The Dynamics of Self-renewal
Systems thinking to understanding organizational challenges in dynamic environments

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The challenge of the future companies

- **Innovativeness of the organization**
  - **Self-organization**

- **The genuine core identity of the company**
  - **Autopoiesis (self-reference)**

    -> SELF-RENEWAL CAPABILITY

Self-organization by Prigogine

In certain circumstances and under certain conditions, systems are capable of organizing themselves, i.e. producing completely new physical, social and mental structures that are not just an incremental step forward, but an innovation-like shift.

Examples of self-organization

– **Operation of markets: An economic system is created out of the countless decisions that are constantly made by people, consciously and unconsciously, to purchase and to sell**

– **Human biology**

– **The movement of flocks of birds**

– **Genes organize themselves in a certain way as they form a liver cell and in another way to form a muscle cell.**

– **A modern example of self-organization is provided by the Internet.**

Collective intelligence

- **Collective intelligence may be created particularly in situations where people are working with highly complex information and knowledge for extended periods of time.**

  – **A team that works closely together for long periods, such as an elite anti-terrorist police group, a football team or an emergency room team may develop a *collective mind* (Weick & Roberts, 1993).**
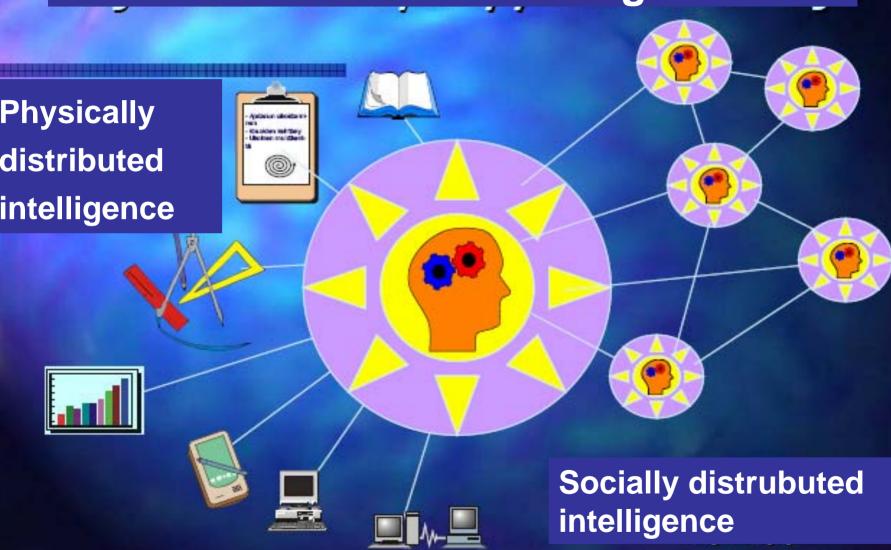
Hybrid expertise

Intensive interaction makes it possible to transcend the boundaries of the individual's skills and competencies and to form a socio-cultural system with *hybrid expertise* that cuts across those boundaries (Howells, 1997; Spinardi, 1998).

Transactive memory and distributed intelligence

- **Social collectivities spontaneously produce an accurate understanding of the distribution of knowledge and know-how within an organization, which refers to *transactive memory* (Wegner, 1986; Moreland 1999).**

- **It has also been suggested that the current era of information networks is changing our conceptions of how human intelligence works.**

- **This calls for a new understanding of humans as networking cultural creatures whose *intelligence in socially and physically divided* (Salomon, 1993).**
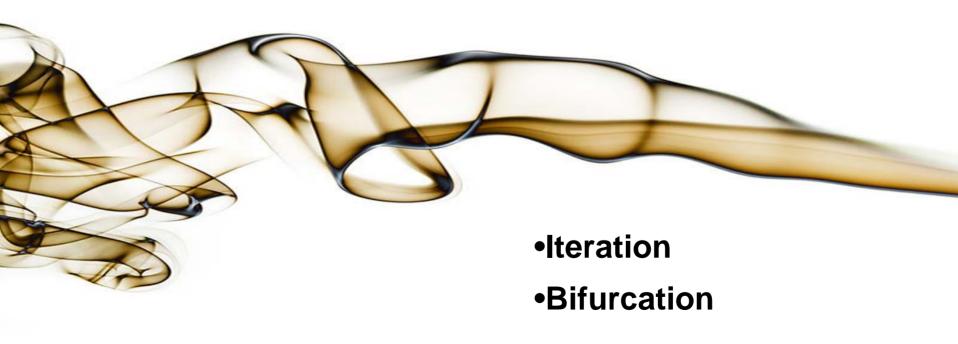
Forms of Distributed intelligence

Physically distributed intelligence

Socially distrubuted intelligence

The antecedants of self-organization

- **Far from equilibrium**
- **Entropy**

•Iteration

•Bifurcation

The next generation of intelligent organizations

The secret of innovative development and by the same token of organizational competitiveness lies in whether or not <u>companies can learn to make good use of the capacity of self-organization</u>, or whether that potential is constrained by excessive control.

As Prigogine points out, in some circumstances chaos produces nothing but confusion; in others it may produce radical innovations.

Search for the core identity: Autopoietic systems by Maturana and Varela

Autopoiesis refers to "the process of self-production and self-renewal in living systems".

The focus on living systems as self-copying, self-reproducing organizations.

The authentic self

The theory of autopoiesis emphasizes *being as something*. Being, however, is not seen as a static condition, but above all as a process in which the system continuously produces and reproduces itself. The aim of autopoietic organization, then, is the system itself and its existence – not "doing" or "representing".

BRANDS AND IDENTITIES

Attraction of authenticity

- **In today's high-paced and insecure competitive environment, business organizations must constantly work to identify and define their own competitive assets. Much attention has been paid to products and services, but there is also a growing recognition that the <u>creation of attraction</u>, an image or brand is in fact often more important that the development of a specific product.**

- **People are intrigued by the aura and identity of a business, and their decisions are largely driven by their <u>desire of identification</u>. Persona or identity, the system's fundamental essence is reflected in interaction.**

- **It is not enough that the company declares its mission and its values verbally or in writing, but <u>the core of the system lies in its genuine action</u>. The more strongly that core is transmitted to others, the greater its appeal and attraction – both from internal and external perspective.**

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