
# Is Your Company Ready for the Transformation?

**Stephanie Borgert, 2017**

The next industrial revolution is supposedly already looming for companies. It brings with it many concepts – Industry 4.0, Work 4.0, Management 4.0 – that promise wonders. Not only are recent technological developments making this digital transformation necessary, but they are also forcing SMEs in particular to take the next step in their evolution. Is this really a revolution, or is it just temporary hype? It is hype, and it makes the necessary transformation clear-cut and urgent – however, it is not a digital transformation that is necessary, but rather an organizational transformation. And it has nothing to do with technology, but rather is something that has been looming for companies for decades. It has been looming ever since we left the Industrial Age and developed into a knowledge society. And it is crucial, in order for organizations to finally adapt their management to the dynamics and complexity of the market; the possibilities offered by the latest technologies will then also have a chance to evolve from hype into enduring mainstay.

### A new veneer on the old thought pattern

"Horizontal networking" – i.e., between suppliers, customers, partners, etc. – brings new product ideas and production possibilities. As a result of such interconnectedness, the teams within a company will automatically work in a self-organized manner, take on more responsibilities, and achieve increased performance due to increased motivation – these are just some of the things promised by "4.0". However, they are all based on a fatal error in thinking – namely, that there is a direct causal relationship between networking with other organizations (usually understood in technological terms) and how an organization itself works. If we believe in the existence of such a simple cause-and-effect relationship, then we have fallen into the "causality trap". An automatization of work processes and a high degree of interconnectedness do not necessarily lead to any change whatsoever in how an organization functions. There are dogmas, values, norms, and rules that have developed and taken hold over many years. No "Internet of Things" or "Industry 4.0" can just come along and change these – because an organization is complex, not simple.

Production processes are becoming leaner, and production thus more efficient. This is the desired result in many companies that are currently devoting themselves to the digital transformation. The perpetual striving for greater efficiency is a thought pattern that is as old as it is outdated. It has been a key component of management thinking dating back to the Industrial Age – back then, the main task of management was to ensure the optimization of workflows by making repetitive tasks run more efficiently. However, this dogma is now outdated. Our working world is complex, our tasks are no longer repetitive, and what matters are new ideas, innovations, and adaptability to rapidly changing markets.

**Our mental model needs an update**

Industry 4.0 is not an "efficiency switch" that can be flipped, but rather is something that shows us the degree of complexity we are dealing with – the question then is how we respond to it. If organizations attempt to increase production efficiency within the preexisting possibilities, then they can easily fail – and what remains will be just another fad that cannot live up to the hype. New technologies, networks, and options are of little use if organizations just stick to their old thought processes. The same old ways of thinking will simply produce the same old results. In order for new things to happen, complexity and its various aspects must first be embraced. This means giving up on simplification and quick cause-and-effect formulations – and coming to grips with unpredictability, non-transparency, and market dynamics, as well as one's own organization. The focus of every company must again be on creating value, rather than on efficiency alone. The approaches of many organizations still conform to those from the times of the Industrial Revolution. They are not suitable for a digital revolution – only an updated mental model can help here.

**Does more data mean greater understanding?**

One of the promises made to SMEs is that, "Having lots of data will enable more accurate forecasts of sales opportunities and will help in making good decisions." Apart from the fact that such statements again trivialize matters, they also embody yet another key misconception with regard to complexity. Good decisions are not simply made on the basis of large quantities of information – but rather on the basis of *relevant* information. Still, "big data" has been one of the major buzzwords in recent years. According to International Data Corporation (IDC), the global volume of data will reach 44 zettabytes by 2020. In 2013, only about 22 percent of all data was usable for processing (e.g., categorization, analysis). Only 5 percent was analyzed at all. So there is a lot of data – and very little is done with it. Now, "big data" is touted as a solution, with the promise of being able to realize the interpretation of this data as well. And therein lies the hitch – because, for purposes of systemized data analysis as we know it, simply dealing with enormous quantities of information is meaningless. The data is there unstructured, in different formats, and of ambiguous value – and so an "analysis", in the traditional sense, will bring no benefit to a company. Interpreting the data still must ultimately fall upon the manager or director. More bits and bytes do not ensure that one will have better data – only that one will have more data. And that, paradoxically, brings people into a state of perceived information deficiency.

**Data relevance aids decisions – not data quantities**

Cyberneticist Gregory Bateson defined "information" as "a difference which makes a difference." Data can only be considered information if it creates some meaning in a person's mind – i.e., the decryption of the data happens in the mind. Many decision-makers constantly feel like they don't have enough information at their disposal – so they gather more data, in the hopes that this will help them to make good, safe decisions. However, since they are operating in an unpredictable, dynamic context, they will never be able to capture all information that exists. And as long as they are not aware of this, they will just keep gathering more data. This creates the sorts of dilemmas that lead to indecisiveness in worst-case scenarios. Managers suffer from an information deficit because they have too much data. The human brain is not designed for mass processing; it is a problem-solving organ, adept at recognizing and processing relevant information. Just like the brain focuses on relevance, we should do so in our companies. Under the mantra "less is more", a first step is to question all of the data collection, KPIs, and reports. Which are necessary? Which yield insights? Which actually contain information?

**Pyramid 4.0?**

"Vertical networking automatically ensures networked organizations." This is another one of the popular slogans from many "Industry 4.0" publications. However, networking alone ensures nothing. It will fail if the organization is not prepared for it – and this is not a reference to any sort of technological preconditions. The most common organizational structure nowadays is still the formal hierarchical pyramid. Thinking and decision-making happens at the top, with tasks being carried out below. This was precisely how Frederick W. Taylor formulated his management concept, which laid the foundation for the perpetual cry for efficiency. However, if organizations stick to their pyramid structures, then their networking efforts will largely ricochet off them, and all the pretty 4.0 projects will fall flat. The four key reasons for this are as follows:

- **Rigid hierarchies cannot adequately respond to change**
  In order for decisions to be made "at the top", information is needed. It comes from outside the organization (the market, customers, suppliers, etc.), and must then be conveyed up the chain – being cleaned up, polished, supplemented, or otherwise modified in the process. This takes too long, and decisions are not made where the value creation and market knowledge are present.
- **Rigid hierarchies foster silo mentalities and behavior**
  The marketing department has its yearly goals, as does the IT department. The production department does not know anything about these; meanwhile, they also have their own goals. Obviously, the disparate goals and their incentivization promotes

employees' thinking and acting within the boundaries of their own areas.

But networking means interdisciplinary work – so demanding networking while sticking to a formal, rigid hierarchy will always create dilemmas for the people involved.

- **Rigid hierarchies hinder networking**

  Each employee is distinctly assigned to a particular department. An identity develops, such that each employee knows "where he belongs". The hitch in this construct manifests itself when uncertainties or conflicts arise – people then tend to go through the formal path to superiors and decision-makers, rather than entering into discourse amongst each other in order to clear matters up.

- **Power and networking do not go together**

  Power, in the sense of control, is an illusion even in formal hierarchical structures, because complex organizations are always networked and interconnected. The illusion is perpetuated in many companies in order to maintain their own status quo, because the generally accepted notion of a good manager remains one who "always has everything under control and always knows everything." Consciously allowing for networking inherently means consciously giving up power and control. This is tough for many managers to do.

The digital transformation will not make any company a networked organization if that company is not genuinely willing and prepared to be one. Networking is a question of an organization's approach – not of its technology.

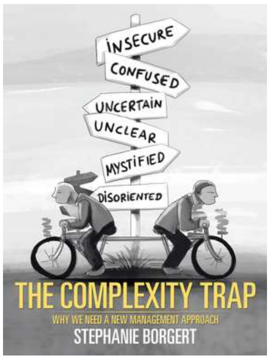
### A transformation – yes or no?

There is a clear answer to the question of whether SMEs are facing a transformation: Yes – but it is not a digital transformation. SMEs are facing an organizational transformation, one that is inevitable given the increasing complexity of the world. Industry 4.0 is a wave that is making this complexity abundantly clear and that is forcing the transformation to happen in order for them to take advantage of new technological opportunities in a goal-oriented manner. However, what companies need is not "enablers" in the form of technology – but rather to remove the "disruptors" from their paths. This includes questioning their own approaches towards their company, their markets, their employees, and value creation, as well as choosing the right management tools for mastering complexity. The digital hype will then offer them the opportunity for ideas, innovations, and long-term competitiveness.

### About the author

Stephanie Borgert is a speaker, management consultant, and forward thinker for a contemporary management approach. She helps managers, directors, and project leaders become "masters of complexity" and not leave their success to chance.

### Recommended reading




The Complexity Trap: Why We Need a New Management Approach

Stephanie Borgert, 200 pages, paperback, iUniverse, 2017, $17.75, ISBN: 9781532019524