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ORG PHYSICS - EXPLAINED

How structures work, how they interact, what this means for organizational effectiveness and change

BetaCodex Network Associates

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11

“It is probable that one day we shall begin to draw organization charts as a series of linked groups rather than as a hierarchical structure of individual “reporting” relationships”

*Douglas McGregor,
The Human Side of the Enterprise, 1960*



This paper was previously entitled “The 3 Structures of an Organization”. It was renamed in Feb 2013.

**Ask someone to take a piece of paper, and a pen.
And to draw the structure of his or her organization.**

That person will usually come up with a single design. One that resembles the “org chart” type design shown on the right.

That, to be sure, happens anywhere in the world (we tried it). Those perceived structures actually look surprisingly similar anywhere – depending on industry a bit, of course, and give or take a few details and variations.



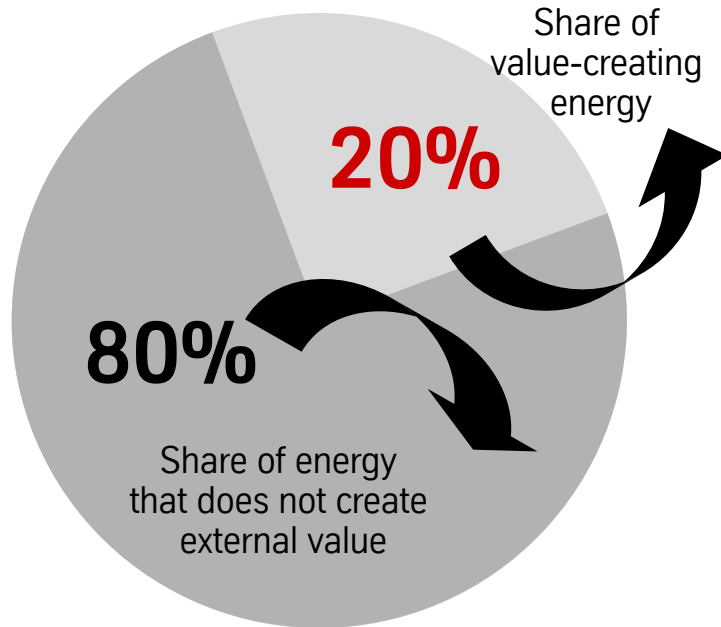
Today's professionals around the world perceive their organizations as a set of “boxes”, populated by “teams” that are each topped by “bosses”, and that are interconnected through “reporting” or “line” relationships. Horizontally, organizations are always divided in a “functional” way, to some degree, but there normally are additional divisional criteria, such as products or divisions, regions, etc.

The trouble with this kind of structure is that it is just an illusion. One that actually hinders success and results, work flow, and the well-being of the people in it. It represents a hopelessly limiting line of thinking about organizations and about what they should be.

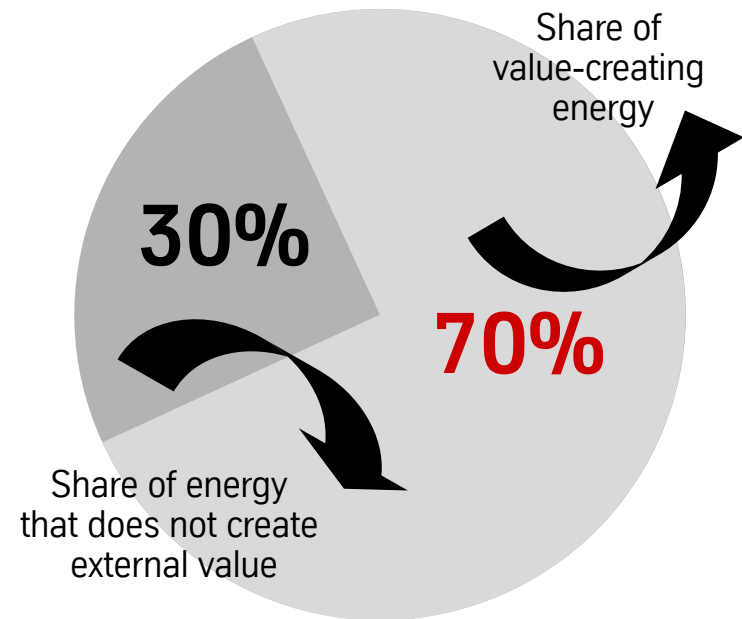


Organizations today are grossly ineffective. Because most of us have flawed ideas about what actually makes them tick

The **average** organization



The **best** organizations



Organizations work through structures. And every organization has three of those. Not one. The problem: Hardly anyone in business is aware of that - and that's why so much investment into effectiveness and change simply misses the point. Let's consider why this is urgent.

Most of today's organizations are phenomenally ineffective. When asked what share of their organization's total energy is applied to external value creation (instead of into bureaucracy, administration, politicking, in-fighting and waste), then the percentage given by managers, company owners and employees alike is usually around 20%. The typical organization today thus is likely to dedicate only about a fifth of its energy and resources to value creation for external markets. Little wonder then that work often underwhelms us.

At the same time, most of us acknowledge that the most effective organizations are able to dedicate a far higher share of their energies to relevant value creation – typically, the estimate is 70 or 80%. **Some exceptional companies thus make dramatically better use of their capabilities.** But what is it that makes the difference?

Our answer: Those vastly more effective firms understand structure.

In this paper, we will firstly introduce you to the little-known real world of organizational structure – and we will secondly discuss the consequences and the options for change.

The first structure: **Informal Structure**

The first structure of an organization is *Informal Structure*.

Every organization has it. Informal power and influence structures, group norms and interaction patterns arise wherever human beings come together. They evolve in any social structure, and in any human interaction.



Even though Informal Structure is a natural result of social interaction, and creates the glue between human beings in any group, it is rarely given profound thought to by both smaller and larger organizations.

Informal Structure by itself is neither good, nor bad. It does, however, in many ways influence organizational and individual well-being and effectiveness: Informal Structure can, for instance, unleash decisive action in crisis and turmoil. But it can also, under certain conditions, be the sources of mobbing, or total complacency.

Most organizations dedicate little energy to their Informal Structure, systematically, although they invariably “tick” through them and much energy is employed into them in various ways. Many managers have a tendency to disdain Informal Structure, considering it suspicious and undesirably emotive, or feeling insecure about how to deal with it. As a consequence, these structures are more often than not neither considered, nor consciously influenced.

Informal Structure has become more popularly known since the rise of social networks. It can be mapped as “clouds” of interconnected individuals, with varying numbers of links to others – placing individuals either in central or more peripheral positions in the cloud.

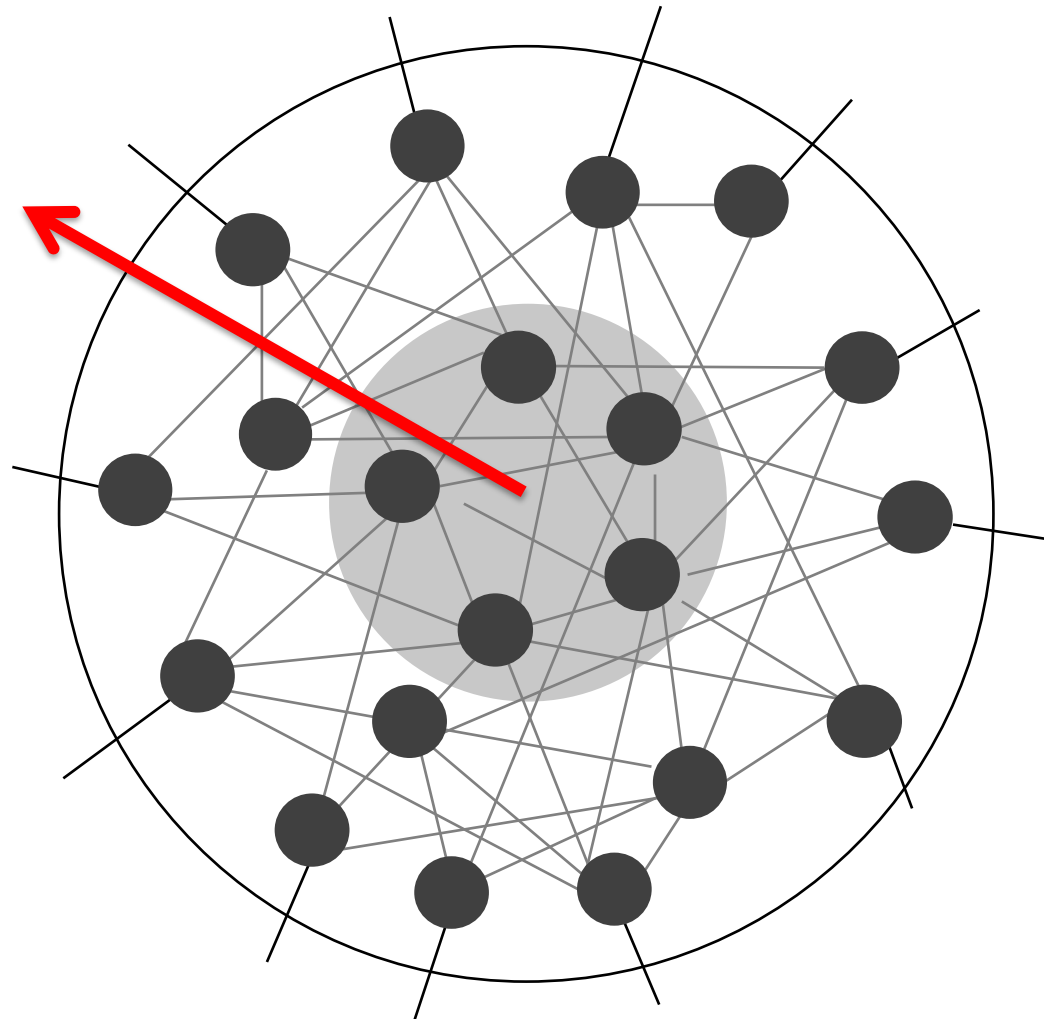


The second structure: **Value Creation Structure**

The second structure of an organization is *Value Creation Structure*.

Like Informal Structure, any organization has it: Because organizations of any kind have to create value for its outside market, and any organization that didn't have one would cease to exist. It is through the Value Creation Structure that value flows from the inside to the outside, from Center to Periphery, towards the external market.

It is through this, and only this structure, that performance and market success can be produced. Value-generating work by nature only happens here.

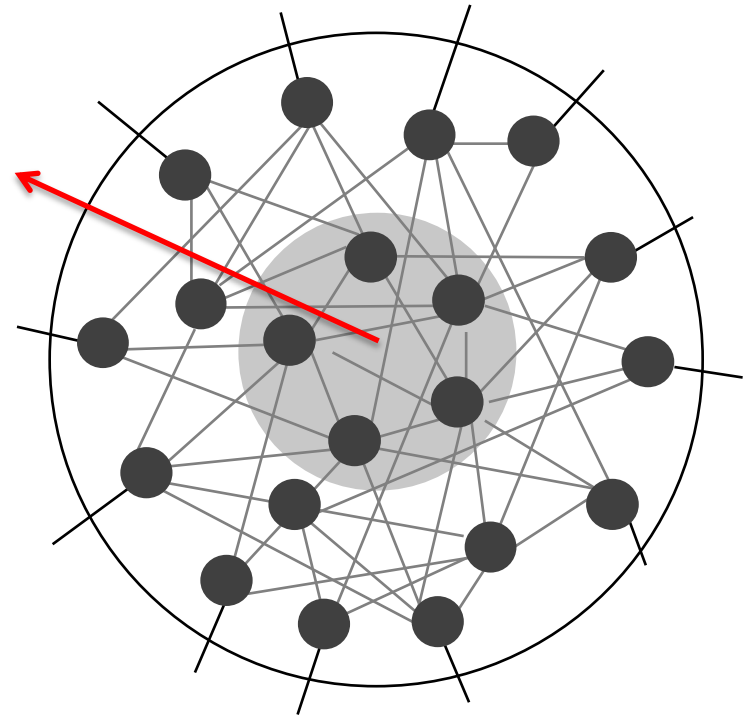


Innovation, or the processing of Ideas into external value-creation also happens within this structure: It is a role performed by the Center. When members of an organization “innovate”, they put a “center hat” on.

Interestingly, though, Value Creation Structure is not widely understood in firms, **it is rarely systematically designed**, and most of the time not being invested in systematically – with a few notable exceptions. One company that has developed true mastery in empowering and leading its Value Creation Structure, by turning it into its dominant structure, is Toyota.

Value Creation Structures – aligned with systems theory - can be mapped as **networks of cells**, which contain functionally integrated teams, and which are interrelated by value flow, pay, and communication relationships. In the structure, any cells either creates value for other network cells or for the outside market. Cells, or teams, respond to market pull, not hierarchy.

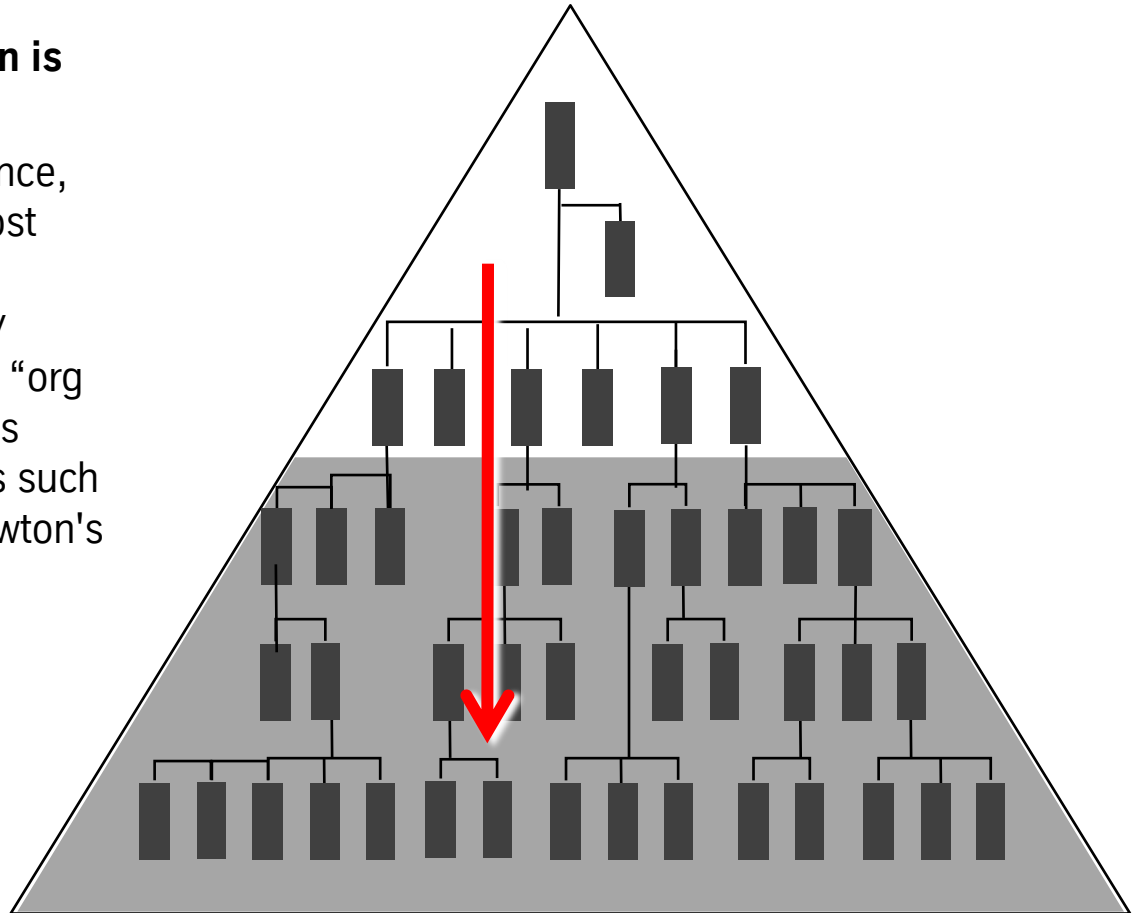
Value Creation Structure and flows are, in many organizations, being hindered and crippled by another type of structure – the third structure of an organization.



The third structure: **Formal Structure**

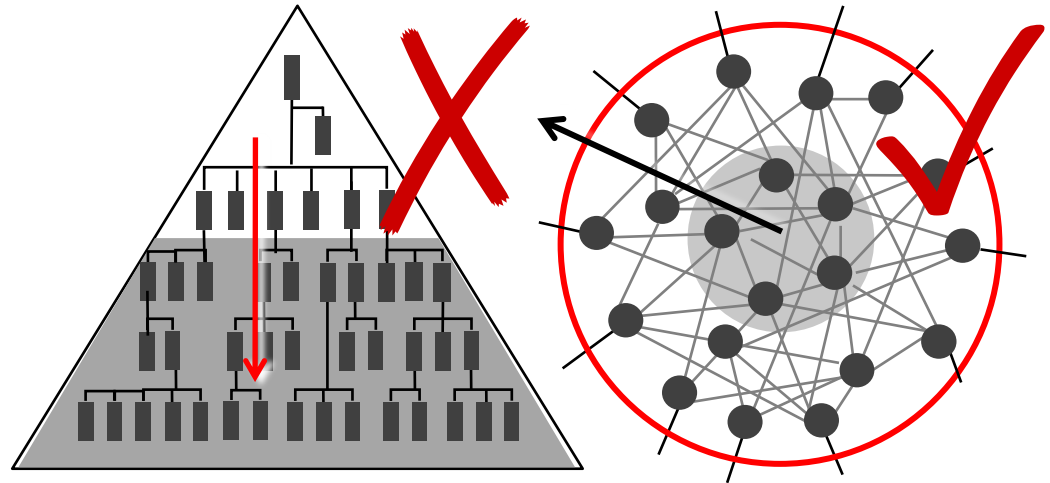
The third structure of an organization is *Formal Structure*.

Formal Structure can produce compliance, but it can never produce value. It is most frequently mapped as a pyramid of departmental boxes, interconnected by power or “reporting” relationships (the “org chart”). This concept of structure stems from the industrial-age thought leaders such as Frederick Taylor, and from Isaac Newton's “systems-as-machines” thinking.



Formal Structure should be judged by only one measure: effectiveness. Does it contribute to market success - or does it serve internal purposes only?

The problem: When outside-in market forces are hindered by hierarchical top-down relationships within an organization, that is called bureaucracy. Formal pyramid structures, as most organizations employ them, tend to focus on power relationships alone, and **people within them easily lose sight of outside markets and customers**, serving instead the hierarchy and “bosses”. The result is command and control. Not competitive success. Also, managers mistakenly believe that “work” is done through Formal Structure somehow – though, systemically, this is impossible.



Centralized top-down organization is never aligned with market, customer, or shareholder interests - even though it is commonplace to mistake shareholder interests with the necessity to create internal hierarchy. Power structures are in fact never induced at all by external stakeholders, but instead by (wasteful) internal centralization of influence and power. External compliance and internal discipline, however, can also easily be produced within a decentralized network structure.

If value creation for the external market is not to be hindered, then minimal organizational energy should go into Formal Structure. **Formal Structure, as it can solely serve the trivial purpose of external compliance, should be subdued to or coherent with Value Creation Structure**, in which the work is done and where organizational periphery is in charge, not bosses.

Organizational reality today mostly is very different from that: Formal Structure receives a lot of attention. That in turn leads to waste, fiddling with tools and processes, pointless restructuring, and to breeding the illusion of control at the top.

Putting it all together.

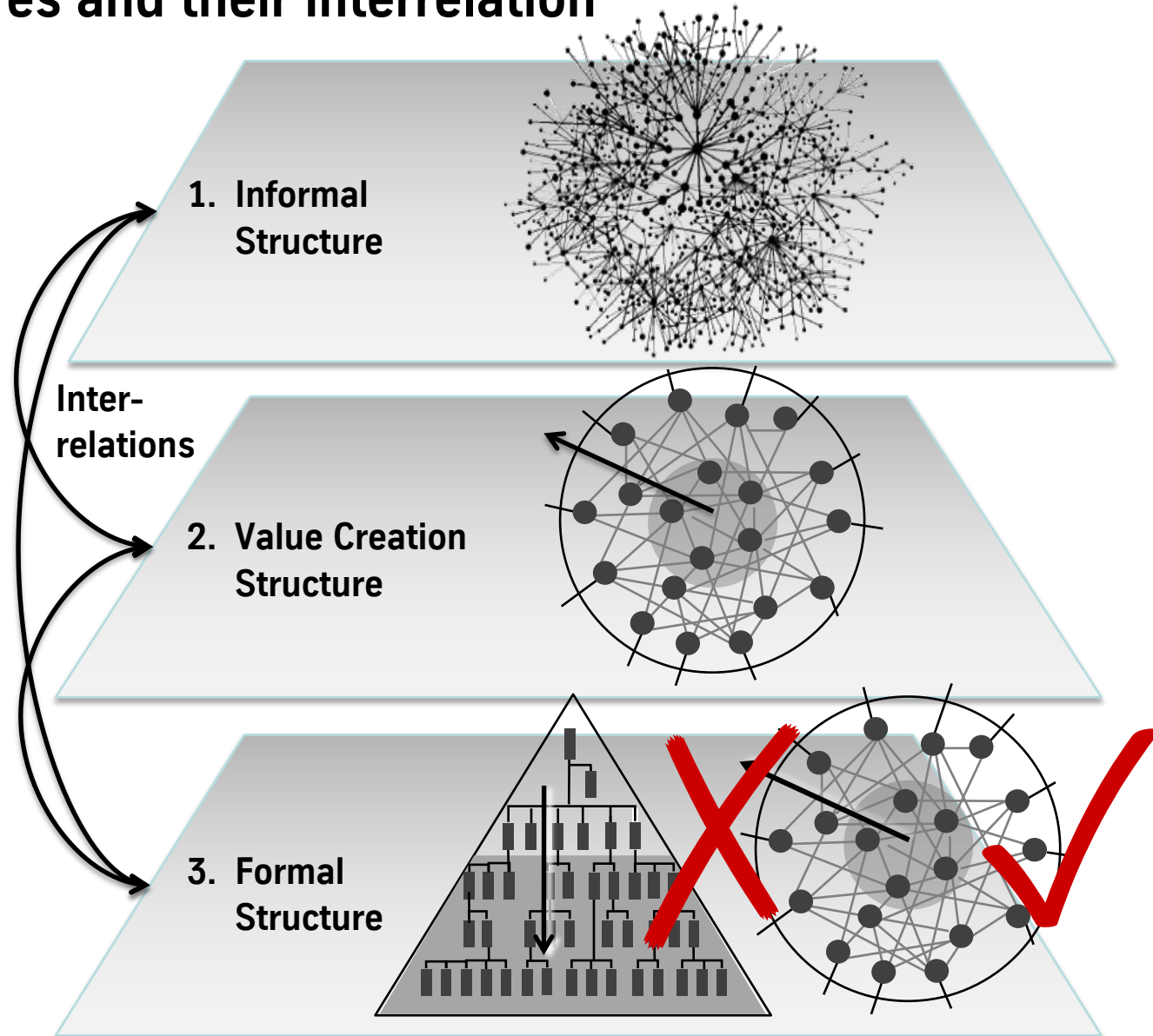
The three structures and their interrelation

The three structures of an organization strongly influence each other.

Remember:

Value creation only occurs through the 2nd structure, whereas the 1st is a natural collateral of social interaction and bonding.

The 3rd serves only for external compliance, while it can easily get in the way of value creation, due to disempowerment of an organization's people.

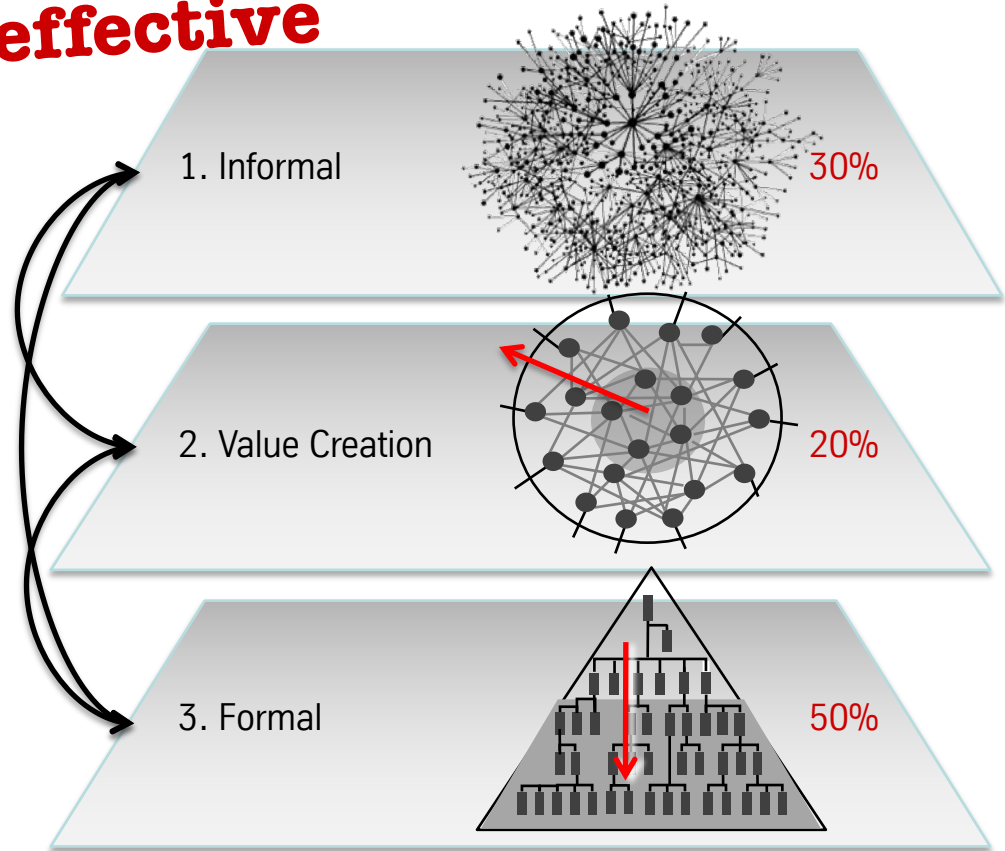


Impacts: How to organize ineffectively. This is how you do it.

Let's imagine an organization with a traditional, command and control-type Formal Structure: A part of its organizational energy and resources, let's say 30% of it, go into the Informal Structure, as a side effect of the social interaction in the firm. This organization also invests a good deal of energy and resources, let's say 50% of the total, into Formal Structure – processes, planning, centralized coordination, hierarchical control, top-down decision-making. Into what is usually referred to as “managing”.

The remaining of the total organizational energy, or 20%, go into generation of value, and create real performance. In other words: into the structure where the real work is done.

ineffective



Here, autocracy and top-down management force more of people's energy than would be strictly necessary into the Informal Structure: Like in a dictatorship, or in a soviet state, command and control provokes fear, defense mechanisms, internal politicking and infighting. In this kind of organization, people have to defend themselves against the top, and against others who might blame or harass them. Informal Structures here turn predominantly negative, due to mistrust.

Most organizations today are just like this. It is a rather ineffective way of running an organization. Far too little organizational energy goes into value creation, too much is wasted.

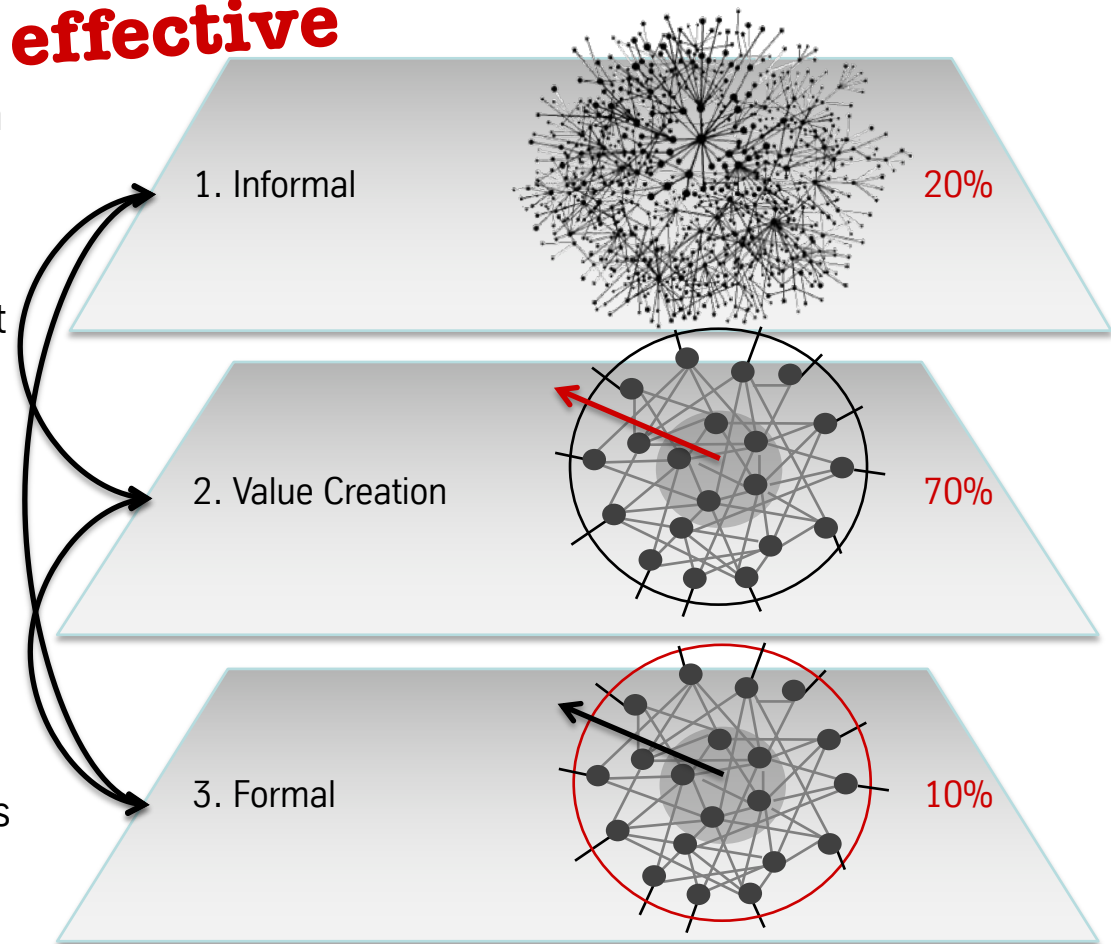
This is an “alpha” kind of organization.

Impacts: How to organize far more effectively

Now imagine a rather different organization: One that doesn't believe in Formal Structure, One that considers all management and centralization of power toxic and harmful, and refuses to put energy into Formal Structure, except when needed for external compliance. One that believes so strongly in its people that it won't let get anything between them and the external market.

This kind of organization systematically empowers teams to improve work and value creation - always. It loathes waste and puts everyone in charge to fight it. Here, the periphery is in charge - bosses keep their hands to themselves, refraining from micro-management. Control is not hierarchical, but social. As little as 10% of organizational energy here might go into Formal Structure.

effective



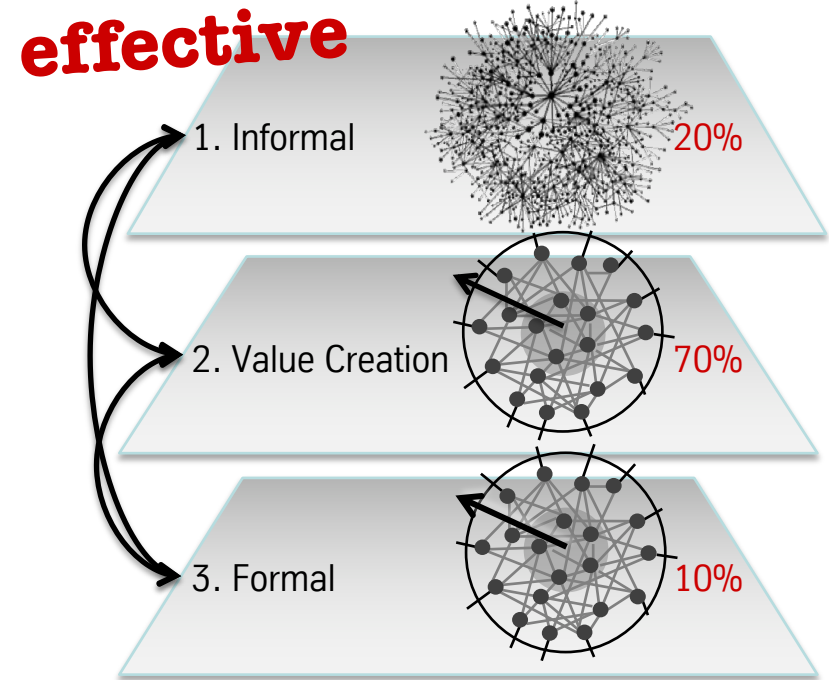
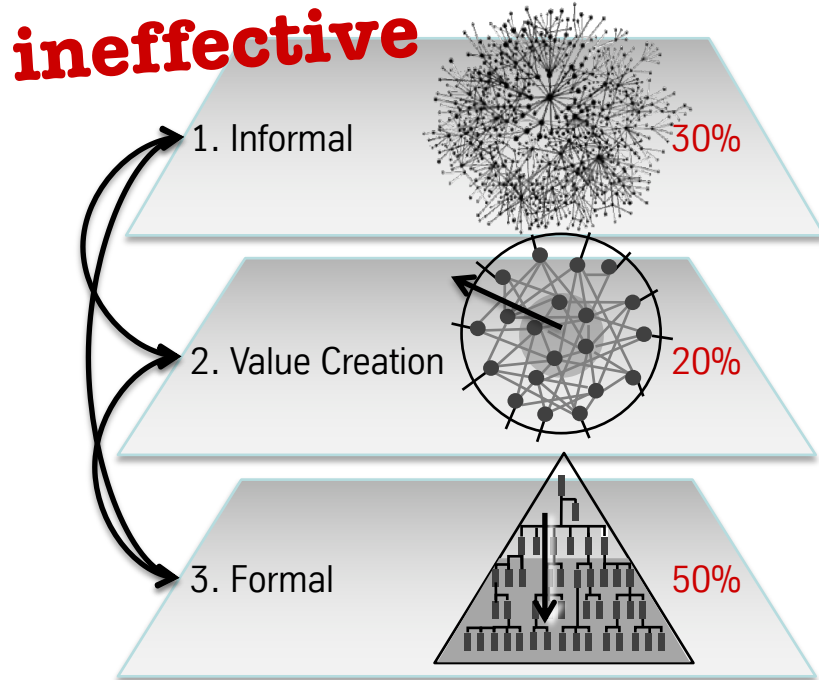
Here, leaders battle against bureaucracy and work hard on maintaining the sense of urgency high. As the firm does not put pressure on formal top-down structures, less of its people's energy has to go into the Informal Structure: Instead of allowing for command and control to provoke fear and internal infighting, people find the time to dedicate their passion and abilities to innovation and continuous improvement – which both, ultimately, serve value creation. Thus, only 20% of total organizational energy in this firm goes into the Informal Structure. The remaining 70% can be applied to Value Creation.

This is probably as effective as an organization can be. You want a name for it? You might call it Google, or Southwest Airlines, or W.L.Gore, or dm-drogerie markt, or Toyota.

This is a “beta” kind of organization.

Effective or ineffective organization: There is a choice

Maybe your are asking yourself now: Who in his right mind would support an organizational structure that is so ineffective that it dramatically fails to serve the organizations purpose - which is creating value for society? (see structure on left)



The fact is: Today, far too many organizations dedicate far too little of their energy and resources systematically to structures 1 and 2. **Far too much energy and resources go into structure 3** - creating no value and actually stifling performance through hierarchy, bureaucracy, and the command-and-control culture that top-down management breeds.

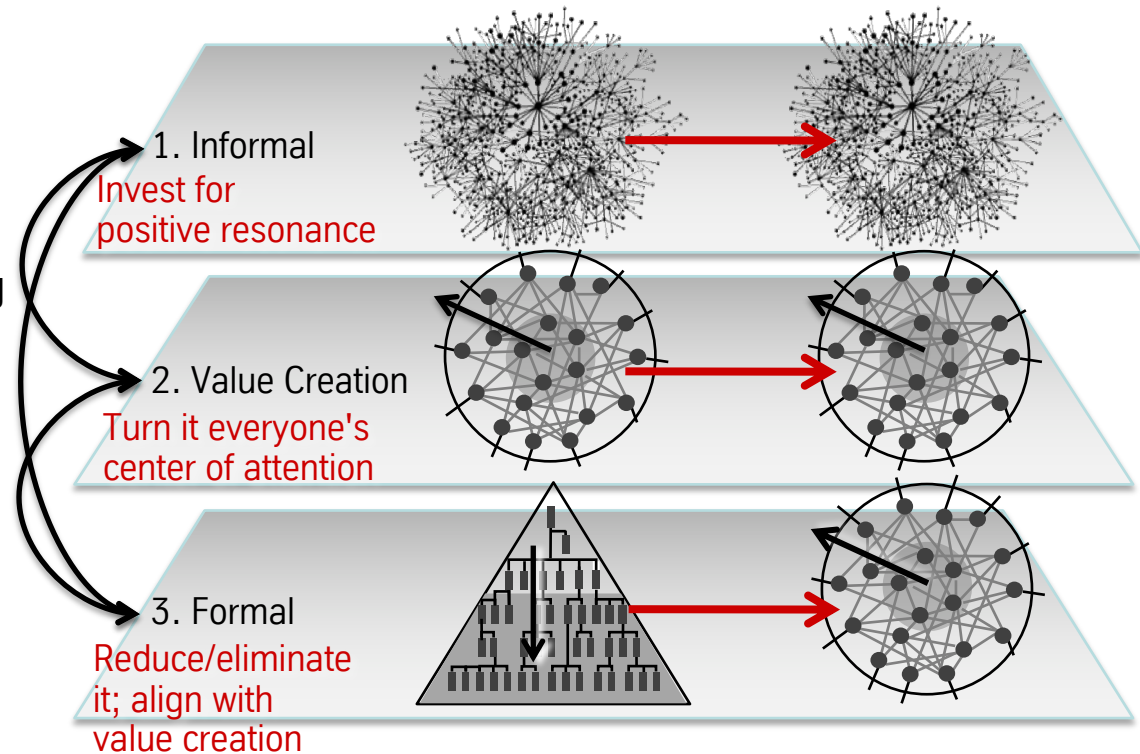
Theories abound about why organizations have so far not systematically and broadly moved away from command and control management and structure. One is that managers at the top are simply addicted to power. We do not believe in that theory. We are convinced, instead, that **broad understanding of the alternative to management and hierarchy is missing**, and that we urgently need to develop it, in order to stop the massive waste of resources that management thinking inflicts.

We do not need different, or better people. We need different, and better organizational thinking, design, and effective action.

What “organizational transformation” is. And what it means.

Organizational transformation intended to produce higher organizational and individual success, effectiveness, and happiness, should consequently focus on the following guiding principles:

- 1. Eliminate Formal Structure**, as much as possible, by fully aligning it with value creation and by allowing it only for external compliance. Make the work independent of formal structure.
- 2. Focus all organizational energy (e.g. with regards to learning and mastery) on the first two structures** - *not* on formal structure, which is trivial. Approach Informal and Value Creation Structures with a systemic mindset.
- 3. Support the positive effects of Informal Structure** through high levels of transparency, investment in self-awareness of teams, radical decentralization of decision-making towards the periphery, and also through bonding rituals, and strong, shared values and principles.



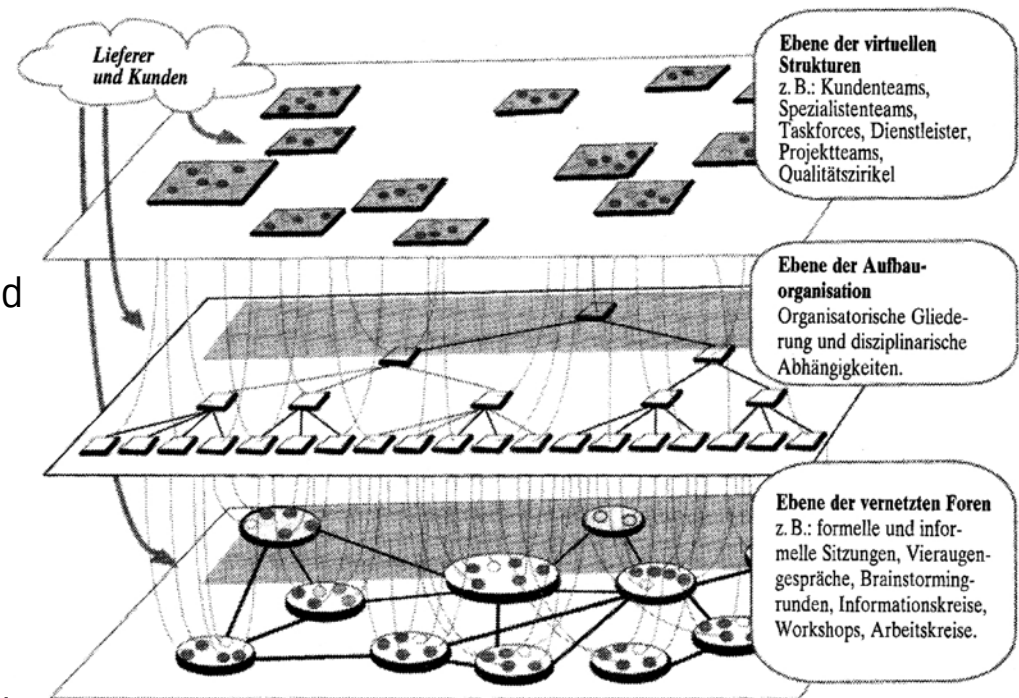
It is worth noting that the radically decentralized network, or “beta” organization, is a reality in all organizations already, in that all have their own Value Creation Structures in place. The problem is that this structure is so often subdued to a hindering Formal Structure.

Value Creation Structure, in this sense, is far more real than the type of Formal Structure that is shown in the typical org chart. In organizational practice, artifacts of the Value Creation Structure often go by the names of project teams, task forces, customer or product teams. It is this structure that remains to be empowered, in order to create full-fledge BetaCodex organizations, and to fulfill human potential at work.

Acknowledgement and further recommended reading

The concept outlined in this paper was inspired by a book from German business thinker **Uwe Renald Mueller**, published in the mid-90's and entitled *Machtwechsel im Management* (Haufe). Somewhat hidden in that book, you could find an illustration entitled "Companies always have three organizational levels" (pictured on the right).

Here, Mueller distinguished between three structures: *Virtual Structures* (the Value Creation Structure), *Formal Organization* and *Interlinked Forums* (somewhat similar to Informal Structure). He argued that Virtual Structures were "much more real in real-world organizations" than what managers use to draw up in their command-and-control org charts. The concept inspired us to think afresh about the theory of organizational "levels", and to align this concept with scientific insights not available to Mueller at the time – from social sciences, systems theory, and the like.



The result presented here is an update, a review and a substantial extension of Mueller's level concept from the 90s, but not a complete reinvention.

For further information on Value Creation Structure and about why it should follow the laws of the BetaCodex, read our 2-part **white paper “Turn Your Company Outside-In!”**, which is available through betacodex.org/white-papers.

For more about why today’s organizational structures must reflect the nature of complex markets and complex value creation, read our white paper “Organize for Complexity”, which is also available through the page betacodex.org/white-papers

For the human nature underpinnings of the structures and the BetaCodex, read **Douglas McGregor's** book *The Human Side of the Enterprise*, especially the annotated edition from 2008 (McGraw Hill).

Please also read our white paper No. 18 entitled “Org Physics in Follett’s words”.



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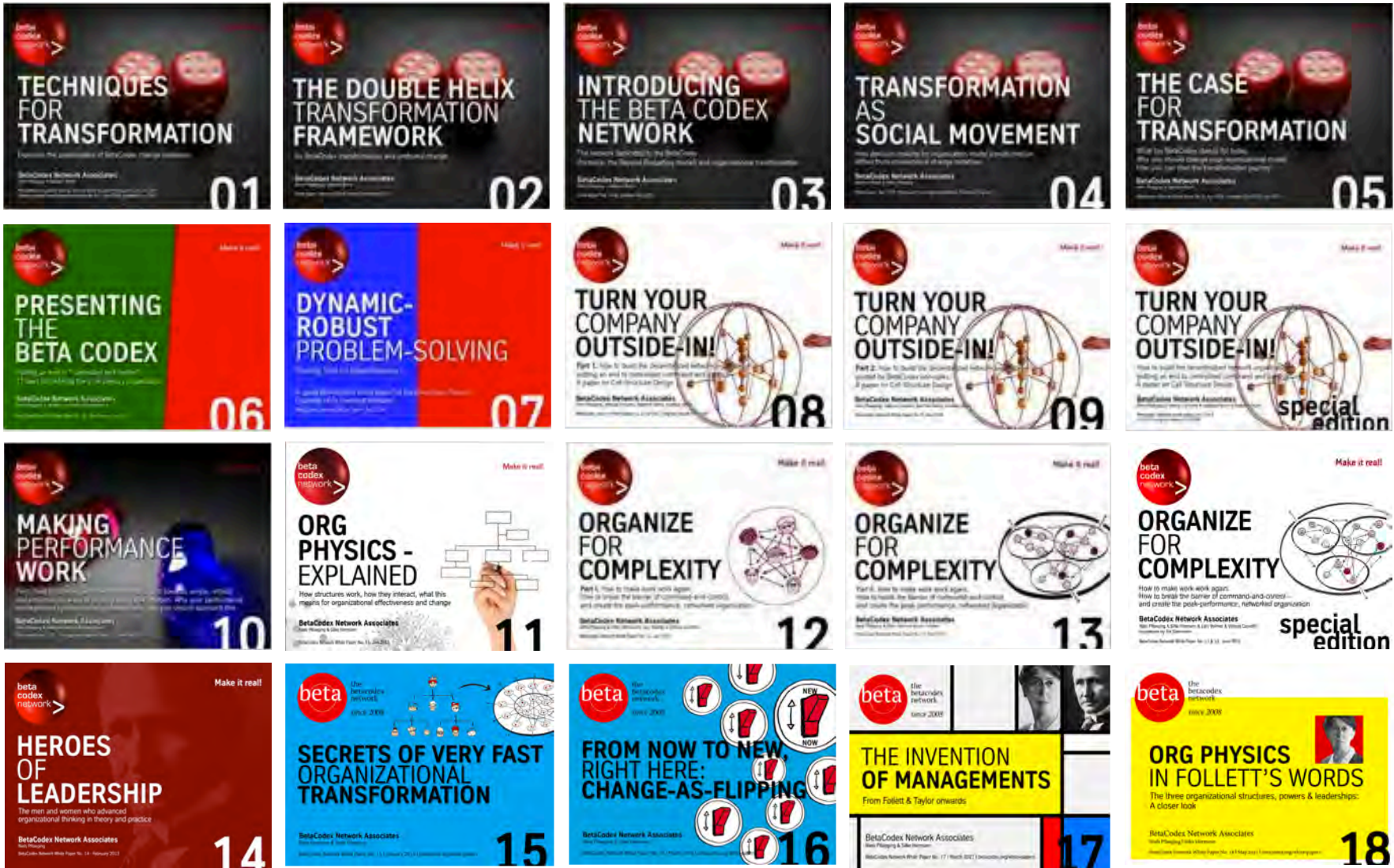
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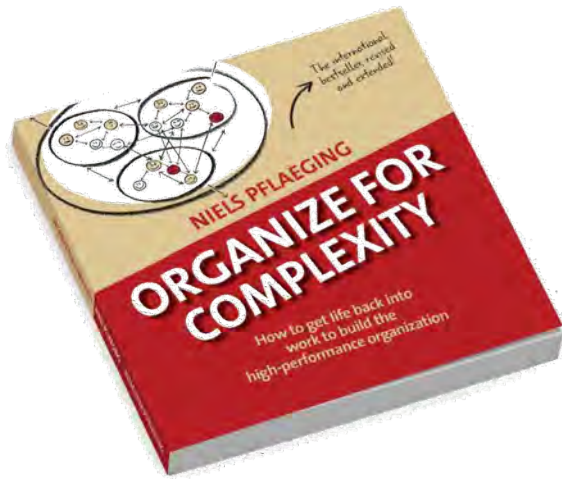
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