## The DNA of Collaborative Organizations

Until very recently, the large-scale deployment of capabilities within society happened almost exclusively through state or market mechanisms. With the rise of I.T. and the Internet has come a whole new model for delivering capability and value creation. It counteracts some of our most deeply held notions of the rational self-interested individual to present a new model of collaboration and self-organization. Its iconic forerunners are Wikipedia and the Linus foundation, but today, mass collaboration is filtering into all areas of society and economic activity, from car sharing to distributed manufacturing to education and hospitality. It is highly disruptive and increasingly difficult to ignore as it rapidly moves from the fringes into the mainstream.

In this section we are going to try and understand the DNA of these collaborative organizations. So let's start by talking about our traditional bureaucratic model to organization that is the default model that we inherit today. Fundamental to the bureaucratic industrial model to organization is the premise that organizations are composed of rational self-interested individual, otherwise known as homo economicus. Homo economicus is so named because he or she is driven by one simple logic, that is, to maximize their economic utility payoff.

Within this paradigm, we can describe human collaboration within organizations as no more than a rational choice made by individuals in order to achieve greater payoffs that were not possible for them to achieve in isolation.

Given this logic, we can also deduce that homo economicus will be driven to avoid the expenditure of resources required to perform some function within the organization. In other words, he or she will avoid working if possible. Thus, the only way to mitigate this and develop an overall functional organization is to use incentive systems, and importantly to counter-balance the incentives of one individual against those of another in the form of competition.

This framework is held together by the idea that resources are scarce and that it is competition between individuals and organizations that drives productivity, not just external to the organization but also internally. A hierarchy is built within the organization so that the incentives of an individual to avoid work are counter-balanced with the incentives of their direct supervisor to achieve high productivity levels and objectives. Authority is then exercised from the top down so that each level's incentives are balanced with those above it. The net result is the harnessing of the simple linear relations of competition both inside and outside the organization in order to achieve overall productivity.

This is a reductionist, linear model to organizations. Reductionist because it breaks down the organization into its most basic atoms or building blocks, that is, the individual, and reduces the logic that governs their behavior to a single motivator. It is linear because it tries to model the entire organization as the

product of the simple deterministic interactions of competition between these constituent parts. We have been developing this model to organization for centuries with the basic reductionist paradigm first formulated within classical physics, which was later applied to modeling organizations during the industrial revolution and with the expansion of the neoliberal free market ideology. During the latter half of the 20<sup>th</sup> century, it became more explicit, pervasive and greatly refined.

Organizations are a product of the environment they must operate in – either they adapt to it or they become extinct in the long run. Today, organizations have to operate in the much more complex environment of the  $21^{\rm st}$  century, where globalization, information technology, the knowledge economy and the rise of sustainability are working to undermine some of the most basic assumptions to the industrial model and making its limitation increasingly clear.

The industrial model was a response to a particular type of socio-economic environment, one that was centered around the mass production of standardized tangible products, what economist call revival goods. Meaning, if one person owns or consumes a tangible product then another person cannot, resulting in the scarcity that drove the relations of competition that are at the heart of the reductionist model to organizations. The fact that some things were non-rival and that some people we not so self-interested was not important. The industrial age employed a one size fits all model. It was a mass society – what mattered was the average mass of people.

The huge growth in the services, information and knowledge sector that has come to dominate the economic activity of advance economies by the end of the  $20^{th}$  century is fundamentally changing this core dynamic. Knowledge, information and many services are non-rival goods that have the so-called network effect, meaning that, more than one person can consume a service at the same time without anyone owning it, and the more people that consume the service, the better. The telephone is a good example of this. The more people that use the telephone network, the more valuable it is to any one of the users. And whilst none of the users own the network they can all avail of the service without excluding others from using it.

This changes the core dynamic within post-industrial economies from competition over rival goods to cooperation over non-rival services. In many ways, this changes the underlying dynamic within organizations and the economy from a zero-sum game that results in situations of competition to a positive sum-game, where collaborative reciprocity and sharing become much more viable and likely strategies.

Without this basis for the logic of rational self-interest and when people become reconnected through I.T. enabled networks, a much richer set of social and cultural motives start to enter the equation that were previously excluded, such as identity, sense of community and purpose. These begin to return to the forefront of why people do things and how value is created alongside the traditional economic motives.

This reduction in competition as a motivator reduces the need for the formal top down apparatus required to maintain it and allows for greater autonomy for individuals to self-organize through intrinsic motivators. Coupled with this is a shift from a need for industrial age workers performing standardized and routine functions to information and knowledge workers. Work requires greater self-engagement and self-expression in order to deliver the creative and innovative solutions that are increasingly in demand. Lastly, the 21st century environment is one of much greater interconnectivity and interdependence, where many of the challenges we face affect us all equally.

In summary, we can say that the post-industrial information society of the 21st century is spawning a new form of collaborative organization that is highly interconnected through information technology into a more open network structure. It is based more upon the dynamics of collaboration rather than competition. It is driven by a wider set of social, cultural and economic motives that creates a more self-organizing form of collaboration organization.