



WHY WE FAIL IN DIGITAL TRANSFORMATION

and other complex organizational projects

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From "Performance Management Evolution", Jeroen Loosli

A peek into science, metaphysics, and consciousness

Most of you who will read this paper will have an idea of the complexity the new VUCA (Volatility, uncertainty, complexity and ambiguity) reality brings on the table.

Let's face it: We are struggling.

We are struggling with building meaningful societies.

We are struggling with sustainable development.

We are struggling with educating our children in an appropriate and efficient manner.

We are struggling with cultural diseases.

We are struggling with world poverty and inequality.

We are struggling with climate change.

We are struggling with building a meaningful economy.

Organisations are struggling with disruptive competitors.

Organisations are struggling with demotivated employees.

Organisations are struggling with digital transformation and innovation.

"We are struggling with managing complex problems!"



Why is that?

Please allow us to start with a broader excursion. There are quite some science workers out there who tried to classify “problems”. Already 1974 R. Ackhoff classified a problem to be either a “Problem”, solvable via traditional analysis or a “Mess”¹, not solvable by traditional analysis. He used “Mess” to describe multivariable systems, where changing one variable had an influence on many others. Others like H. Rittel used the word Tame vs. Wicked Problems². There is no short definition of a *wicked problem*, but the core of it is the following:

Every wicked problem is unique and behaves unique.

And the solution to it is not true or false, but rather better or worse³.

Therefore it is not solvable by best practice approaches.

Neither via our binary thinking left brain hemisphere.

Also several persons will develop several realities about the problem, because they come with their own (unconscious) belief- and valuesystem. And belief is almost impossible to overcome⁴. So conflict is preprogrammed. And where there is conflict, there is a trust problem. And a trust problem will lead to “by bias” distorted understanding of speech, or worse, unauthentic speech. Consequently there is wrong information in the room.

Finally wrong solutions will be applied, some stakeholder will start to feel uncertain and classify the problem as unsolvable. They give up and take shelter in the status quo! That’s how most innovative pilot projects end on the wrong side of the statistics. So there is a lack of understanding and wrong presumptions⁵, which finally lead to chaos.

Researchers like the physicist David Bohm or economist and nobel price winner Elionor Ostrom who proposed that developing and exercising a professional dialogue (instead of discussion or debate) would solve this problem, but ended up disillusioned. The reason was, that even sophisticated and structured dialogue practices couldn’t solve the problem, as one core need was empathy and transparency of ego, internal competences of an individual, which could not be developed by itself, as this needed reflection on oneself first.

The origin of this disability

In school we were told that we can solve all problems with our left hemisphere analytical skills and logic, denying the whole nature of ourselves. Or why do you think nature has equipped us with the right brain hemisphere? To understand how things really work we have to reactivate this gift of nature and find a

¹ The word is derived from french “mes”, a mixed food plate

² https://en.wikipedia.org/wiki/Wicked_problem

³ Every “solution” will come with trade-offs

⁴ “Why Facts Don’t Change Our Minds”, New Yorker 2017

⁵ Peter Senge, MIT, used the word “mental models” for his concept for learning organisations. “Mental models” are deeply ingrained assumptions and generalizations, or even pictures or images that influence how we understand the world and how we take action. Very often, we are not consciously aware of our mental models or the effects they have on our behavior.



balance between left and right⁶. If we may believe Albert Einstein, even that is not enough, and left should be just the servant, the test probe, of the real master, the right hemisphere:

***“The intuitive mind is a sacred gift
and the rational mind a faithful servant.
We made a society
who honors the servant and has forgotten the gift.”
Albert Einstein***

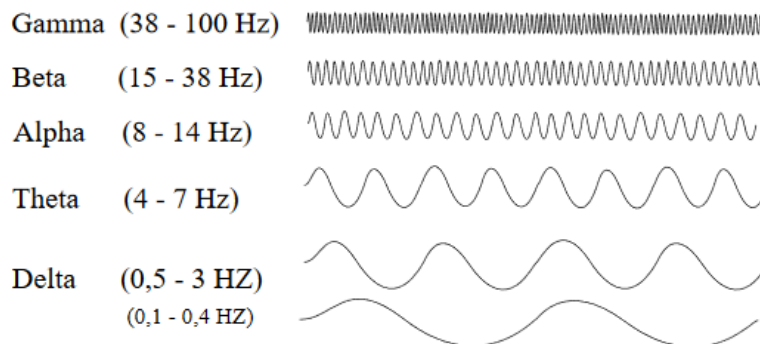
So the rational mind is only one analytical tool for checking the experience of reality mainly entering our consciousness via senses and the intuition, per definition “the immediate, non-discursive, non-reflection-based recognition, grasping of a situation or a complicated process”. Intuition is a fast, parallel processing “chip”. We have lost this capability through a system built on logic, not on “good sense”, whereas sense is coming from sensing, perceiving reality by feeling, groping, smelling and other sensations, which are not built on logic. *Logic is just a slow sequential secondary process.*

Awareness States

We learn now from the wisdom cultures, which fortunately still exist with indiginouse tribes and eastern cultures, how to reactivate this gift, and we learn now from western science that this wisdom is the truth:

“Our brain is a radio tuner, and we can actively steer which external frequency we are listening to.”

The following displays our radio frequency bands.



⁶ Think also of this: Nature comes often with a dual System, like having two legs, to be able to proceed forward efficiently, or two ears to hear stereo, or two eyes to see 3D. The dual system allows us to see the third dimension, the deepness of space. Could it be that it is quite similar with having two hemispheres?



With methods like EEG, Biofeedback and MRI we learn now from western science⁷ that our disbalanced mind is, during the day, foremost working in the Beta Wave Range.

Beta (38 - 15 Hz) are the brain waves of normal awakened consciousness, outward attention, logical thinking. There are 2 frequency bands. The *high frequencies* of the beta spectrum are especially seen in cases of inner **turmoil, fear, stress**, and when our inner commentator or critic is active. It is, inter alia, a root cause of Burnout, high blood pressure and ADHS. They are different from *the low frequencies* of the beta waves of the awakened mind, whose thinking is **clear, alert, attentive and creative**. In the western learning environment, we learn mainly in the Beta state. Beta is **high focus**. Things outside of this focus are almost completely faded out. Your consciousness is confined "on a point". The right hemisphere, presentiments and intuition are quasi-disabled. Beta is tension. **Tension** needs a lot of energy. When we do not learn to relax our muscles we will have pain, right? The muscle will cramp and distort how we are moving forward! That is exactly the reason why this state of being is also related to burnout symptoms. So how to relax?

Science shows clearly that when we move our brain frequencies to a mix of alpha-theta waves, we broaden our awareness. We are able to "read the environment" in a broader sense. We relax, heart rate and blood pressure goes down, we connect. If we do that regularly even structural and functional brain changes will occur.

Alpha waves (14 - 8 Hz) occur in a relaxed basic posture, when daydreaming and visualizing (whereby all sensory qualities are meant here; some people, for example, can "visualize" smell or tactile sensations much more intensely than inner images). Alpha waves are the **gateway** to meditation, they are necessary as a bridge so that information from the theta area (and other areas) can reach our waking consciousness. Alpha is one of the brain's most important frequency **to learn** and use **information taught in the classroom** and on the job. While one is consciously learning, the brain is also unconsciously processing what one is learning. It is also the ideal state to be in after studying, as it will help the brain better assimilate, organize, and remember. It also comes with a higher engagement of the individual⁸. There is even a strong indication, that IQ levels can be augmented⁹.

If we meditate so deeply that we only produce theta and delta waves but no more alpha waves, we will not be able to remember the content of the meditation. Alpha is therefore particularly important in combination with other brain waves, in the function of an ascending channel for deeper information. Alpha-Theta training can create an increase in sensation, abstract system thinking and self-control. Alpha gives energy.

Theta (7-4 Hz) are the waves of the subconscious. They occur especially in dreams (REM sleep), in meditation, during peak experiences and during creative states. It is abnormal

⁷ <https://www.frontiersin.org/articles/10.3389/fnins.2018.00178/full>

⁸ https://spinoff.nasa.gov/Spinoff2019/cg_6.html

⁹ <https://www.eeginfo.com/research/researchpapers/Research-w-Othmer-Method-2017.pdf>

in awake adults but is perfectly normal in children up to 13 years old. Theta is believed to reflect activity from the limbic system and hippocampal regions. Theta is also observed in anxiety (4 Hz)¹⁰, behavioral activation and behavioral inhibition. When the theta rhythm appears to function normally it mediates and/or promotes adaptive, complex behaviors such as **learning and memory** together with gamma: **high theta-gamma coupling enables more efficient working memory processing and has an impact on the IQ¹¹** .

In the theta area you will find our unconscious or suppressed emotional parts, but also our **creativity and spirituality**. Images from the theta range are often less colorful, sometimes tinged with bluish tones, but usually give us a deeper feeling of personal importance than the vivid, colorful images of the alpha waves. Theta waves alone remain unconscious; only when alpha waves are added can we consciously perceive or remember their content.

Delta waves (3 - 0.5 Hz) are the brain waves with the lowest frequency and represent the unconscious area. In dreamless deep sleep, the restful part of sleep, we exclusively produce delta waves. However, they also occur in combination with other brain waves. Then they correspond to an **intuitive attention**, a kind of **radar**, an **empathy** with situations or other people. Often people from helping professions have high levels of Delta, as well as people with traumatic experiences who live in a state of constant alertness.

Gamma waves (100 - 38 Hz) were discovered last and are still the least explored. They are associated with peak performance, strong focus and concentration, high flow of information, mystical and transcendent experiences. Fusion experiences, **the feeling of universal knowledge** and loss of the sense of self were also observed. A **good memory** is associated with well-regulated and efficient 40Hz activity, whereas a 40Hz deficiency creates learning disabilities. At the moment gamma waves in the frequency band around 40 Hz are being researched in connection with focused meditation. A special feature is the synchronization of the gamma waves over large areas of the brain.

Can we summaries this paragraph with the words,

that we probably lost...

... **creativity, the problem solving skills,**
 ... **empathy, the connection with the living world,**
 ... **our radar, to understand the big whole,**

with mainly developping our left brain hemisphere?

¹⁰ Neurocentre Magendie, Cyril Herry, Bordeaux

¹¹ https://www.researchgate.net/publication/277749367_Theta-gamma_cross-frequency_coupling_relates_to_the_level_of_human_intelligence

The Lost Connection

So: [Please allow us to be a little simplistic, but you will get the broader meaning] Does this sound like we have lost the connection to the ecosystem, as we have lost the ability to tune our radio mainly into the beta wave channel? Does this sound like, that we lost connection to nature and to people, because we live in a “Beta Dominated Culture”? Could this be the root cause, why we have problems with empathy, constantly nag around, and feel unhappy. Could this be the reason, that we live in a time of war against nature and “the others”? Could this also be the reason that we fail in managing complex problems in general, as we have never activated our “third eye”, and scan problems mainly with beta waves? Could this be the reason, that we live in a time of symptoms-fighting, instead of finding second-order solutions¹²? Could it be the reason that around 70% of IT projects fail? Could this also be the reason why around 70% of cultural projects fail? Could this also be the reason why we have problems with innovation management and creativity in general?

**Could it be that we have to reinvent what we are,
rediscover what abilities we have
and then will be able to turn our cultures, societies, organisation and projects to the good?**

It seems, that we just were floating on a surface, mainly “unconscious”, and have entered now the century, where we enable ourselves to go deeper, establish a bird's eye view to see the whole problem and to connect with a more expanded reality, and therefore will be able to find other ways to perceive information for wholistic solutions for problems which are presented to us in this increasingly complex & uncertain environment we live in .

Or is it just coincidence that Quantphysics emphasize the importance of the connection versus the particle, that nature always workes within networks, and Connectivity is named as the most powerful megatrend of our time? The principle of networking dominates social change and opens a new chapter in the evolution of society. Heavily centrally managed cultures show existential problems.

Digital communication technologies are fundamentally changing our lives, reprogramming socio-cultural codes, and giving rise to networking power (power of the people), new lifestyles, and patterns of behaviour, and for companies new possibilities for customer services and communication arise.

In this sense it is also not surprising that in organisations Command and Control Leadership is no longer working, and as several studies¹³ show: It are these companies who successfully manage VUCA, which decentralise, strengthen internal networks (or system thinking), invest in people-centred leadership, distribute their power to their employees and find new ways of learning.

¹² From Paul Watzlawick's book “Solutions”: In their study, Watzlawick et al make a central distinction between first-order solutions that can be found within the regularities of a system, and second-order solutions that can only be developed from “outside” the system. Problems arise, among other things, when solutions are sought on the wrong level of order, e.g. you cannot describe language without developing a second order language (called metalanguage) with new words, like verb or pronoun aso.

¹³ e.g. MIT Sloan Management Review Deloitte Digital 2018 Global Study

The Integral Path

If we also try Ken Wilber's integral model, we see a similar tendency: We must see the big picture (all 4 quadrants). This is the only way to create holistic solutions. A holistic solution must make a balance between the individual (ME), the shown behaviour (IT), the technology (ITS/THEM), and the culture (WE). Ken Wilber earned recognition for his comparative research in philosophy, science and religion, and the development of its 4 Quadrants-Model (Integral Theory):

<p>Interior-Individual (ME)</p> <ul style="list-style-type: none"> Self & Consciousness Intentional Subjective Values Attitudes Commitment Empowerment Cognitive Emotional Spiritual 	<p>Exterior-Individual (IT)</p> <ul style="list-style-type: none"> Form Organism Behavioural (Actions) Objective Skills Performance Decision Training
<p>Interior-Collective (WE)</p> <ul style="list-style-type: none"> Worldviews Shared Perception Culture Value System Justice & Ethics Norms Morale History (Stories) 	<p>Exterior-Collective (ITS/THEM)</p> <ul style="list-style-type: none"> Organisation (Social System, Economic System) Environment Policies and Procedures Information Metrics Technology

The right side represents the doing, the external physical world and how it is ruled, and the left side the internal world, the being and perception of the world [How we perceive reality]. The quadrants represent *individual consciousness* in the upper left, and the *physical body* in the upper right-hand quadrant. The lower quadrants describe how these two dimensions are extended and connected to the world around us. It is clear that, with our materialistic paradigm, we have focused mainly on ITS/THEM, metrics, processes, technology. And this is one root cause why we are failing to implement successful projects. It is not surprising that the McKinsey digital survey 2016 shows that the main problem for Digital Transformation¹⁴ is seen in the left dimensions of Wilber's Model. Companies



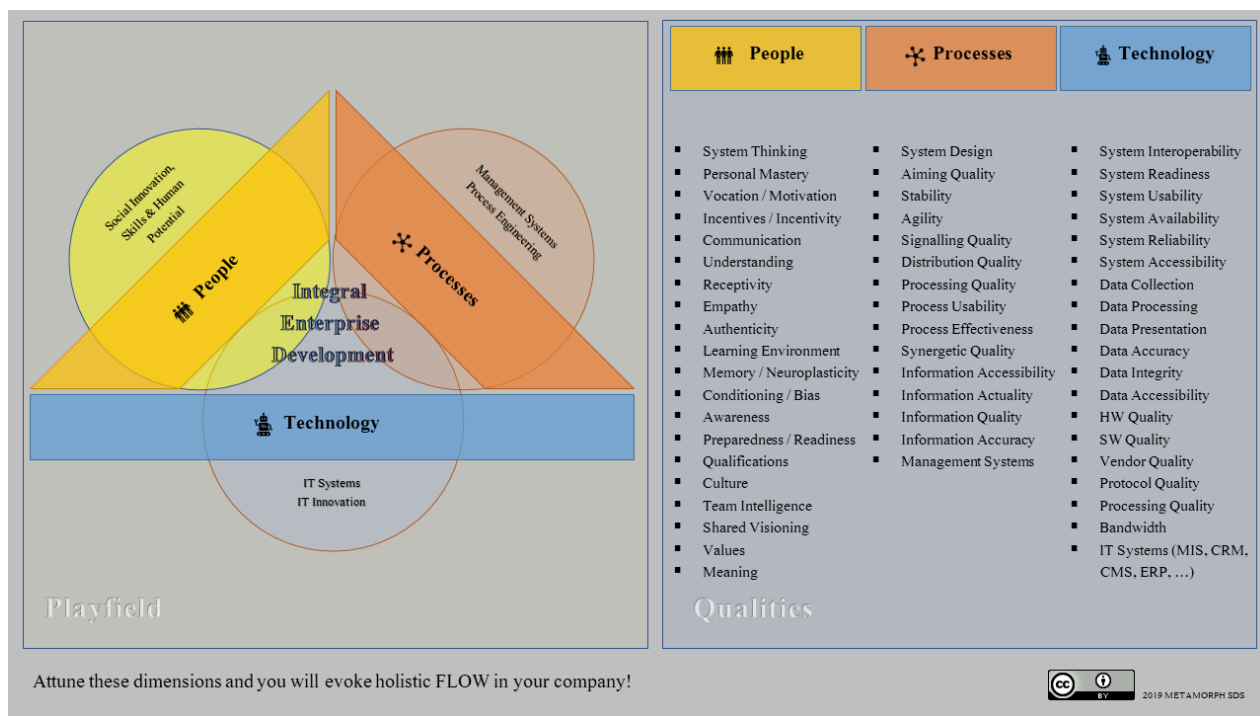
¹⁴ We use the word Digital Transformation as a discipline for boosting organizational performance and organizational health as a whole and not as an IT discipline. Just buying the latest technology is one of the most costly and major misconceptions of digital transformation.

need to shift their routine thinking into system thinking, need to invest in the change of their culture, and with it in behavioural changes.

Conclusion

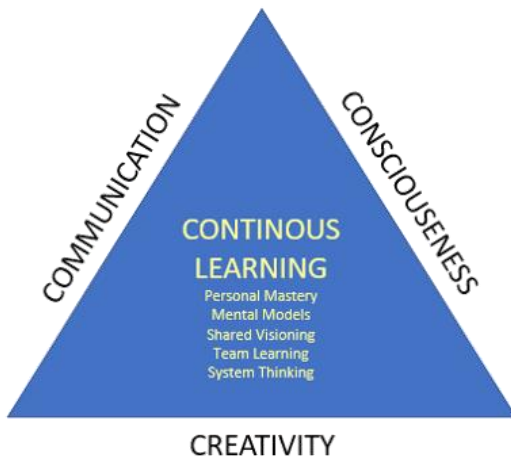
So let's say this: Companies need new connectivity skills, a better understanding of reality as a whole, a better understanding of the human being and its potential, and a holistic-systemic understanding of (digital) change in an integral way, in order to survive in these times of fundamental change.

The holistic systemic view needs to take all relevant dimensions (people, process, technology) into account.



Still today 70-80% of digital transformation projects fail. And we asked ourselves, what deeper reason there is. The heretic view for failing digital change projects is: If innovation management is failing at a high rate AND if change and innovation comes from the human mind, then should we not focus on the people dimension first? There are new studies out now, like the [MIT Sloan Survey 2018](#), which clearly identifies, that companies concentrating on developing a culture of continuous learning and modern leadership (getting people to take risks and encouraging staff to be more connected), are much more successful with implementing digital transformation projects. They are highly aware, skilled in communication, and outperform on creativity. They invest heavily in programs that build culture and mindsets and have left the command & control paradigm behind. They invest in becoming a learning organisation¹⁵ and in continuous learning.

¹⁵ For reading about the disciplines of a learning organisation we recommend the book "The 5th Discipline" (Senge 1990)



OK, that is great information. But as we know also cultural change programs fail at high rates. What might be the reason for this? There are several reasons:

- A missing holding environment¹⁶
- show-like events,
- project-driven approaches, which harvest resistance from all those who have contributed to the existing culture (“are we retarded Oldtimers?”).
- normative, un-empathic and platitude-generating “mission statement” - and “rules of conduct”-processes, to try to change the value system.

Trying to achieve deep culture change seems to be hard to do for leaders because it involves having to dive deeper into the ‘messy’ human dimensions and dynamics.

There also has been a lack of systematic and measurable ways to address the human experience and multiple dimensions of people and yet this is at the heart of impactful culture programs.

So how we do it right?

To provide an adequate answer, we would like to refer to the following additional sources:

Further readings:

[Human Potential und die Quelle der Innovation](#) von Jeroen Loosli

[Increasing the ‘meaning quotient’](#) by Susie Cranston and Scott Keller

[Conscious Culture](#) by Peter Leong

Further actions:

Interested to know more about the Human Potential activation? [Reach Out!](#)

The Author:



Jeroen Loosli
Metamorph SDS
Switzerland

www.metamorph-sds.com

If you wish to obtain more information write to info@metamorph-sds.com

¹⁶ Definition under https://www.researchgate.net/publication/250959617_Holding_Environments_at_Work