CAPITALISE ON COMPLEXITY THINKING

09 March 2012

Capitalise on complexity principles

1. Recognise that elements in a CCES co-evolve. Actions you've taken may change your landscape. Other CCESs making changes will also have an impact. It might be wise to check your data regularly. Also, recognise that a similar action at another time might have completely different outcomes. This is because initial conditions will have shifted, perhaps subtly.

2. Encourage experimentation with incremental change ('next adjacent') – such that no change initiative ever threatens survival of the organisation. If this is happening on a wide-spread basis and often, you'll soon be enjoying rapid but relatively safe changes and innovations.

Biological organisms, such as bacteria, mutate often. However, "the rate of mutation is well below the error-catastrophe" (or system wipe-out).

3. Instead of pursuing a single optimal solution, look for a range of possibilities. This diversity of possibilities is likely to make your change initiative more robust. It will also expand the range of 'next adjacent' possibilities. Remember great ideas, only two steps away, are currently not on your horizon. Don't fret! Keep taking incremental steps and remain alert to emergent opportunities.

To be expected?

Reflect for a moment on the following information about a training organisation. It has a $50m annual turn-over. Delving a little deeper, you find that it has no formal organisational chart, but 200 employs people. It's not just that there isn't one. Senior management actually abolished it. A "false construct", Chief Executive (CE), Peter Fryer, suggests. According to Fryer, "everyone (can) talk to anyone, and should". Forms of organisational charts are around, as individual's own views of their organisation.

Already sensing that management controls might be a little loose, you're not at all surprised to learn that the organisation has "removed all reference to hours". People simply come and go as they please. You find they do what they want, when they want. Hold on a minute! This is starting to look very much as if management has lost control.

What you find next seems to confirm this developing impression. The boss admits they've swapped well defined rules for "fuzzy policies". They've also scrapped specific procedures. The last straw, managers don't check that people do their work.

Finally, it all makes sense. Humberside Training and Enterprise Council (HTEC) is a government-sponsored organisation in the UK. And, it's also missing plans, budgets, job descriptions, targets and objectives!

The really big surprise!

Any organisation showing those characteristics must be in dire straits, right? But, as Professor Eve Mitleton-Kelly, Director of the London School of Economics Complexity Research Programme, shows, HTEC is a high performing organisation.

In fact, HTEC is the most cost effective of the 72 TECs around the UK. It also makes bigger surpluses and spends more back into the community. It pays better than average, achieves low unit costs and is the only TEC with a clear strategy – focusing on outcomes rather than inputs.

Abandoning ration-linear for complexity

Rather than being a dud, HTEC is an ace. HTEC people avoid becoming bogged down by the common rational linear approach of focusing on inputs to predict outputs. Instead, they intentionally adopt modern complexity system principles to deliver desired outcomes.

Fryer outlines five key principles. First, he recognises that all organisations are Complex Adaptive Systems. Mitleton-Kelly usefully suggests they are, in fact, Complex Co-Evolving Systems (CCES). Essentially, they not only adapt to changes in their context, but exert influence on and affect that context. Processes are thus reciprocal and co-evolutionary, not just unilateral in nature.

Second, far higher value is placed on questions than on answers. Key improvements are made because people ask very different questions from normal, and many of them. This is very different from the norm.

Their third principle is to view the organisation as an entity in itself, expecting the whole to deliver more than the sum of its parts. As a committed learning organisation, people frequently asked, "What is in the best interests of the organisation?"

HTEC also recognises that it is a CCES within a much larger CCES – its local environment. To survive and thrive, HTEC is constantly alert to changes in its environment. A nimble response is possible by dispersing authority to wherever (whoever) needed to facilitate quick change.

Finally, HTEC people are seen as having a "valuable and unique contribution to make". All HTEC people, it is felt, want to do a good job. If this isn't happening, then the organisation is obstructing.

Key complexity principles in action

Mitleton-Kelly suggests that key components of complexity theory are at work. We'll look at a select few. First, because the HTEC system can create 'new order', it is a complex rather complicated system. Connectivity and interdependence is vital. Decisions or actions by one have the capacity to affect others. However, not all components in a CCES have "equal or uniform impact".

Vitally, HTEC is subject to the impact of emergence. Structures, patterns, qualities and properties emerge from individual interactions. Often these are unpredictable. The variability in weather patterns is a great example of emergence and unpredictability.

Innovation and change follow the 'next adjacent' principle. Instead of seeking revolutionary change, HTEC looks for the 'adjacent possible'. This ensures steady progress but reduces the risk of system failure. Done quickly and often enough, the organisation changes rapidly and always from a known starting position to one not too far off.

Finally, they explore 'the space-of-possibilities', favouring variety by seeking multiple options. This rather than a single, linear, 'optimum solution', which becomes sub-optimal as soon as CCES conditions change!

Are you locked in the past or looking to the future?

Rational-linear approaches don't adequately explain the performance of CCESs. Yet, they still predominate. Which approach do you use most often in your organisation that is undoubtedly a CCES?