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Why are we surprised at surprises? Integrating disruption theory and system analysis with the scenario methodology to help identify disruptions and discontinuities

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Abstract

The scenario literature has limited discussion on the process of identifying the systemic conditions that could create disruption and/or discontinuity. This paper focuses on the integration of Christensen's theory of disruption and system analysis with the scenario methodology to develop a framework that provides an understanding of the underlying systemic conditions that create disruption and/or discontinuity. The framework is developed from a recent scenario case study to show the process of integrating these three theories and approaches. The case study reveals the systemic conditions inherent in the UK energy industry and how these conditions may portend discontinuity.

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1. Introduction

The recent exchange of views in this journal about discontinuities [1–3], disruptions [4], and the ability of scenario planning as a methodology to help detect signals and conditions of discontinuity and

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disruption [5–7] has raised many challenging methodological questions for those interested in this subject, including:

- What are the implications for interactive scenario development in view of the fact that intuitive process designs offer the most possibilities for considering disruption and discontinuity?
- What does it mean for group composition?
- What does it mean for techniques for intuitive scenario development?
- Is there a value in emphasising the idea of discontinuity in general and “desirable discontinuity” in particular, and how can this be facilitated?

These questions pose a number of challenges for researchers, which if they are resolved, would enhance our understanding of the scenario methodology, helping to improve its use and efficacy in practice.

This paper addresses the first of the above questions: “what are the implications for interactive scenario development in view of the fact that intuitive process designs offer the most possibilities for considering discontinuity?” The paper presents findings from a recent exploratory case study that links systems analysis with the scenario methodology [8,9], and applies the principles of Christensen’s disruption theory [10] to help in the building of scenarios. By doing so it is possible to reveal the systemic conditions that may portend disruption and/or discontinuity. Such integration is a part of the continued development of our understanding of the scenario approach. The paper defines¹ disruption as “throwing into disorder” (the current state of order) with short-term consequences for the system, which persists over time; and discontinuity as “a lack of continuity or cohesion” with past experience, bringing about a new order over time.

The contemporary contribution of scenario planning as part of strategic management in organisations has developed over many years [11–20]. The starting point in the literature is widely recognised as Herman Kahn and his innovative work with the RAND organisation and Hudson Institute. Kahn is recognised as the founding father of scenarios or alternative futures, and scenario planning, contributing to our understanding with his books *On Thermonuclear War*, *Thinking about the Unthinkable*, and *The Year 2000*.

The growth of its use in business started primarily from Pierre Wack’s seminal papers in *Harvard Business Review* (HBR) [13,14] where he established two key criteria for such work. First, the identification of predetermined elements in the business environment; and second, as a consequence of the first, changing the mindset of managers to bring about new action. Although Wack was primarily interested in the re-framing impact of scenario planning, it is worth noting that there are occasions where the outcome of the process affirms management thinking.

Wack was arguing that planning should be based on events and eventualities that have a greater degree of *predictability* e.g. predetermined elements, rather than on best guesses and unsubstantiated assumptions. The scenario process creates the opportunity for managers to assemble information, facts and opinions that can be structured in a way that produces new insights about the situation under consideration. Wack also argued that if any scenario project did not lead to a change in the mindset of the manager, which would ultimately impact decision-making, then any such work had failed.

Yet, beyond Wack’s concept of “predetermined elements” there is little or no empirical or theoretical development of the utility of scenario planning in identifying systemic conditions that would result in

¹ Note: both definitions were taken from Webster’s dictionary.

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