The Cynefin Framework: putting complexity into perspective

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Cynefin (pronounced cun-ev-in) 'is a Welsh word with no direct equivalent in English. As a noun it is translated as habitat, as an adjective acquainted or familiar. More poetically, it describes "that relationship: the place of your birth and of your upbringing, the environment in which you live and to which you are naturally acclimatised.' Cognitive Edge 2006).

The Cynefin Framework

When you make the complicated simple, you make it better, but when you make the complex simple, you make it wrong." (Gray).

The Cynefin sense-making framework was developed by Dave Snowden when he was working at IBM (Snowden 2002). He recognised that most research deals with situations and problems that are *complicated* and benefit from efforts to simplify them and bring order. Researchers tend to avoid situations and problems that are really *complex* and which are distorted by such efforts. *Complicated* systems, although composed of many intricate parts, can be understood over time by careful examination so that their future behaviour can be predicted. *Complex* systems, on the other hand, are 'comprised of populations of interacting entities where the overall system behaviour is not predefined but rather emerges through the interactions of its entities' (Kim & Kaplan 2006, p. 37). The Cynefin framework distinguishes between *order* (*simple and complicated*), *unorder* (*complexity and chaos*) and *disorder*, and, uses these distinctions to match problems, and their contexts, with the methods, tools and techniques that lead to solutions.

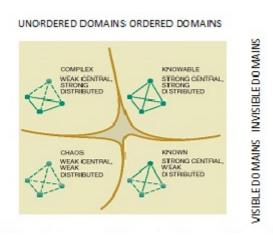


Figure 1 The Cynefin framework drawn from Kurtz and Snowden (2003)

As shown in Figure 1, the Cynefin framework has five *domains* reflecting the different ways of understanding the relationship between cause and effect, and different ways of working, in each of the *domains*. Each *domain* has a different mode of community behaviour and each implies the need for a different form of management and a different leadership style with the adoption of different tools, practices and conceptual understanding. Four of the Cynefin *domains* provide legitimate contexts for sense-making, decision-making and action. In the fifth, central *domain*,

disorder, there is confusion on the legitimate domain for situations and problems that are being faced and so disagreement on how to proceed.

In proposing Cynefin, Snowden (2002) distinguishes between the two states of order and unorder. Order exists in two domains, namely, the Known Domain (sometimes called Simple) and the Knowable or Complicated Domain. Unorder also exists in two domains, namely, complexity and chaos. Snowden also characterises context by their visibility. In the two bottom domains, Simple and Chaos, the state of order or unorder is clearly and publicly visible, whereas in those domains on the top, Complicated and Complex, the nature of a situation or problem is not publicly visible and needs to be addressed in different ways. Situations and problems in the top right Domain are complicated but knowable so that problems here can be solved by rational 'scientific' analysis. This is the domain where expertise is recognised and knowledge can be codified. In contrast, situations in the top left complex domain are not completely understood so that the effort is directed towards problem resolution, rather than solution, using approaches consistent with Complexity Theory. Systems in the Complex Domain are inherently non-linear. To allow new patterns of practice to emerge, attractors and boundaries are needed to replace command and control and self-direction to replace imposed rules and regulations.

How and where it is used

Many of the big challenges of the current digital age come from 'wicked problems' (Rittel & Webber 1975). Such problems are ill-defined, with shifting definitions and multiple elements whose conflicting objectives make them impossible to solve. Concepts from Complexity Theory (Mitleton-Kelly 2005) and ideas of complex adaptive systems (Holland 1994; Anderson et al. 1988) help us appreciate and deal with wicked problems. Not all situations and problems that people commonly refer to as 'complex' really are in the sense that we describe here. However, distinguishing the truly complex from the merely complicated enables us to more effectively plan our way forward and appropriately address problems. Running a large bureaucratic organisation is complicated but most of its operations are more efficient and effective when an ordered approach is taken. In contrast, the recent case of a small innovative ICT company taken over by a major telecommunications company reveals a different aspect in relation to'imposed order. Once the telco corporatised and indoctrinated the smaller company's personnel and practice into its bureaucratic culture, their innovation and creativity disappeared. We suggest that if the telco wanted to support the innovation and creativity they thought that they had acquired, they should have allowed the group flexible and self-directed arrangements more suited to unorder and complexity. Cynefin provides a framework within which to do this.

Its novelty, contribution and significance

While there remains a desire for stability, predictability and order, organisations now also need the flexibility, adaptability and innovative culture to prepare for uncertain and unpredictably futures. We suggest that most organisational studies deal with *complicated* systems, and in practice, most managers prefer to ignore *complexity*. There is abundant evidence that many things are now much more *complex* than they once were. We are globally interconnected and can be contacted anywhere any time making our lives systems of interconnected *complex adaptive systems*. Cynefin provides a mechanism to help us to interpret, understand and cope with this.

Examples of the use of the Cynefin Framework can be seen in other chapters of this book.

References and links

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Dave Snowden http://www.youtube.com/watch?v=N7oz366X0-8

Shawn Callahan http://www.youtube.com/watch?v=5mqNcs8mp74

Helen and Alanah http://ro.uow.edu.au/commpapers/959/