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# How to manage the development of complex organizations ... and beyond

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### Abstract

The article starts with a synthesis of traditional Theory of organization.

This vision of the organization is inspired by the classical view of world, and we use to summarized this theory the "metaphor of the machine". As gears of a machine, people are treated as systems of skills, which can be analyzed and used to achieve organizational goals. This vision is too primitive due to the fact that it is impossible to design procedures that prescribe all behaviors and measure in an absolute manner the ability of each person. People have an undeniable autonomy that make them create a so called informal organization which autonomously evolves.

"To Manage" does not mean to make an organization function. Instead it means to manage the evolution process it-self. We have developed a methodology to govern the self-evolution processes of informal organizations. We present a specific case history in one of the major Italian metallurgical companies, to increase the level of safety and improve management of the human factors.

#### Key words

Directive command and control management style, Informal Organization, informal dimension, self-evolving social networks, profound existentiality, traditional approach- new approach, "A Safety-Building Community", Cognitive Defreezing, Socially built of behaviors, Sorgente Aperta.

The traditional Theory of Organization is inspired by the Classic Vision of the world.

The starting point of the article is synthesis of traditional Theory of organization. According to this theory, organization is a system made up of two parts:

- a **physical part** (physical spaces and technological systems)
- a formal part (operational procedures that prescribe certain rules of guide behavior).



To synthetize this vision, we use the **metaphor of the machine**. A machine is Indeed made up of parts that have properties equally well-defined, distinct, independent to and from the other and from the context.

Inside the machine white and blue collars with their skills are allocated. The characteristics of the machine must be orientated to the execution of the strategy. It's possible to create an optimal design for the organizational machine.

This vision of the organization is inspired by the classical view of world. To manage an organization as it were a machine (in which all operational activities are calculated for the best functioning of the machine) it is necessary to use a directive command and control management style.

The direct command and control style is realized by the following activities:

- analysis of the organization
- programming (methods, times of operations and results)
- communication (expressing the tasks to be performed to function properly)
- control

.... People are not gears

No one explicitly declares to consider people as "pistons". In spite of that, the traditional vision of organization attempts to describe people as "objects".

For example, people are treated as systems of skills, which can be analyzed and used to achieve organizational goals.

Unfortunately this vision does not work.

First of all, skills are not objectively definable. That means that it is not possible to measure them.

Then, people are not just skills, they have, for examples, also emotions.

Last but not least, people generate what we call the Informal Organization.

Using metaphoric language, people and organization are like clouds- they can be stormy, and behave mysteriously. Their behavior can produce thunder and lightning that destroys all preconceived models of an organization.

Coming back to a more "scientific language", to be able to manage organizations today, first of all it is necessary to understand the informal dimension of an organization.

A simple, but useful, general model for it is the following.

The informal organization is composed of 4 informal dimension:

- rational dimension
- emotional dimension
- social dimension and the system of relationship
- anthropological dimension

In other words people, on one hand, apply their its own interpretation to the roles they are asked to perform. On the other hand, people create. Self-evolving social networks (groups of people, systems of relationships) from which behaviors emerge.

Absolutely it is impossible to design procedures that prescribe all behaviors.

People have inevitably many areas of freedom that can and should be "filled" with responsibility for self-defined behaviors.

## The process of self-evolution

Behaviors is note dictated by rational decisions that have the maximization of their own economic self-interest as their objective.

They are inspired by their "profound existentiality". They take into account the context. We do not use the verb "to depend" because the interactions are casual: there are no laws that define such a relationship and it is not hetero determined.

In synthesis informal organization is characterized by a self-evolution process. We need to describe this process and, in order to this, we need to use main results from natural and human sciences of the 'last century.

The processes of the self-development of informal organization is not managed. Therefore the self-evolution generates organizations which are highly self-referential.

### Manage the process of self- evolution

Due to the existence of a management self evolution process, the managerial challenge changes completely.

"To Manage" does not mean to make an organization function. Instead it means to manage the evolution process its-self.

Stated differently, we need a new governance system of informal organization, that is completely different from command and control management

To describe this difference would require a specific paper therefore here I'm going to describe just two a main issues:

### • The measurement process change the informal organization

This means that, even if we could put in place the necessary resources to collect a complete analysis, we would not get usable results. Mean that it is impossible to make an analysis of informal organization because the analysis process is disturbed by the analysis process itself.

# • The difference between the resources used in the new methodology and traditional methodology

The main differences can be summarized in this way:

Resources used in *traditional approach*:

- rules
- procedures
- planning
- decision making
- calculation of risk

Resources used in *new approach*:

- sociological
- psychological
- autonomy
- responsibility
- consensus
- involvement and defreezing

### The methodology: Case Study

We have developed a methodology to govern the self-evolution processes of informal organizations.

We present a specific case history.

This methodology was chosen by the one of the major Italian metallurgical companies , to increase the level of safety and improve management of the human factors.

The methodology guides the organization to activate a process of a self-constructing safetybehaviors. I mean to find the best way to significantly reduce the frequency and severity of on-the-job accidents and to induce commitment to safety. The name of project was **"A Safety-Building Community"** 

The process was divided into three main phases:

- setting the safety-building community.
- How to make a community emerge
- Never ending story

### **1.** First main phase: *setting the safety-building community.*

It's necessary to state the starting point. This phase is divided in two sub-phases:

**1.1** Choice of organizational issue: the paradigm of management of change forces us to specify the type of change that you want to achieve. Considering that we are working in the informal dimension, where you can not determine behavior rules.

**1.2** Choice of suitable model of *"spaces of freedom"*. In this case, a simplified model for the informal organization.

### 2. The second main phase: *How to make a community emerge.*

This phase is structured in three sub- phases:

- Cognitive defreezing
- Social constraction of behaviors
- Celebration
- **2.1** Cognitive Defreezing: unlock the cognitive system of participants.

This process does not enable a type of "grafting", despite the incessant training in organizations.

The cognitive system of a person is not a firmware that can be replaced to your liking. You must provide a new collective cognitive resource and community that generates a model of informal organization it self-ant.

The steps are:

- *create groups of operators* that define a model of the project proposal outlining factors to increase positive and negative factors to be deleted;
- *preparation of a document* (the maps) which explicit values attitudes that each group has decided to promote or to delete.

**2.2** The social constraction of behaviors: This aspect is a choice of behaviors to be put in place, which does not consist in total approval, but in the preservation of diversity to use as a resource. In practice the **maps** will produce a **pacts** trough which the people commit themselves to achieve the desirable, useful and necessary behavior.

2.3 **The Celebration:** the above describe process builds a real and unpublished anthropology. Actually people became protagonists of their future. They discover the organizational dimensions that only they can manage. The above describe process eliminates the problem of motivation and people see in implementing

maps and pacts an opportunity of self-realization. It's necessary to widely communicate their commitment trough a so called "Celebration Event".

### 3. The third main phase: Never ending story

This last step is "transfert moment". The previous phases of the process had been managed by consultant. In the same phases squad chief were observers. In third main phase squad chief learned by doing how to substitute consultants. This phase had made up by punctual meetings where time to time blue collars produces artifacts that formalized the intent the process of informal organization development.

### .... Beyond organizations

Our method of informal organization governance can be generalized to promote the process of development Of any type of human system such as strategy development, country development, local communities development etc.

In details, every human system is equipped with an autonomous capacity of evolution. If this is not managed human system will become a self-referential.

That means that the interaction between a human systems and its environment becomes what Maturana and Varela call structural coupling. This interaction allows an exchange of matter and energy but not meaning.

Using "Sorgente Aperta", top managers, local and at country level politicians can avoid the self-referential degeneration of human systems they are supposed to govern. In this way, they become able to grant a continuous development to human systems.