

## INTEGRATING KNOWLEDGE INTO THE LIVING ORGANISATION

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We have sorted out our databases, we have instituted customer-facing processes, we have integrated our supply chain and we have introduced the concept of knowledge management. But we still estimate that there is massive under-utilisation of the talent and knowledge of our people. Achieving the competitive gains we need is still elusive. What are some of the steps we have still to make to become a smart organisation?

The case I want to make in these articles is that there are three basic gaps between the systems and processes we set up and the core way that human intelligence operates. If we can see these gaps more clearly then we have a starting point for a new wave of competitive improvement.

The first gap is between knowledge management and the organisation as *a living human organism*.

The second gap is between knowledge management and the *working team*, whether collocated or virtual.

The third gap is between knowledge management systems and *individuals*.

In this article I will tackle the first gap.

### **The human use of human knowledge.**

With the development of sophisticated software, more and more of what people do is being taken over by, effectively, robots. These are often embedded, not the humanoid variety of science fiction. Nevertheless, they play a role of displacing the need for human beings. Yet there are other areas of business process – customer relations, innovation, high discretion decisions that need the presence of unique intelligence and real personality. This very human capability operates in the twilight zone between creativity and codified knowledge.

For example, in the oil industry the advances in modelling what is under the earth has reached a sophistication that borders on science fiction – the ability to go on virtual journeys underground and “see” what is there. However, the closer a big investment decision gets to the deadline, the more the judgement moves over to human experience and intuition. Important bets are placed by people, not by technical robotic systems.

People form communities that become the operational units of what we call the formal organisation. Behind any organisation chart is the living system of what people do. This would be labouring a very obvious point were it not for the fact that, in our technological society, we so frequently overlook the human factors.

The organisation gap is that we design our organisations on mechanical and robotic principles and try to shoehorn the people into that mould. Then we wonder why we have the performance gap. Can we design our organisations as living systems that can accommodate and utilise at higher performance levels the robotic systems? I believe

we can, if we change the design principles. Once we change our principles of aerodynamics we could design heavier than air machines to fly.

### **The New Organisational Design Principles**

Actually, they are not new. They have been around for around fifty years but have not been assimilated into the mainstream. Just as technology, such as the facsimile was invented in 1842 by Alexander Bain and took until the latter part of the twentieth century to be incorporated into everyday use, so social inventions have a long period for take up. The good news, then, is that we are not starting from scratch.

The principles we need from modern understanding of systems are:

- Requisite variety
- Structure determines behaviour
- Viability has a generic structure
- As above, so below (recursion)

<i>Principle Explained</i>	<i>Practical Consequences</i>
<i>Requisite variety</i> tells us that we need the same complexity in our control systems as we do in the situation to be controlled. Complexity is growing exponentially in our business environment.	We need human beings to control the development of valuable knowledge, not the robots. Only a collaboration of brains can match the complexity of interpretative knowledge
<i>Structure determines behaviour</i> tells us that we cannot change the performance of our organisations without understanding and changing the deep structure behind the ways things work.	We need to design our organisations based on systems that have feedback, can adapt to unknown emergent situations and can sustain flexible pathways towards a goal.
<i>Viability has a generic structure</i> tells us that we must understand the irreducible features of a living nervous system and recognise the parallels in the life of organisations.	We need to incorporate into our organisational design the know-how enshrined in a viable systems model that is based on understanding of living systems.
<i>As above, so below</i> tells that we need to realise that viability has as much to do with a viable context (or environment) and viable components as it has to do with the organisation is question.	We need to link our knowledge management not only to the organisation but the communities of practice in which knowledge grows and the personal development that enables human beings to generate it.

### **Getting to Grips with the Viable System**

Let's see how the generation and distribution of knowledge would operate in an organisation based on the viable systems model. First, we must describe in outline the viable system. It will help if you picture that this description is about the physiology of an organisation, not its anatomy. Viability is essentially a structured process. The forms it can take are be many and varied and addpated to diverse habitas and diverse roles within habitats. By analogy, we can determine the key characteristis of

mammals eg reproduction, rearing young, internal temperature regulation and so on. However, there are many distinct forms of this system - bears, cats, mice .

The viable system has five key components, such that if one of them is removed or badly connected to the rest, “death” will surely follow. We need to learn a simple new language here: we simply call the five components Systems 1 through 5. These need to be individually characterised before we go on to the critical investigation of how this can change the way we approach practical knowledge

### **System 5 – Identity and Purpose**

A living organisation has a unique identity related to its primary purpose, its values, its sense of self and its membership. System 5 from one perspective is the community of members that perpetuate the organisation. It is usually a network across several stakeholders. From another perspective this role is embodied in a "top office", a CEO or President. Both, in practice operate together. Chief Executives can only play this role if they have the mandate. It and they can be removed. Equally, incoherence in the organisation usually leads to failure or absorption.

### **System 4 – Alignment and Strategy**

Any organisation lives in a wider environment of space and time, a habitat. System 4 is the function of looking outside and into the future. Looking outside implies scanning the environment, interpreting the signals through uncertainties (scenario thinking); devising options for submission to systems 5 and 3 and sustaining the integrity of the internal models of the community as an organism. It is the system that helps alert to the need to adapt to anticipated change in conditions. System 4 also is the custodian of how things work around here, for example what the business model is.

### **System 3 – Direction and Regulation**

The role of System 3 is to sustain and enable implementation of a strategic set of actions that makes practical progress in fulfilling the purpose in a given time period (the next quarter, the next year). The focus of this system is more on the now, current decisions, and inside the community System 3 manages the portfolio of action programmes. In terms of direction and primary resources, System 5 has a command and control relationship to System 3. System 5 audits System 3. If the CEO role is centred in System 5 then the COO is centred in System 3.

### **System 1 – Operation and Action**

System 1 is where action is carried out, the purpose is delivered, the values are expressed and the vision realised. It is the set of operational units that has the capability of acting on behalf of the organisation and conducts its day to day businesses. In any large organisation there are many Systems 1 and these should operate under the strategic guidance of System 3.

### **System 2 – Balance and Facilitation**

Action in an environment always encounters the unexpected and the unplanned. This may appear as problems or opportunities that call for on-the-spot decision and action. Deviation from System 3 directions and expectations is inevitable. The directive decision link between System 3 and Systems 1 is

often unable to resolve the deviations by the very nature of its relationship. System 2 is a kind of “thermostat”, which operates through a facilitative role. Off-line, the experiences and perspectives of System 1s are facilitated through feedback and dialogue into new understandings which then help System 3 see more clearly what is going on and what needs deciding to keep things on track.

An organism can only exist through the living cells from which it is constituted; a herd of cattle can only survive if the animal members of it are themselves viable; an ecological habitat can only survive if each component of its web of life is alive. This is the principle of recursion or “as above, so below”. Any viable system is itself composed of viable systems. For example, individuals are members of project teams; project teams are components of enterprises; groups of enterprises form companies; companies link up to form partnerships; companies and competitors together form a business ecology.

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