

As nature intended: the ecology of complex change

Annika Ratcliffe introduces the topic of the next TJ Round Table

“The best way to predict the future is to create it.”
Management guru Peter Drucker’s quotation suggests one approach to complex organisational change but it begs some difficult questions: creating the future sounds as problematic as changing the present.

A lot of change theory is just that: theory. A lot of “practical” advice seems impractical.

Business ecology is a recent approach to the area, based on the well-established theory of management ecology. It’s being pioneered by Human Insight, a research-driven company founded by Dr Peter Robertson. Business ecology is based on the insight that companies are living systems. Drawing on evolutionary studies, systems and chaos theory and cybernetics, business ecology suggests organisations develop like any natural system. As George Land, an American thinker in the area, states: “All systems in nature follow identical patterns

of growth and change.”

The theory gives particularly rich insights into organisational and human changeability. Fundamental to this approach is a deceptively simple shape.

The S curve

The S curve describes the growth, change and ultimate collapse of natural systems. Its applications seem endless: from population growth and decline to share performance and the growth of bacteria in a Petri dish. Silicon Valley has used the curve for years in forecasting new product take-up, among other things. There are a number of computer programmes available that turn detailed data into S curves.

Business ecology states that change emerges whether you like it or not. Populations establish themselves, grow to an optimum level and die off: products are launched and sales grow, but at a certain point they reach saturation point and are replaced. In organisational terms, managers can affect each stage of an S curve but not the fact that change will happen

and will follow this shape.

This sounds pessimistic but is quite the opposite. The S curve provides a predictable core in a seemingly chaotic situation. As Human Insight has found, most managers know intuitively where their organisations sit on the S curve. Once that knowledge is made explicit they can create the conditions for natural growth. They have an aim that is ultimately to jump on to the next S curve.

Using the four-stage S curve model below, we can show how the process works. →



Figure 1: A generic four-stage S curve analysis

The four organisational stages of the S curve change

Invention: This is the start of an organisation or a phase in its life. At this stage it needs creative, imaginative people. Formal controls are light. There's not much of a track record to draw on. Organisational structures and job roles are invented as necessary. It's chaotic, personalised and often fun. Recruitment is opportunistic. Progress is "jerky": big successes and fallow periods may alternate.

Growth: If all goes well, sales grow ahead of industry norms or the service meets acceptance by more people. Patterns emerge in areas such as: which clients make the best prospects; the best marketing messages; the successful and failed lines. Internal systems begin to develop.

Consolidation: The mature company, highly structured, with specialist jobs, a culture and a past track record that is used as the basis for future planning. Costs are controlled and sales maximised to generate best possible profits. Staff take on defined, specialist roles for which they have qualifications. The organisation may become conservative and risk averse.

Completion: At a certain point sales level off. More effort is needed to get any growth so return on investment plummets. The past is still the guide to the future but tried and tested methods fail: managers find this hard to believe. Seeing the company's success, new entrants flood into the market with low-cost competition or replacements. In not-for-profit organisations, external conditions, attitudes and needs change. After a while the organisation dies or, in the case of not-for-profits, finds itself increasingly irrelevant.

This is a fairly classic account of organisational failure but organisations don't necessarily fail. So is the S curve wrong?

Managers can affect each stage of an S curve but not the fact that change will happen and will follow this shape

This is a misunderstanding. Of course an individual project – for instance, to develop a new piece of technology or to reorganise a department – will start slowly, pick up pace and complete. A project finishes. An organisation can also die if it's viewed in this way. However, if it's seen as a process, an organisation can reinvent itself. Once leaders understand where they are on the S curve, they can prepare to jump to the next one. In fact, that's what successful organisations do.

To achieve this, the consolidation and completion stages involve more than is implied in the box on the previous page. At precisely their moment of greatest success, organisations should be preparing for change. They should "harvest" their core activities but should also invest in people who can create the next stage of their business. Thus COMPLETION becomes the point where the organisation jumps on to another S curve (see below).

Organisational change involves all business areas, but many managers agree that people issues are the most intractable. Changing mindsets; explaining new strategies; getting people to think in new ways are the

key to successful transformation, but they are the tasks that call for most effort and cause most heartbreak. It's precisely in the area of people organisation, management and development that business ecology makes its most practical contribution. To look at some key topics:

Diversity

There's a growing understanding that you need different sorts of people in an organisation. This drives legislation on gender, age, religious belief, sexual preference and ethnicity for instance. But diversity deals with a far wider issue: individuals possess very different thinking styles, skills, values, personalities and preferences. Diversity is about leveraging these differences.

Business ecology's origins in evolutionary theory enables it to make a particularly telling point. Some differences are hard-wired into people, and are difficult, if not impossible, to alter. Three of these drives specifically affect how well people will respond to change and insecurity. At Human Insight we've developed an instrument called the AEM Cube to measure these drives.

Attachment

This is the most fundamental drive in human beings: the need to have a secure attachment. Individuals either tend towards an attachment to people or to content. The former are more able to contribute to change when they have close bonds with the people who are most important to them. Matter-attached



Figure 2: How businesses can successfully jump from one S curve to the next

people contribute to change when they feel a strong emotional bond with the content of their task, the activity itself, and their technical competence. Having the right “secure attachment” means individuals will accept change; “insecure attachment” means they will use their energy to find security.

Exploration

People are either naturally explorative- or stability-orientated. Exploratory people will gather information from their environment and use it to help create the future without knowing whether the outcome will be positive or negative. Stability-orientated people make ideas concrete and then implement them using feedback that informs them how well things are going.

Complex maturity

Complex maturity is how well an individual has been able to assimilate life experiences and develop the capability to tackle complex, unsafe or unpredictable circumstances.

Measure how key people are positioned on these drives and you have a picture of where on the S curve they'll make their most important contribution – in nurturing a core activity or envisioning the start of the next S curve. Because these change-related characteristics are hard-wired, organisations can avoid wasting time and effort trying to change them. Instead, leaders can marshal human resources to meet the challenges posed by their position on the S curve.

Planning for change

Feedback is the basis for how living systems keep in balance. Information on the past is used to keep processes efficient. Feedback is a key management tool but business ecology, drawing on cybernetics, introduces a different sort of information gathering process. Feedforward is based on our ability to imagine the future and work towards it – something, arguably, that only human beings can do.



Feedforward is about reaching a goal. This ability is sometimes referred to as “vision” or “creativity”.

Too much feedback and you fall into bureaucracy. The reasons organisations fail to notice strong warning signs is that feedback continually reinforces itself. If something has always worked or the market has always been a certain way, people simply ignore contradictory information.

Too much feedforward and you have creative anarchy. The dot-com boom is an example of that; examples of the former are everywhere as the pace of change has accelerated over the last 40 years.

Business ecology suggests you need both sorts of information all the time. But at different stages you'll need to emphasise one rather than the other – and most particularly you'll need to ensure that one doesn't crowd out the other.

Leadership

In this model, good leadership involves creating continuity when change really bites. Human Insight emphasises the key concept of consistency; our definition is: “The

extent to which people perceive that there is a consistent set of values and management behaviours that create a foundation of trust, from which the challenges of a changing world can be tackled with confidence in a mutually supportive environment.”

This turns some thinking on its head. Leaders are often called to be change agents and they must marshal forces to set change going. But they also have a key role in ensuring there are certain unchanging elements in an organisation. Ultimately this leads back to the importance of genuine values. Values are not side issues but central to a successful, changing organisation. How leaders communicate them creates an environment within which people can feel comfortable and contribute most.

Paradoxically, change is only possible within an environment in which there is some consistency and where people develop secure attachments. That's what consistent management behaviour, values, ethics, missions and visions provide.

Summary

We need to remember that change is not a special project but a fact of nature.

You need people who create and welcome change *and* those who are averse to it, but they need to be in the right roles. Change leadership is about providing the right conditions within which change occurs naturally; consistency upholds the organisation's “personality” and helps staff develop secure attachments so they won't resist change. Finally, you must prepare for change as soon as you're successful for while the past helps you plan a mature business, it will blind you to warning signs of failure. ■

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