcholic spirit. The parent company's principal role is the marketing and branding of the group's drinks products and it has cross shareholdings with two other well known producers of blended whiskies and a whisky cask trader. The Group is located in premises in Scotland and blending and bottling operations are conducted at this location along with the storage of bonded whisky. Additionally, ABC Co. acts as a bottling sub-contractor for other name brand whisky companies.

At the time of the scenario intervention, the mission of ABC Co. was 'to provide a quality service in the blending, bottling and storage of scotch whisky and other spirits; to co-operate with our customers in assisting them to develop their brands; and to provide a realistic return on the company's assets'. The company's philosophy was centred on three inter-related issues; 'customer satisfaction' (everyone acts to satisfy the agreed requirements of the customers); 'continuous improvement' (through a process of active involvement and personal development); and 'contribution' (everyone contributes positively to the success of the business). As with the Beta Co case documented in [1], ABC Co. had a historical context of long periods of incremental change interrupted by much shorter periods of discontinuous, radical change.

#### 3.2. Initial reactions to the scenario planning intervention

As will be demonstrated in this case, the management team of ABC Co. had, over time, developed deeply held beliefs or 'recipes', regarding their organization, its products, and its interaction with customers. These recipes locked the management team into behaving in particular ways which prevented them from understanding: (i) the obsolete assumptions and disabling features underlying the recipe; and (ii) the importance of ongoing structural change in their contextual environment.

The first workshop with the management team, based around the feedback of pre-intervention interviews of each of the individuals in the management team, enabled them to reflect together in a way not previously experienced. For example:

- The weight of the data in the interview feedback is interesting, vulnerabilities are less than expected. (Participant 1)
- does that tell you anything? (Participant 2)
- healthy?..."or complacency? (Participant 3)

At the second workshop, an informed outsider, or in the phraseology of scenario planning, a 'remarkable person' (RP), was brought in to question the received wisdom of the team, to introduce new ideas, concepts and examples and to generally act as a stimulus to challenge management beliefs and the organizational recipe. Examples of some of the challenges evoked during the workshop include:

- I never thought about this before ... I am depressed, we are being stuffed by our customers, we are locked into the risk of customers. (Participant 1)
- ABC Co. gives value, creates value for others, why? ABC take a worthless product and creates value in the process, for little reward. (Participant 2). [Here the participants were reflecting on their experience and considering the lack of scope ABC Co. has to plan production due to short time requests from customers, following a presentation from the RP discussing value creation and the offering provided by ABC Co.]

These challenges acted as a trigger to managerial reflection on past experiences and decisions made by management, inquiry into the evolution of the industry and the key success factor requirements for the industry, and recognition of the potential skills inadequacies within the organization. The process of inquiry and reflection allowed the participants to surface their assumptions which, when taken with the third workshop in the scenario intervention process (scenario building), facilitated the opening-up of the management thinking to new perspectives. Examples of this are reflected in the following quotations:

- Can we increase the margin on a case? In the short term? In the long term? (Participant 4)
- We can adopt a JIT approach, no price increase, price pressure on packaging, we can use technology for efficiency (go quicker with fewer people) or flexibility (for filling changeovers). (Participant 3)
- Robotics in technology would lower costs. (Participant 5)
- Past investments in plant may not allow us to do that. (Participant 2). [Here, participants reflected on past investments in packaging plant during workshop 2 and coming to the conclusion that there had been an under-investment by ABC in the past.]

In essence, this process of inquiry and reflection not only allowed, but also stimulated and encouraged members of the management team to question each other and the RP for further insights about new concepts and ideas, and to consider the implications of these for the organization and its future. For example:

- The consumer is the creator of value, no such thing as an end user; how do we create value for the customer? You need to think in terms of you, the customer and the customer's customer; consider Benetton—what business are they in? Textiles? Fashion? Fashion for the young woman market, what do they value to be attractive? How does Benetton create value and help them to be fashionable? Their shops capture sales information and this is part of the production process, so that Benetton captures trends in colours early and design products accordingly. (Participant 5)
- This is a challenge to my thinking, its not needs, but creating value, this has blown away my 10 years of previous experience. (Participant 6) [Here, participants reflected on new concepts—customer value, customer's customer.]

Throughout the process several decision dilemmas began to surface. Whereas in the Hodgkinson and Wright case, the management team defensively avoided dilemmas related to the viability of the current business idea-by bolstering the current failing strategy, by procrastination, and by buck passing responsibility for resolution of the dilemma—in the ABC Co. case, the decision dilemmas (focusing on efficiency versus flexibility and on customer teams and dedicated lines Versus quick response) were openly discussed and vigorously analysed, in depth, by the management team.

### 3.3. Developing a broader conceptualization of the contextual environment

In addition to inquiry and reflection on the current situation, the second and third workshops in the scenario intervention process allowed the management team to identify and consider uncertainties that, it was

agreed, could potentially have a major impact on the organization and its industry in the future. By identifying and examining the environmental 'driving forces', the process allowed participants to explore how these could evolve individually and in concert over the scenario horizon, to create a range of plausible futures which went far beyond a simple extrapolation of the present. Structural patterns begin to emerge as participants began to causally link factors, previously regarded as inconsequential or not applicable within their domain, and developments by other organizations not previously recognised, both of which resulted in a new understanding and new insights. An example of this is evidenced in the quotation below:

• With static demand, the distributor is all powerful, the distributor owns the consumer, the whisky industry has accelerated this situation, other drivers in the whole industry are creating a positive feedback loop of control for the distributor, this will lead to one EU distributor, we are beginning to see a trend emerge, for example, Intermarche taking over Thomson in France, the distributor is creating a monopoly situation. (Participant 2)

In contrast to the Hodgkinson and Wright Beta Co. case—in which there was no careful search for and subsequent use of information to develop contingency plans in the face of challenges—in the ABC Co. case the process stimulated the management team to re-consider the purpose and objectives of the organization, to analyse for further structural insights, and to use their new understanding to actively search for 'control' in their context (cf [31]). For example, part of the 'new understanding' was that the ABC Co. management team came to the realization that the current configuration of operational activities resulted in the company absorbing suppliers' and customers' risk. Supplier risk arose from ABC Co. holding, and paying for, large stocks of empty bottles, labels, packages and bottle caps. Customer risk meanwhile revolved around the fact that customers were requesting orders at short notice and, to accommodate these, ABC Co. had to regularly amend production schedules, significantly increasing their operating costs. As a consequence, the management team developed a new conceptualization about the supplier and customer interaction and risk, and the need to do something about this—as can be seen from the following quotation:

• We have been out-maneuvered by our customers, we need to respond to that, and also think about the relationship between ABC Co., customers and suppliers to enable us to manage customers. (Participant 2) [One participant linking knowledge about the business, insights from the scenarios and past customer behaviour as ABC Co. considered responses to the re-design of the organization in the future.]

There was a realization within the team that the industry structure had moved from three tiers (raw materials, blending and bottling, and brand management) to two tiers (production and customer relationships). ABC Co. had almost no involvement with external customers and therefore no intelligence about market demand. This lack of involvement resulted in little internal understanding of the relationship between the brand and customers, and ABC Co.'s role in that relationship. Production planning and scheduling would continue to be problematic under these circumstances as orders taken on at short notice, acted to increase internal production complexity. Flexibility, previously regarded by ABC Co. as their competitive advantage, now appeared to be a major weakness.

#### 3.4. Search for response

The dual threat of supplier and customer risk, and lack of market intelligence required ABC Co. to identify and develop strategic responses. The response that emerged from the management team's analysis and deliberations was that ABC Co should take the role of "supply division" for the parent company. This role would give ABC supply chain control, using "IT for customer service through order visibility (value)" and "IT providing on line, real time enquiry for customers (new routines for relationships and market intelligence)". These would require the group to henceforth concentrate supply responsibility with ABC Co. including "redefining operational activities for supply chain control and enhanced customer service" and "developing EDI/IT systems for order to delivery processes". In an interview conducted some 18 months after the scenario

intervention, the Director of Whisky operations reflected, "We made a presentation to the (Group Board) about the outcome of the scenario exercise and made the point that ABC could not really develop further... without getting more control over the process—total production, control over the ways orders come in to us, and the way we process them ... we moved from being an independent bottler to being the supply chain management unit for the whole group".

## 3.5. Summary of our inferences from the case analysis

The outcome of this scenario intervention was a severe challenge to managers' beliefs and experience, and our empirical findings highlight a pro-active and vigilant, managerial response to the new structural insights arrived at through the intervention. Prior to the intervention, the case study organization had not explicitly articulated any major concern(s) regarding the contextual environment and had indicated that the key managerial issue was simply the desire for a growth in bottling of 25%. At the conclusion of the intervention, the response being formulated had moved from an initial concern with efficiency in operational production systems, to developing an end-to-end supply system utilising information technology to allow order tracking in real time.

We infer that the scenario process can, in the appropriate circumstances, act as an external 'jolt' to the organization—a jolt which can bring about a re-conceptualization of the organization's business idea or recipe for success. In the ABC Co. case, the original recipe entered a state of flux, eventually resulting in a transition as a result of the search for a position of control in the industry, itself re-conceptualized. In short, the participants from ABC Co. undertook a redesign of organizational purpose that appears likely to enhance the prospects of the organization's survival in the futures encapsulated in the scenarios developed by the management team.

Table 1, below, summarizes the main stages of the scenario process intervention in ABC Co. and provides a stage-by-stage summary of the conclusions of our case analysis.

The question which arises is: why were the decision avoidance processes described in [1] not invoked in response to the organizational 'jolt' in the ABC Co. scenario planning intervention? We conjecture that the answer to this question can be found in application of Janis and Mann's theoretical model. We next turn to apply the Janis and Mann analysis to the pre-intervention interview responses in the ABC case.

#### 3.6. Case analysis: methodological approach

In the ABC Co. case, we adopted the same methodology as that documented in [1]. Our aim was to illuminate which, if any of Janis and Mann's psychological coping patterns could be identified in the thirty-

Table 1 Stage by stage analysis of transitions in thinking

Process stage	Case analysis	
Original problem vision (espoused aspirations)	Increase throughout to 10 m bottles pa (25% increase)	
Original recipe and key success factors	Efficiency in whisky production and flexibility of response for customers	
Pre-intervention approach to customer	Respond to order	
Scenario insights	Structural threat—power of distributors and providers in the future	
Post intervention approach to (creating value for) the Customer	Product integrity and support for the brand by providing supply chain management	
Domain in the recipe for re-interpretation	Supply chain management	
Change in industry structure of power with distributors—resulting in ABC control the supply chain and therefore access to markets		
ransition in thinking and recipe re- terpretation Customer Service Centre to produce end-to-end supply chain management for and suppliers		

Table 2

The seven "trigger" questions used to elicit information from the various participants prior to the group meetings (adapted from [5])

- 1. The participant's background and current role in the organization
- 2. Three key issues confronting the organization over the coming decade on which information is much sought
- 3. Developments relating to these issues under a good scenario
- 4. Developments relating to these issues under a bad scenario
- 5. Key/landmark events in the history of the organization
- 6. Major decisions ahead
- 7. The participant's epitaph

two pages of single-spaced-typed interview data, which we accumulated in the pre-intervention interviews of the six members of the ABC Co. senior management team.

The "trigger" questions used to elicit information from those interviewed in ABC Co. are given in Table 2. These are the identical questions as those used by Hodgkinson and Wright and are known, in the scenario literature, as the '7 Questions' [5]. Accordingly, the interview responses from the Beta Co. and ABC Co. cases are directly comparable.

Our interviews were undertaken with ABC Co.'s managing director, finance director, HR director, operations director, operations manager and quality manager. One participant, participant 4, whose interview quotations are given in Section 4.2, above, joined ABC Co. part-way through the process and so did not contribute to our pre-intervention interview records.

In order to facilitate analysis and interpretation of the interview transcripts we used an a priori scheme comprising 13 categories, which collectively embrace the full range of concepts employed within the Janis and Mann conflict theory of decision making [1]. An additional miscellaneous category was added to the coding scheme to allow for the possibility that none of the categories derived from this theory were applicable. The coding scheme is presented in full in Table 3.

Initially, the researchers read through the set of original interview transcripts and highlighted interviewee responses, or 'quotations', that were, plausibly, illustrations of the various aspects of Janis and Mann's theory. The highlighted responses were then allocated to one of the 13+1 a priori categories as considered appropriate, any disagreement between the researchers as to category allocation being resolved through discussion.

To the best of our knowledge our analysis of the interview transcripts was exhaustive. However in order to ensure that we had not inadvertently overlooked any material of potential relevance, we explained the Janis and Mann theory to two post-graduate research assistants. They were then given a copy of the categories shown in Table 2, and instructed to independently:

... read through each of the six interview transcripts and indicate any additional phrases, sentences or paragraphs that you believe could be plausibly allocated to any of the 14 categories (you are not required to actually allocate them, merely to indicate which phrase/sentence/paragraph deals with decisional issues that could be categorised into one or more of the 14 categories).

As expected, the research assistants identified very few additional quotations.

The analysis in the ABC Co. case was based on a total of 84 quotations identified through this exercise. The total population of quotations was 576. In the text of this paper, we selectively allocate the 84 quotations in order to illustrate those aspects of Janis and Mann's theory that we believe are identified within the dataset. Our interpretation is necessarily subjective, However, given that all 84 quotations are documented across the Tables attached to this paper, readers are in a position to reflect on the extent to which they agree or disagree with our account of the data.

### 3.7. Findings

The following sections examine the application of the Janis and Mann model to the interview data.

Table 3
The coding schedule used to re-analyse the pre-workshop interview transcripts

Category no.	ption		
1.	The individual believes the risks are serious if the organization keeps to its current strategy		
2.	The individual believes the risks are serious if the organization changes its current strategy.		
3.	The individual believes the risks are not serious if the organization keeps to its current strategy.		
4.	The individual believes the risks are not serious if the organization changes its current strategy.		
5.	The individual believes there is insufficient time to search for (and fully consider) a new strategy to replace the current strategy.		
6.	The individual believes there is sufficient time to search for (and fully consider) a new strategy to replace the current strategy.		
7.	The individual believes that it is realistic to hope to find a better strategy to replace the one currently being followed.		
8.	The individual believes that it is unrealistic to hope to find a better strategy to replace the one currently being followed.		
9.	The individual (or wider organization) is delaying (or putting off) making a strategic choice.		
10.	The individual (or wider organization) is shifting the responsibility for making a strategic choice to another individual or group of individuals.		
11.	The individual (or wider organization) is engaged in exaggerating the positive consequence (or minimizing the negative consequence) of the current strategy.		
12.	The quotation indicates either (a) limited evaluation of available information or (b) limited planning for events that could happen.		
13.	The quotation indicates high quality strategic decision making.		
14.	The quotation indicates panic.		
15.	The quotation dose not fit any of the other categories.		

## 3.7.1. Are the risks serious if ABC keeps to its current strategy?

The answer to this question was "yes" and "no". "Yes", as illustrated by the following remark:

• We are not concerned enough about diversifying. We have grown, doubled over the last 10 years. Maybe that has made us less concerned with the risk in our situation. Everything depends on the solid two brands we look after. (Participant 3)

And "No", as illustrated by this remark:

• There is a lot of turbulence in the industry, things are happening, some companies are in a mess but we are in a good position. (Participant 7)

Further quotations supporting these conclusions are detailed in Tables 4 and 5. The initial issue of concern to the participants was clearly that of the strength of ABC Co's position in the whisky bottling business. On the one hand, the loss of one of the two main brands currently being bottled by ABC Co. would be a major issue; on the other hand, the efficiency and cost effectiveness of ABC Co.'s bottling operation was seen as a major strength-a competitive advantage in terms of attracting new customers.

# 3.7.2. Is it realistic to hope to find a better solution to ABC's current strategic dilemma? The answer to this question was an unequivocal "yes". The following quotation illustrated this:

• If we manage to improve efficiency and maintain the (positive) atmosphere in the plant e.g. by improved rewards, and fewer but more highly skilled people, I see no reason why we could not move up to 10 million cases through-put, and it could be done on the same site. (Participant 6)

Table 6 sets out other comments on this issue, whilst Table 7 sets out the sole comment indicating that the potential market in bottling whisky for export may be limited.

Table 4

The individual believes the risks are serious if the organization keeps to its current strategy

- "Our current position is that we have the right equipment, but not the right calibre of people." (Participant 2)
- "Our fate is with the 2 main Brands. If anything happens to them we would collapse. Things do happen though, remember the Perrier event. Or it could be a more gradual process, e.g. due to a price war." (Participant 1)
- "The main threat would be to lose one of our main brands." (Participant 7)
- "The main uncertainties relate to the 2 main brands handled here. Will they continue to perform in the market? Problems could arise around market demand, or with access to the distribution chain." (Participant 3)
- "Although we consider our business across all spirits, 98% of what we do is whisky. And in that we are dependent on two major customers. (Participant 6)
- "We have got to spread our risk wider, and acquire major new brand customers. We are getting into small things at the moment, but no success yet with a really big new customer." (Participant 3)
- "ABC are highly dependent on volume. With high fixed cost and low variable costs our break even point is rather high." (Participant 2) "Developments in the price levels in the whisky market are problematic. Own label brands in supermarkets are putting pressure on margins, of which we can feel the effect in our negotiations with customers. For example, our prices to customers have not been increased since three years." (Participant 2)
- "We try to give a premium service, and on the whole we succeed in this. But there is not a lot of scope for a premium price. Our price has to be competitive. The cost of the service is the main issue for our customers (particularly the bigger once)." (Participant 2)
- "The fighting brands could destroy the main brands. As we depend on two of these for our survival, we are walking a tightrope here, supporting our brands, as well as being ready to jump into the new market as it comes." (Participant 1)
- "A development which might affect the whisky market could be the development of a wholly new drink. The younger part of the population might be attracted to something new. Bells are putting out new drinks." (Participant 1)
- "Through our high investment level our break-even is high. We could not lose one million cases and stay in the black." (Participant 6) "Two eggs in our basket are not enough. We could not survive the loss of one of the main brands." (Participant 1)
- "Due to our flexibility investments the break-even point has increased from 2.5 million cases to 4 million. This means that if we lose one of the main brands we would be below break-even. If you consider what happened to Cutty Sark in the US you have to come to the conclusions that this is by no means impossible. A 'health warning'." (Participant 7)
- "Finding the right team leaders is the crux of our performance. It is a serious problem area. Our policies, such as promotion from within, have not helped. It has put a cap on the level of achievement." (Participant 6)
- "What is going to happen with the perceived value of brands? Whisky could become much more of a commodity. This would create intense pressure on profitability. One can imagine a situation where ABC could not survive." (Participant 2)
- "The developments around unbranded whisky are worrying, because of the pressure on prices it causes. This could even eventually kill off brands." (Participant 7)
- "I am concerned that Europe are pricing themselves out of the market with our wage rates. There is no way we can compete with India or China." (Participant 3)

#### Table 5

The individual believes the risks are not serious if the organization keeps to its current strategy

- "The EU protocol seems to bring bottling back to the country or origin. Sherry is now increasingly bottled in Spain, and whisky has come back to Scotland." (Participant 3)
- "The smaller companies now have little alternative. MacDuff, who is selling 200 K cases in principle could do the bottling themselves, but it would be expensive. They would have to overcome a big hurdle." (Participant 2)
- "What we are looking for are new customers who will do all their bottling with us. We have gained one such customer. The take-over of William Muir by Whyte & Mackay may provide new opportunities." (Participant 2)
- "William Muir has now been renamed Whyte and Mackay Bottling. This will scare off third party customers, who do not like to contribute to the overheads of a brand competitor. ABC is independent, not owned by a brand." (Participant 5)
- "Most of our clients come to us for mainly historical reasons. In this business the crux is 'word of mouth'. People need to know who you are." (Participant 7)
- "My optimistic scenario is another 1 M cases over what we are doing now. We will have invested in another 3 fully automatic lines, and we have still to build a new hall and warehouse." (Participant 3)
- "Highland Distillers could be subject to a hostile take-over bid. They are a public company. It would be resisted, but who can tell? If it happened we should try to turn it into an opportunity, by acquiring new bottling business from the new owner." (Participant 6)
- "Our investments are geared towards our existing business, both quality and throughput. It is not intended to serve major new business opportunities." (Participant 6)
- "Our facilities are the key. We must continue to spend on them." (Participant 7)
- "We will reach the stage where only a few multi-nationals will be left in the industry. Maybe at that time some sense can return in the market place." (Participant 6)

#### Table 5 (continued)

- "The 4 or 5 large players in whisky have their own bottling. But they may be looking at it as a cost, and may be interested in rationalization. That would give us a chance. At other times they think they must be in it, for reasons of control, marketing and scale." (Participant 7)
- "The name of the game is the lowest possible cost per case." (Participant 3)
- "The ABC part of the strategy is to take on more and more business. We are doing this in a stagnant to declining market. Even so, we see further opportunities." Participant 3)
- "The challenge is now to pick up another big player, who would bottle one or a couple of million cases with us." (Participant 7)
- "I would not be surprised if in the not too distant future we would suddenly have the opportunity to acquire a very large contract. There is a lot of turbulence in the industry, things are happening, some companies are in a mess, but we are in a good position. I am not sure anyone is doing anything about this." (Participant 6)
- "Apart from William Muir there are two other independent bottlers, but they have a 'back street' image in the industry. They do not provide a good finish to their service. They are also smaller, typically one million cases against our 5." (Participant 2)
- "Flexibility is the main reason why customers come to us. We take the hassle out of their operation." (Participant 2)
- "The key business issue is getting the efficiency up." (Participant 2)
- "A major selling point in our favour: We are independent from any brand. Therefore we are not seen as a potential competitor. Many companies will not deal with competitors." (Participant 7)
- "The big customers are all in the process of rationalization of their facilities. This creates overflows for which they have to go outside. The bigger the company, the bigger the bits that are outsourced. This can lead to worthwhile contracts, as large as 50 K cases." (Participant 3) "We are not entirely sure what is standing in the way of higher line efficiencies. We have launched process measurements initiatives to find out. Many factors are impinging on this. The reasons for stoppages can be many." (Participant 6)
- "Bottling in Scotland is now becoming a brand feature. 'Bottled in Scotland' is printed on the label.' (Participant 6)
- "The main constraint to expanding our business is the demand for the type of services we offer." (Participant 7)
- "United Distillers have rationalized their bottling from 7 to 4 plants. They want to get rid of irregular business. But I am not sure whether they are a willing partner yet. It is an evolutionary process." (Participant 3)
- "The ABC part of the strategy is to take on more and more business. We are dong this in a stagnant declining market. Even so, we see further opportunities." (Participant 3)
- "Our distinctive competence is in bottling whisky. We have no competence for filling water. Other spirits will remain a side line." (Participant 3)
- "We have been installing new equipment consistently over the last 10 years. There still is some way to go." (Participant 3)
- "The whisky market in the UK is declining, but exports are up. Grouse export one million cases, all Cutty Sark production is exported." (Participant 6)
- "We are now quoting for contracts from people like United Distillers and J&B. It is a new developing scene for us. It will take time to build up. We have not got there yet." (Participant 3)
- "One could have a vision of one big blending and bottling operation serving the whole of the Scotch whisky industry. An operation so efficient and flexible, that no-one wants to do it for themselves any more." (Participant 2)
- "I think the future is in more machines and less people. It is certainly the present trend." (Participant 7)
- "There are not many companies like ABC, just in storage, blending and bottling. Our one serious competitor, has been taken over by another major firm and may be pulling out of third party bottling. It may offer a significant opportunity for ABC." (Participant 2)
- "One of our two main customers could be taken over, and their bottling could go elsewhere. On the other hand our group could take over another company, and do the reverse." (Participant 6)

#### 3.7.3. Shifting responsibility, procrastination and bolstering

There was some evidence that members of the ABC Co management team were attempting to shift the responsibility for any change in strategy, as evidenced by the following quotation:

• The parent company is a 'whisky firm', that is, where they make their money. A proposal form ABC Co. to invest in a big way in other drinks would have a hard time. (Participant 1)

Further quotations providing evidence of shifting responsibility, are given in Table 8, below. However, note that since ABC is part of a privately owned company it may, in reality, be unable to make strategic decisions in certain areas independently of the parent company.

Even though there was some evidence of other defensive avoidance behaviour patterns, only a small percentage of quotations were classified under the categories of procrastination and bolstering failing strategy (Tables 9 and 10), relative to a larger proportion of quotations evidencing limited information search and limited forward planning for contingencies, as detailed in Table 11.

#### Table 6

The individual believes that it is realistic to hope to find a better strategy to replace the one currently being followed

"If we think in terms of expansion we have got to get much better at it. The bottleneck is that we do not have enough quality people. The problem is that this industry has traditionally been a cradle-to-grave employer, with little flexibility. Now we need a different competence level. Particularly in the junior to middle management area." (Participant 1)

"Over the last 5 years we have made major progress in getting people involved. It is very gratifying to see relatively uneducated people stand up and talk about their job. People are also starting to realise that there is value in education, acquiring the ability to contribute to the business." (Participant 3)

"The 10 million cases future would consist of some generic growth in the existing business, new brands, other spirits (vodka?), or even some unbranded whisky." (Participant 7)

"Our new business plans require that we go outside the existing pool of people. It means that some others will have to go. We are the only business these people know. This is hard as it is our fault that this situation has arisen." (Participant 1)

"Maybe our main constraint to lower cost and improved product is our own managerial thinking. The ability to lead and carry things through. We have got to develop good leaders. The work force is probably as good as any, but traditional management is the limitation." (Participant 2)

"There is no reason why we should not grow to 10 M cases, 5 or 6 from the main brands and the rest from 1 M contracts and some small stuff. We could do that in our current facilities, possibly with the addition of a third bottling hall." (Participant 5)

"ABC has enormous potential, due to facilities and people available. We are not yet quite there. First resolve the internal problems, and do not go too far before these have been resolved and we are ready. For example, line efficiencies must first go up." (Participant 7)

#### Table 7

The individual believes that it is unrealistic to hope to find a better strategy to replace the one currently being followed

"There are huge potential markets for whisky in countries such as India and China. But due to low labour cost they do their own bottling. This business therefore bypasses ABC. (Participant 2)

## Table 8

The individual (or wider organizations) is shifting the responsibility for making a strategic choice to another individual or group of individuals

- "The big strategic decisions require the benefit of the vertical integration of the group. We cannot do it on our own." (Participant 6)
- "We are supplying own labels to supermarkets in France. There is a lot of potential expansion in business of this type. It could be a template for the future. But we depend on XY to bring in these customers," (Participant 7)

"How do we want to grow the business? We have the 'amber light' for growth, not the 'green light' yet, we have to make the case first." (Participant 2)

Our main uncertainty is the thinking in the parent group. The real decisions are taken at board level, and some of us are not present there. On the whole there are no secrets, but that does not mean that everyone knows what they are working on. We are not always able to influence the thinking." (Participant 6)

"It is difficult to see how ABC could develop major overseas opportunities on its own. Such JV's would require the group's distribution capabilities. Only thing we can do is assist". (Participant 6)

#### Table 9

The individual (or wider organizations) is delaying (or putting off) making a strategic choice

- "We are very slow off the mark. For example, our JV in India followed just about everyone else." (Participant 1)
- "We have further plans for development of the company, but we need to triggers to get things moving." (Participant 2)

#### 4. Discussion and conclusion

This paper has presented a case analysis of a company that reacted "face-on" to the perceived environmental threats provoked by a scenario planning intervention. We contend that such rethinking is an appropriate, vigilant, response to the 'jolt' of a scenario thinking intervention. The evidence for prior procrastination, bolstering, and buck passing was slight in the present case when compared to the Hodgkinson

Table 10

The individual (or wider organization) is engaged in exaggerating the positive consequences (or minimising the negative consequences) of the current strategy

- "In the 1970s XY bought a food company. This proved a disaster. The company has been disposed of. But the memory lingers on. This is one thing we will never do again. It is unlikely that the group will diversify from whisky." (Participant 5)
- "Although we are not any longer a cost centre, we will continue to live with the dilemma that if we improve our efficiency our customers will expect a lower price. There is no other price standard to look at than our cost. There is no 'going market rate for the job'. Also we are very close to our customers. We will therefore never be extraordinary profitable. And we can prosper only under the protective arm of the Group." (Participant 3)
- "The industry are looking for ways to reduce stocks and working capital, but at the same time to increase variety and choice to the market. If we find some magic formula here we have got it made." (Participant 2)

Table 11

The quotation indicates either (a) limited evaluation or available information or (b) limited planning for events that could happen

- "Although we say we are in spirits, I think the company would look at something else, if a really promising opportunity came about. The company is cash-rich." (Participant 6)
- "I wonder whether we should start thinking beyond spirits." (Participant 7)
- "Our MD is also our sole marketing man. This cannot be sufficient. We need to bring in more business and new customers." (Participant 7) "We do not market research, we have traditionally left that to XY and the brand owners. This may have to change if we want to develop the business." (Participant 1)
- "Where is whisky going as a product? The overall market is growing, due to new markets such as the FE, but the mature markets are declining. What does that mean?" (Participant 2)
- "We do not know who the potential overseas business partners are. I trust someone in the group knows." (Participant 6)
- "As part of the Group empire ABC has been an inward looking insular company. The business came to us and we reacted. The brands had the commercial contacts outside." (Participant 2)
- "Growth probably will have to come from a customer by customer approach, rather than through one big conceptual leap. The latter is difficult to envisage." (Participant 2)
- "Over the last 5 years we have tried to become a bit more outward looking." (Participant 2)
- "There is hardly any financial constraint on what we do. The problem is really to spend money wisely. It is easy to get capital expenditure approval. Too easy." (Participant 1)
- "Our biggest underlying uncertainty is the future of the whisky market in general. Where is whisky going as a product? The overall market is growing, due to new markets such as the FE, but the mature markets are declining. What does that mean?" (Participant 2)

and Wright [1] Beta Co. case. Table 12 sets out the proportion of quotations that were accumulated under each of Janis and Mann's headings in the present case and compares the proportions obtained to those obtained in the Hodgkinson and Wright case.

Inspection of Table 12 reveals that participants in the current case felt that the risks were not serious if the organization kept to its current strategy but there was appreciation of the risks inherent in this strategy (rows 3 and 1). There was also little evidence of the close analysis of alternative strategies (rows 2, 4, 5, and 6). There was, however, evidence of hopes to find a better strategy (row 7). Overall, 13% of the quotations in the present case indicated procrastination, buck-passing, or bolstering behaviour compared to 33% in Hodgkinson and Wright's case (rows 9, 10 and 11). Importantly, in the latter case, there was no evidence that Beta Co. believed that their current strategy was risk free (row 3).

In light of the above evidence, we contend that in the Hodgkinson and Wright case, the organization had, prior to the scenario intervention, become disabled as a consequence of the stresses engendered by a decision dilemma (rows 1 and 2, taken together and contrasted with row 3) and that this resulted in the activation of coping behaviours underpinning decision avoidance (rows 8, 9, 10 and 11) and subsequent poor information search and contingency planning (row 12). By way of contrast, the ABC Co. case evidenced little decision avoidance behaviour (rows 8, 9, 10 and 11), since the risks of the current strategy were seen to be lower (row 3 contrasted with row 1).

What are the implications of our case analysis? We suggest that the initial set of interviews with a client organization, using the seven "trigger" questions detailed in Table 2, can be used to diagnose the receptiveness

Table 12
A comparison of the results of the present case with that of Hodgkinson and Wright's case analysis: percentage of quotations sorted into each of the 13 categories of Janis and Mann's model

	Description	Hodgkinson and Wright's (2002) case	The present case
1	The individual believes the risks are serious if the organization keeps to its current strategy.	12%	23%
2	The individual believes the risks are serious if the organization changes its current strategy.	10%	0%
3	The individual believes the risks are not serious if the organization keeps to its current strategy.	0%	40%
4	The individual believes the risks are not serious if the organization changes its current strategy.	0%	0%
5	The individual believes there is insufficient time to search for (and fully consider) a new strategy to replace the current strategy.	0%	0%
6	The individual believes there is sufficient time to search for (and fully consider) a new strategy to replace the current strategy.	0%	0%
7	The individual believes that it is realistic to hope to find a better strategy to replace the one currently being followed.	0%	10%
8	The individual believes that it is unrealistic to hope to find a better strategy to replace the one currently being followed.	16%	1%
9	The individual (or wider organization) is delayed (or putting off) making a strategic choice.	16%	2%
10	The individual (or wider organization) is shifting the responsibility making a strategic choice to another individual group of individuals.	6%	7%
11	The individual (or wider organization) is engaged in exaggerating the positive consequence (or minimising the negative consequence ) of the current strategy.	11%	4%
12	The quotation indicates either (a) limited evaluation of available information or (b) limited planning for events that could happen.	29%	13%
13	The quotation indicates high quality strategic decision making.	0%	0%

of the organization to scenario thinking. If the management team's responses to these questions evidence a similar pattern to that of Beta Co., then we contend that this pattern is indicative of a predisposition to defensive avoidance behaviour when confronted with a decision dilemma. In such a case, a typical scenario planning intervention is unlikely to result in success, as measured in terms of the management team's willingness to engage in a vigilant debate on the appropriateness of the alignment between the organization's strategy and the demands of the environment. By contrast, a pattern of responses similar to that seen in the ABC Co. case is indicative of a management team in which a decision dilemma has not been recognized and the psychological coping patterns inherent in defensive avoidance have not been activated, thereby increasing the potential for a successful scenario intervention exercise.

Although there is in general, a paucity of research in the area of scenarios, research that has been conducted has tended to concentrate on scenario processes and content, and a number 'pitfalls' have been described in these arenas [23]. The significance of the present piece of research is that it takes a step back and offers a well-known model from laboratory-based decision research, which can be used to identify the pre-existing conditions within an organizational management team that may determine the likelihood of the success of a scenario intervention-at the outset of that intervention.

If the results of this research are indeed generalizable, then the impact on scenario planning practitioners cannot be overstated. Although the management team of an organization may claim to want to engage in a scenario planning intervention in an attempt to examine and debate the alignment of the organization's strategy, as in Hodgkinson and Wright's case analysis, practitioners can, with reasonable confidence, determine at the outset whether or not the espoused desire coincides with the actual receptiveness of the organizational context—as revealed by the application of the Janis and Mann model to the pre-intervention interview data yielded by the management team. With this information, the reflective practitioner is then in a position to make a contingent decision as to the best way to proceed, or not, with the scenario exercise. Thus, in keeping with recent calls for researchers to make management theory more relevant to the world of practice,

this paper has begun to establish a contingency model of the signs that would indicate a receptive or non-receptive intra-organizational context for a scenario-based intervention.

We note, however, that the two cases that we have compared and contrasted will differ in other significant ways than those that we studied—for example, in terms of team leadership, team dynamics, and team structure. Other differences may be those of organizational competence, organizational power (over the business environment), and organizational architecture. Clearly, the present study is one that enables theory building—an initial transfer of knowledge from the psychological laboratory to the organizational setting—rather than providing a rigorous testing of theory in controlled conditions.

We conclude that the ability of an organization to overcome strategic inertia can be psychological. As we have reviewed, the extant literature on the causes of strategic inertia is sparse and it is silent on psychological causation. By contrast, our development and application of Janis and Mann's theory to the organizational context illustrates the operation of psychological processes that act to reduce stress by avoiding decision dilemmas. These processes underpin, we contend, observed boundedly rational behaviour and routine following.

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