

This paper appears in the publication, Managing Strategic Intelligence: Techniques and Technologies edited by M. Xu @ 2007, IGI Global

## Chapter X Knowledge Creation and Sharing: A Role For Complex Methods of Inquiry and Paraconsistent Logic

**Peter Bednar** University of Porstmouth, UK & Lund University, Sweden

> **Christine Welch** University of Portsmouth, UK

## ABSTRACT

Strategic intelligence involves examination of internal and external organizational environments. Of course people inhabited each of these environments. Whether they are customers, allies or employees, these are not standardized units but real human beings with personal histories, perspectives, and opinions. Recent research and practice have led to the development of relatively complex methods for inquiry which can be applied by human analysts and which recognize contextual dependencies in a problem situation. One such method, the strategic systemic thinking framework, is outlined in this chapter. The purpose of complex analysis in relation to strategic intelligence is not, in our perspective, decisionmaking—it is developing an ability to make informed decisions. Until software tools could not support recently complex methods, since the limitations of traditional mathematical algorithms constrained their development. We suggest a model, which lays the foundations for the development of software support and can tolerate the inherent ambiguity in complex analysis, based on paraconsistent (multivalued) mathematical logic.

### INTRODUCTION

A perfection of means and confusion of aims seems to be our main problem.

~ Albert Einstein

Unless their firms are fortunate to enjoy an enduring natural monopoly, managers in every business must concern themselves in a perennial search for a sustainable competitive position. In this context, strategic intelligence may be considered

as crucial, in both senses in which the term is commonly used. Intelligence gathering is a vital process by which managers inform themselves about opportunities, ideas and environmental factors. Most writers agree that strategists need to establish a relationship between their organization and the outside world (see, for example, De Witt & Meyer, p. 330). At the same time, they need the intellectual and practical skills to act upon the information created through this process, and lead the organization forward. The exact form such qualities should take will always be a subject for debate. One suggestion (Maccoby, 2001) describes foresight; systems thinking; visioning which draws upon them to shape future ideals; ability to motivate others to realise such vision, and partnering to bring about strategic alliances. The authors of this chapter believe that the two senses of the term "intelligence" are, in this context, indivisible. While it is possible for anyone to trawl for data about a particular market, product or process, such data only become useful when particular individuals consider it in the light of their existing knowledge, experience, and purposes.

Strategically important information is created throughout the organizational domain. Information resides in people's heads, and so information sharing is ultimately dealt with through communication. Communities of practice, created over time by sustained pursuit of shared endeavours, influence efforts to create a higher quality of communication for the purposes of sustaining knowledge creation and sharing (Wenger, Mc-Dermott, & Snyder, 2002). Strategic intelligence requires managers to engage with messy processes of informal learning taking place throughout their organization and its environments (Mintzberg, 1994). Such processes involve consultation with many different individuals who are also members of differing stakeholder groups. Any inquiry will therefore be concerned with individual uniqueness, complexity and issues of power.

At one time, many authorities described strategy formulation in terms of rational planning and goal-setting, whereby a corporate mission would be translated into objectives and targets at increasing levels of concrete detail (see, for example, Johnson & Scholes, 1993). Such a view has long been criticized as naïve and unreflective of organizational life in practice. Mintzberg (1994), for example, contrasts a planning model with an alternative view of strategic thinking, involving intuition and creativity and coming about through "messy processes of informal learning that must necessarily be carried out by people at various levels who are deeply involved with the specific issues at hand." This view is supported by empirical work carried out by Currie (1995) and by Walsham (1993), who points to a "dynamic, socio-political process within multi-level contexts" underlying strategic thinking. Whichever view is preferred, there is a broad measure of agreement that strategic intelligence involves examination of internal, as well as external, organizational environments. A difficulty then arises that each of these environments is inhabited by people, and whether they are customers, allies, or employees, these are not standardized units, but real human beings with personal histories, perspectives, and opinions. Claudio Ciborra (2002) puts this very well when he speaks of management meetings, and decision-making, in the following way:

Something that is beyond technology, management and organization, but that contributes to put all these things into action: those participants being there in the session with their personal histories, problems, projects, visions, and disillusions. What is at stake in those situations is who they are, where they come from professionally and personally, and towards what they are projected in relation to the issues raised by the speaker. (p. 5)

It is essential to recognize power relations as a part of organizational culture and management 17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/knowledge-creation-sharing/25998

### **Related Content**

## Practical Implications On How Established Companies Innovate With Startups: Tools and Guidelines for Innovation Managers

Andrea Back, Tina M. Werroand Lukas M. Peter (2019). *International Journal of R&D Innovation Strategy (pp. 1-20).* 

www.irma-international.org/article/practical-implications-on-how-established-companies-innovate-with-startups/250270

# Practical Implications On How Established Companies Innovate With Startups: Tools and Guidelines for Innovation Managers

Andrea Back, Tina M. Werroand Lukas M. Peter (2019). *International Journal of R&D Innovation Strategy (pp. 1-20).* 

www.irma-international.org/article/practical-implications-on-how-established-companies-innovate-with-startups/250270

### Green Strategy for Production of Antimicrobial Textiles

Nagia Farag Ali (2018). *Fashion and Textiles: Breakthroughs in Research and Practice (pp. 442-461).* www.irma-international.org/chapter/green-strategy-for-production-of-antimicrobial-textiles/187858

#### Uber Strategies for Transport Incorporated Private Market

José G. Vargas-Hernándezand L. E. Fabián Rojas Álvarez (2018). *Radical Reorganization of Existing Work Structures Through Digitalization (pp. 141-154).* 

www.irma-international.org/chapter/uber-strategies-for-transport-incorporated-private-market/191432

#### The New Service Realities: Challenges, Opportunities, and Initiatives

Pratap Chandra Mandal (2024). *Journal of Business Ecosystems (pp. 1-14).* www.irma-international.org/article/the-new-service-realities/342110