Scenario Planning: is the 'box' black or clear? It depends.

Frith D., Tapinos E.

## Abstract

This paper responds to a debate concerning the gap in the knowledge of scenario planning literature. We propose a dichotomy in the scenario planning research: i) investigating the activities undertaken within interventions, and ii) studying how these activities lead to the reported outcomes. In our view, there is a plethora of on-going research on the first, but we have sought to address a significant gap in the latter.

## Introduction

Many scholars claim that their research and articles seek to progress the development of knowledge and open up the academic debate. We are pleased that our article, provided the opportunity to Mr M. Jefferson to share such interesting insights from his personal experience and open up the debate about which are the gaps in the knowledge regarding the theory and practice of scenario planning. We appreciate Jefferson's (2020) clarification that his contribution is based on personal experiences which do not have to be shared by every academic or practitioners on scenario planning. We do not dismiss critical reflection in management studies (Tapinos 2013), but we recognise the limitations in the generalisability of conclusions. We have read with interest the article "What are the intervening factors between the stimulus of a scenario planning intervention and the expected response or desired outcome of the process?" (Jefferson, 2020) and we could not identify the nature of the disagreement with our key thesis (Frith and Tapinos, 2020). We are convinced that the answer to the question of whether the scenario planning box is 'black' or 'clear' depends on exactly which box you are looking at. There are, in essence, two 'boxes' or aspects that can be investigated: one concerns scenario planning as a formalised sequence of activities (Hussain et al, 2017) and the second concerns how these activities lead to the reported outcomes of the interventions. There is a plethora of research on the first, but we have sought to address a significant gap in the latter.

## Which scenario planning 'box' seems to be clear?

Jefferson's (2020) article provides an excellent review of the activities that took place at Shell. Admittedly, not all scenario planning interventions can match Shell's, however we acknowledge in this response and in our original article that there is general consensus in the literature about the basic activities in the scenario planning: *"Chermack (2011) defines ten approaches to scenario planning, although these might be seen as different centres of practice rather than fundamentally different approaches"*. However, do any of the descriptions provided by Jefferson (2020) explain how the scenario planning outcomes reported in the literature (see for example Chermack and Lynham, 2002) occur? In our opinion, descriptions of the scenario planning method and practice do not explain adequately how it changes participants' minds (De Geus, 1997); creates shared mental models (Tapinos and Pyper, 2018); or even improves decision making (Wilson, 2000). Thus, our response to Jefferson (2020), which is that it depends which 'box' you are examining in scenario planning, in order to deduce if it is black or clear.

## Which 'box' do we think was not clear enough?

A quick reminder that our research question was: 'What are the intervening factors between the stimulus of a scenario planning intervention and the expected response or desired outcome of the process?' In our article (Frith and Tapinos, 2020), we explain very clearly that we do not refer to the method or the activities that take place in order to formulate scenarios. For us, the 'black box' is how these activities generate the outcomes claimed by the various studies in scenario planning. As noted in our paper, "The 'black box' has sometimes been acknowledged but rarely exposed to the light (Hodgkinson and Healey, 2008; Chermack, 2011; Lang and Ramirez, 2017) and never as comprehensively or by means of such an effective and epistemologically appropriate research tool as realist synthesis". Thus, our paper attempts to explore how, and in what planning contexts, established 'mechanisms', as identified from published research, affect the participants' cognition.

Another point that we want to re-emphasise and address is what appears to us to be a misunderstanding by Jefferson (2020) that we are claiming the 'mechanisms' we describe as our own contribution to the scenario planning method and practice. On the contrary, in our article, we describe how we have used the realist synthesis method to explore which of the mechanisms and contextual factors, common to many scenario planning interventions, such as those that Jefferson so vividly describes, might materially impact participants' mental models. Where we state that "[N]otwithstanding a substantive practitioner evidence base concerning the outcomes of scenario planning, academic evidence identifying the mechanisms and contextual factors contributing to those outcomes proves notably lacking", we do not claim that those mechanisms and contextual factors have not previously been applied in scenario processes or that they are absent from the literature. Our case is that what has been lacking is an evidence-based way for "seeking to understand what it is about a scenario planning intervention that leads to outcomes associated with changes in how and what participants think".

In terms of Jefferson's evidencing of the earlier use of the "functioning of the brain and its links to human behaviour" in scenario planning, we also have no dispute. Our observation is that the historic trend has seen increased application of such approaches, not that they are an entirely novel discovery. Similarly, where we write of the "diverse limiting factors within participants' cognitive processes" we are not suggesting that there has been a lack of mechanisms (described by Jefferson as "successful heuristics") for countering cognitive biases. Our aim, rather, was to explore the use of the realist synthesis method as a framework for understanding which of those mechanisms are effective and, critically, in which organisational circumstances or 'contexts'.

## Epilogue

Jefferson's (2020) contribution reinforces, for us, the notion that scenario planning research has to go beyond a simple description of practice and, using both reflective and inquisitive

lens, to theorise from scenario interventions as social practices (Beser and Sarpong, 2011). Thus, similarly to Jefferson (2020), we would like to extend the call for further research which investigates how the activities undertaken within scenario planning lead to the outcomes reported in the published studies. We strongly believe that collaboration between academics and practitioners, to investigate and understand the effects of scenario planning, will enable the practice of foresight interventions to be customised in a way that maximises impact and achieves the purposes for which an intervention is selected.

# **References:**

Beser S. G. and Sarpong D., 2011, Towards a methodology approach: theorising scenario thinking as a social practice, Foresight, 13(2), pp. 4-17.

Chermack, T. J., 2011. *Scenario Planning in Organizations: How to Create, Use, and Assess Scenarios.* San Francisco: Berrett-Koehler Publishers Inc.

Chermanck T. J. and Lynham S. A., 2002, Definitions and Outcome variables of scenario planning, *Human Resources Development Review*, 1(3), pp. 366-383.

De Geus, A. (1997). *The living company*. Boston: Harvard University Press.

Frith D., and Tapinos E., 2020, Opening the 'black box' of scenario planning through realist perspective, *Technological Forecasting and Social Change*, 151, 119801

Hodgkinson, G. P. and Healey, M. P., 2008. Toward a (Pragmatic) Science of Strategic Intervention: Design Propositions for Scenario Planning. Organization Studies, 29(03), pp. 435-457.

Hussain M., Tapinos E., Knight L., 2017, Scenario-driven roadmapping for technology foresight, *Technological Forecasting and Social Change*, 124, pp. 160-177.

Jefferson M., 2020, What are the intervening factors between the stimulus of a scenario planning intervention and the expected response or desired outcome of the process?, *Technological Forecasting and Social Change*, (forthcoming)

Lang, T. and Ramirez, R., 2017. Building new social capital with scenario planning. Technological Forecasting & Social Change, 124, pp. 51-65.

Tapinos E. and Pyper N., 2018, Forward looking analysis: Investigating how individuals do foresight and make sense of the future, *Technological Forecasting and Social Change*, 126, pp. 292-302

Tapinos E., 2013, Scenario Planning at Business Unit level, *Futures*, 47, pp. 17-27.

Wilson, I. (2000). From scenario thinking to strategic action. *Technological Forecasting and Social Change*, 65(3), 23-29