

# Applying Complexity Theory to Performance Appraisal

Frances Storr, Sheppard Moscow

## 1. Introduction

There is a growing interest in complexity theories as a lens through which to view businesses and organisations. At the same time people often struggle with what the practical application is and how this field of theory actually helps them in a business. This paper is a practical example of how complexity has been applied to a process used by most organisations, namely performance appraisal. In this paper I will: summarise some of the key concepts in complexity theories, outline the dominant ideas and practice in the field of performance appraisal; describe an alternative approach to performance appraisal, now being applied in a number of organisations, which is based on complexity and describe what the impact of this approach has been.

## 2. Key concepts in complexity

The diverse work in the study of complex evolving systems is crystallizing a number of characteristics or principles of complex evolving systems. There are various summaries of these and the one I will use here is Eve Mitleton-Kelly's ten generic principles of complex evolving systems (Mittleton-Kelly 2003 in press). These highlight some of the key concepts which influenced the development of the face to face 360 degree feedback process described in this paper.

1 Connectivity and Interdependence. Complex behaviours arises from the inter-relationship, interaction and interconnectivity of elements within a system and between a system and its environment. In a human system this means that the behaviour of one individual may affect other individuals and the system and in turn the contribution of a person in a particular context depends partly on the other individuals within that group.

2 Co-evolution in biological terms means that adaptation by one organism alters the fitness and the fitness landscapes of other organisms. In human systems, co-evolution places emphasis on the relationships between the co-evolving entities. Through a complexity lens, it does not make sense to look at the evolution or performance of one individual in isolation.

3&4 Far from equilibrium and Exploration of the possibility space. Nicolis and Prigogine (1989) showed that when a physical or chemical system is pushed away from equilibrium it survives and thrives, while if it remains at equilibrium it dies. The reason is that when far from equilibrium, systems are forced to explore their space of possibilities and this exploration helps them to create new patterns of relationships and different structures. In social systems this is how learning and innovation occur.

5 History. In a social context, the series of decisions which an individual makes from a number of alternatives partly determine the subsequent path of the individual. Before a decision is made there are a number of alternatives. After the decision is made it becomes part of history and influences the subsequent options open to the individual.

6 Feedback. Feedback is the systems way of staying constantly tuned to its environment and landscape and enables the system to readjust its behaviour. In far from equilibrium conditions change is non linear so small changes can be amplified and produce exponential change.

7 Path dependence and Increasing returns. Brian Arthur argues that although conventional economic theory is based on the assumption of diminishing returns in some instances positive feedback loops magnify a shift and lead to increasing returns. A boom and bust economy is a classical example of this.

8, 9 & 10 Self organisation, Emergence and the Creation of new order. Emergent properties arise from the interaction of the elements in the system and the patterns and new order created could not have been predicted by looking at the behaviour of the individual agents. One cannot understand the whole by breaking it down into its component parts.

When we contrast these with current thinking about performance appraisal in organisations we can see that they are based on completely different assumptions.

### **3. The research agenda in appraisal**

Performance appraisal is a term that was once associated with a rather basic process of a manager completing an annual report on a subordinate's performance. In the early days this would involve giving ratings on a number of scales which focussed on attitude and even personality. Progress shifted the focus towards behaviour and performance in relation to goals and competencies. Nowadays the term appraisal has evolved into a general heading for a variety of activities including a system for managing organisational performance, a system for managing the performance of the individual and a system for integrating the two (Williams 1998). Much of the research around appraisal has been centred the use of ratings in appraisal and how to make them more objective and accurate in reflecting performance and it would be difficult to conclude that this has led to any significant improvements in appraisal practise (Fletcher 2001). The last decade has seen research move away from psychometric concerns towards a recognition of social and motivational aspects of appraisal. For example there are numerous studies offering new ways of thinking about structuring job performance including Borman and Motowidlo's (1993) contextual performance. Contextual performance deals with attributes that go beyond task competence and which foster behaviours which enhance the climate and the effectiveness of the organisation. Even given these recent developments in thinking the underlying assumption in the appraisal literature is that the job holder is an individual unit to be isolated and measured. The application of a complexity lens to performance appraisal offers a completely different perspective and shifts the eye towards seeing the individual as part of a system of interrelationships.

### **4. Linking complexity to appraisal - The principles**

The starting point for developing this appraisal process was to frame some principles upon which the appraisal would be based and to make explicit our assumptions. These principles and assumptions fall out of the key concepts in complexity described earlier.

The most fundamental assumption is that there is no one objective reality that one can stand outside and measure. Connectivity and interdependence mean that one cannot understand the behaviour of an individual without taking into account their context and web of relationships. The emphasis of this appraisal process is therefore on multi perspectives and 360 degree feedback. In addition this process does not attempt to measure individuals. It focuses instead on the relationships and the interdependencies so the essence of the process is a conversation not a survey.

One of the key principles of this approach to appraisal is that the process is owned by the appraisee. The broad purpose is to: improve performance; learn and grow (in other words to survive and thrive) and within that the individual determines; what the purpose is for them personally, who they want feedback from and what questions to ask.

Ownership by the appraisee is one of the principles which enables appraisal to be a self organising system and it is reinforced in a number of other ways. At a more micro level, the process involves gathering ones appraisers together as a group, looking them in the eye and having a conversation about my performance and my development. The dimensions of appraisal or the questions have not been defined by the organisation. The appraisee with the help of their facilitator will have decided them. The facilitators role is also to allow other themes to emerge which perhaps the appraisers wish to talk about, provided they have a bearing on “improve performance, learn and grow”. Enormous flexibility is built into the process which allows it to flex with the business, self organise and respond to changes in the environment.

The nature of such a group conversation is inherently unpredictable and this is what many people find uncomfortable about the idea of it. The value of pushing appraisal to the edge of chaos is that the participants explore more of the possibility space and order emerges. What has been found is that people not only give feedback they also spontaneously offer support, solve problems and surface broader organisational issues. The interconnectivity frequently stimulates organisational level learning as well as profound individual level learning.

Because the nature of the process involves a conversation about “how can we work better together?” people who are attending for the purpose of giving feedback often find there are development benefits and implications for them too. In other words, co-evolution takes place.

Co-evolution is also built into the process through the evaluation approach. From the outset people are invited back to evaluation conversations (again as a group) to discuss how we can make this process work really well for this organisation. The assumption is that it will co-evolve with other aspects of the organisation and the environment.

## **5. Linking complexity to appraisal - The practice**

The resultant appraisal system is a face to face, paperless (ie there are no forms) 360 degree appraisal which is owned by the appraisee. This is typically experienced by the appraisee in the following way:

1. You attend an introductory workshop. The emphasis is on: the purpose and principles of this process; the assumptions it is based upon; the freedoms you have as appraisees and the responsibilities; equipping you with the support you need to carry it out and answering all of your questions.
2. Choose a facilitator from the list and arrange to meet with them.
3. Meet on a one to one with your facilitator to plan the appraisal. Together you decide what the purpose is for you, who to seek feedback from, what feedback to seek and how to collect it.
4. Collect the feedback. The principle here is “face to face as far as possible” and the process has been found to work most powerfully when individuals have chosen to gather their appraisers in a room together to do this. Others have chosen to see their appraisers on a one to one basis or to do a combination of the two.
5. Pulling together and reflecting on the feedback with the help of your facilitator
6. Contribute to an evaluation discussion to continually co-evolve the process

From the point of view of the business there is a need to be very clear in the first instance about the purpose of the appraisal process and to define how it fits with the organisations purpose, strategy and culture. From there one can outline what the design principles will be and how it fits with the organisations other processes. Two key processes to manage are the evaluation and the development of a skilled facilitator resource which is highly significant in enabling the process to work effectively.

## **6. The impact it has**

This process has now been implemented in 7 organisations which vary in size and sector. The most complete evaluation was carried out in Humberside Training and Enterprise Council where this process was “born”. The headline findings there, which are being reinforced in the other organisations although they are at an earlier stage, are:

- People are unanimous in seeing this process as more valid than other appraisals they have experienced. It feels real and meaningful, not a paper exercise
- Working more effectively as a result. There were numerous examples of improved performance and of people taking on tasks they would not have done previously.
- The group format frequently produces a deeper level of feedback eg about patterns of behaviour and relationships
- Increased insight into the effect that they have on other people and working differently with people as a result.
- Improved team working and enhanced working relationships
- Increasing the level of openness, honesty and transparency within the organisation.
- Discussing the undiscussable. “I have dealt with an issue that I have worried about for at least 5 years if not more”.

## **7. Conclusions**

A central idea of complexity theories is that behaviour is produced by the interconnections and interdependencies of the agents in a system. The dominant

practice in performance appraisal is to focus on and attempt to “measure” the individual in isolation. Basing an appraisal process on complexity thinking acknowledges the reality of behaviour as dynamic and contextual and redefines the nature of performance appraisal in organisations.

360 degree appraisal is common practise nowadays but many organisations have been disappointed by what it has achieved for them and the level of bureaucracy involved. This perhaps partly explains the growing interest in this approach over the last 1 – 2 years.

The businesses in which this approach is being introduced do not all have open supportive cultures which one would consider ideal for this process. What stimulated the introduction in most cases was a need for organisational truth telling. It has been important in each case to define what the purpose is for this organisation and then create a climate which makes it safe enough for people to say what they have to say. The process helps to create a more open and honest culture.

## **References**

Borman, W. C. & Motowidlo, S. J. (1993) Expanding the criterion domain to include elements of contextual performance. In N. Schmidt, W.C. Borma & Associates (eds), Personnel selection in organisations. San Francisco, CA Josey Bass.

Fletcher, Clive (2001) Performance appraisal and management: the developing research agenda. Journal of occupational and organisational psychology, 2001, 74 473-487.

Mitleton-Kelly, Eve Ten principles of complexity and enabling infrastructures. To be published by Elsevier in spring 2003 in “Complex systems and evolutionary perspectives of organisations: the application of complexity theory to organisaiotns”

Nicolis G and Prigogine I (1989) Exploring complexity W H Freeman

Williams, R (1998) Performance Management. London: International Thomson Business Press (Essential Business Psychology Series)