TINYBOX

HUMAN MINDSET

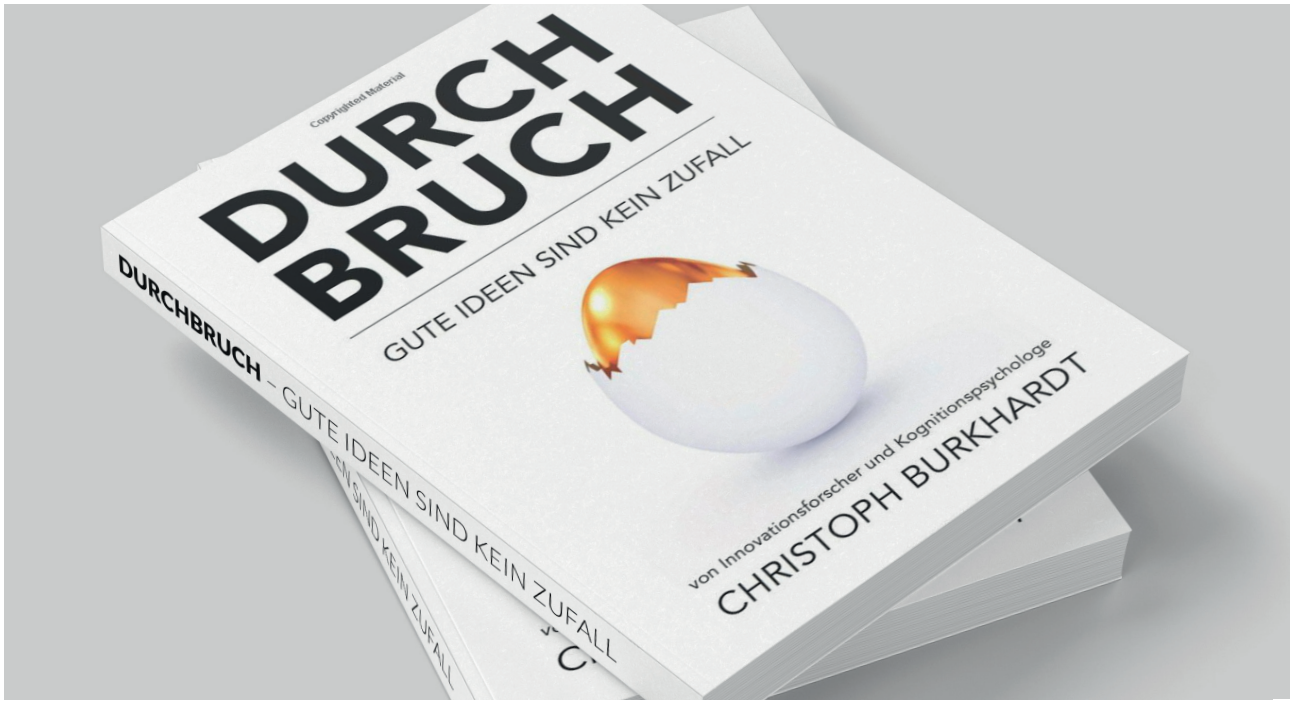
"BREAKTHROUGH: GOOD IDEAS ARE NO COINCIDENCE"

Complex problems take a lot of energy from us, they demand our time and attention. The more complex they are, the more difficult it becomes for us to identify solutions that work not only today but will continue to work tomorrow. Solving complex problems requires creative thinking and completely new mental approaches.

Good ideas are no coincidence, they are a matter of the mind. If we really use our creative potential, good ideas are created, creative solutions are developed, and they are implemented, by systematically abandoning routine thinking habits that we have been trained to use, sometimes over decades, in order to come up with completely new solutions and innovative ideas. The biggest task of our brain is to ignore information and eliminate thoughts that are not absolutely necessary. We have cognitively adapted to a world which we no longer live in.

We can understand complex problems, but only in parts. Yet we still have to make decisions that often have serious consequences. People are irrational but predictably so. We all have the ability to manipulate our own thinking.

"In the spirit of Darwin, the best-adapted ideas survive." In our case this means ideas that people agree on and that meet a need. Progress is the ceaseless chaining of innovations."



THE PROBLEM

PROFIT OR LOSS: Ask yourself: "Are you trying to achieve something positive, a gain, or to avoid something negative, a loss?" The peculiarity of complex problems is their dynamics. While for a rational mind there should be no difference in the framing of profit versus loss, for our brains it makes a huge difference. Facing a potential loss minimizes dramatically how willing we are to take risks or to stay within our framing how creative we are about finding new solutions. Ideas do not happen by chance but in chaos, because people are risk averse they are cautious particularly in loss scenarios.

QUANTITY OR QUALITY: We have been trained that there is one correct or best solution to every problem. Eliminate this convergence problem. In the world of innovation problems have many correct solutions, divergence is good, the more ideas we have the better. Quantity beats quality particularly when we are looking for high quality ideas. Hesitation is a problem and can be eliminated if we focus on quantity; rather than trying to come up with the best ideas we should try coming up with as many ideas as we can. This causes the retreat of the inhibition threshold and challenges your frustration tolerance. Unpredictable association patterns get triggered as we work on many solutions in parallel, allowing the ideas to land much further from the original idea.

TALENT OR EXPERIENCE: It's exercise not talent: "We attribute talent to other people if we do not want to make the effort to produce the same results ourselves". Good ideas are a collective task rather than an individual ability. Creativity is nothing like intelligence, stable and measurable, it depends on the situation not on the person, and requires tolerance and willingness to learn. "If you never try something that you think requires talent, how will you know that you do not have what it takes? It's your choice to give up or to try and learn."

COINCIDENCE OR CHAOS: "Coincidence is a problem. Things that appear to be related but are not, often create a belief system with which we assess new ideas." Chaos is a state in which we do not yet realize what is related but recognize that there are connections between events and ideas. Confirmation bias, supporting one's own hypotheses with evidence that matches our assumptions, leads us to base our assumptions on beliefs created in the past, and does not provide sufficient data to justify us doing so. We largely ignore everything that speaks against our hypotheses.

GUT FEELING OR THOUGHT: Intuition feeds on experience and experiences are full of emotional triggers; there is a partial systematic distortion in our intuitive system which too often provides mental shortcuts leading to the wrong conclusion. Intuition is not a random quantity, it is pretty messy. While it creates false conclusions based on past experiences which we can not explicitly access, it at the same time makes it seem as if our gut is always right.

INVENTING OR RECOGNIZING: Status quo bias makes it hard to predict the future. As we have more information about the status quo than about the future, we also have more reasons to believe that something might not work in the future. Instead of admitting ignorance, we make false predictions and believe in them. Additionally, casual discounting triggers our thought patterns in a way that lets us believe that a single cause explanation is always better than a multifaceted explanation. Of course the multifactor explanations are often the right way to go.

COLLECTIVE OR INDIVIDUAL: Innovations or evolutionary processes have no concrete goal, people strive to get the best possible picture of how the world works. We need the approval of others not so much for our ego, but for the confirmation of our world view. We can't be innovative without others. Yet more than creating something new with them, we are hard wired to prove how smart we are by criticizing the ideas of others – "For every idea we criticize, we need to bring in two new ideas."

CONVINCE OR DIE: Ideas don't speak for themselves. False consensus bias is when we share an idea with others, we assume that others see the idea the same way we do – "Ideas do not speak for themselves, we have to speak for them."

OBJECTION FROM THE PAST: Life has to be understood backwards and lived forwards. Hindsight bias makes us believe that because we can explain the past we can also explain the future. "Doing nothing is not a satisfactory option, because we do not know what will happen if we do nothing". Consider exactly what speaks against an idea and then think about what a world might look like in which your objections are no longer objectionable.

PREDICTABILITY: "Knowing almost nothing about tomorrow is the reason we grow and survive." The more that goes wrong, the more we learn, we need chaos to make mistakes. Mistakes bring about learning, progress and innovation.

THE SOLUTION

PHASE 1 – TO CONSTRUCT

COMPLETENESS OF THE PROBLEM: WHAT DO WE REALLY KNOW? Especially in groups, more emphasis is being put on consensus ideas that everyone can quickly agree on. Our need to agree with each other leads us to share mostly information that everybody has access to. We hide what only we know. That way hidden profiles are created and gaps in the available knowledge will widen.

Questions about problem construction should not be distorted by our need for agreement. The true potential of a group lies in what the individual can contribute with their unique knowledge.

RESTRICTIONS: WHAT CAN WE DO ANYWAY? Focus on things that we can change; those who think too long lose the courage and patience to think about solutions that are out of the ordinary. Consider negative brainstorming.

Consider what's wrong with the status quo. Make a list, then collect as many solutions as possible for each negative challenge and create sustainability through adaptability. Ignore the restrictions that you can not influence - for blue sky thinking, ignore money and time. Unless we define what exactly the problem is, we are deprived of actual solutions.

RELEVANCE: WHO CARES? Ask good questions. Bring questions into your own sphere of influence and ideally, a high number of possible solutions. A relevant question is one that is more than just interesting. Relevant questions make someone invest in the answer because the answer solves an actual problem. Creating relevance means identifying problems that people care about.

PHASE 2 – TO GENERATE

ABSTRACT & CONCRETE: Consider the level of abstraction of a concept or topic, abstract (globalization) vs. concrete (mobile phone function). All abstraction levels are needed for the creative process. "As the perceived psychological distance shifts at different levels of abstraction, abstract and concrete perspectives yield very different results."

ANALYTICAL & INTUITIVE: Let's think in scenarios - e.g technology. Imagine a world without gravity. Think about what would be easier, what would be more difficult? Create your own if – then scenarios. Play through all scenarios until you are far enough away from your own world and move toward a world as it could be.

SELF-CRITICISM & SELF-SUFFICIENCY: Remove omission bias, repenting an action is stronger than a non-action. Give your inner critic space, we do not know which of our ideas are really good until others decide they are. We measure the ideas of others by the status quo and not by their future potential. We have the social need to be right and the only way to be right is if we share our opinion about other people's ideas. Critical feedback is especially constructive for the one who provides it. Less so for the one who receives it. It's a fallacy that constructive criticism helps the evolution of ideas. Overconfidence makes us overestimate our capabilities and chances of success. The inner critic will cut those ideas short.

DRAG & DROP: Consider starting with an existing system or idea. Collect both abstract and concrete elements of it (e.g. University). Then take another system with another idea from which you can copy elements (e.g. fast food). We replace elements of our first system with elements of another idea. Change the context (e.g., airplane instead of campus). Change functions (library as a place of socializing rather than learning). Turn expectations around (turning around the assumptions).

PHASE 3 – TO ASSESS

FEASIBILITY: NO REASON TO GIVE UP IMMEDIATELY. The quality of the first idea you come up with, sets a standard for all subsequent ideas. This standard and underlying quality is an indicator of how well the ideas match the restrictions surrounding it. Giving up immediately means we overvalue the quality of the first idea. It simply is not as important as it seems. For accurate assessment of ideas we need to define a standard that does not interfere with the ideas but objectively reflects the restrictions. The standard therefore has to be implemented before ideas are being assessed. "Big restrictions are not the deciding factor. It is our lack of imagination that leads to a lack of implementation."

VISIBILITY: LEARNING TO RECOGNIZE GOOD IDEAS. Manage the systematic confusion of quality and feasibility. Remember that the mass of individual assessments often beats the individual expert opinion. Ask experts first and foremost "how" your idea will succeed.

CONVINCING: EVEN WITH OPPOSITION. Often it's not the ideas or the beliefs that stop an idea moving forward, but how the people share their ideas. The idea has to be easy to understand, so ask good questions. Remain concrete but also show the big picture. Speak the language of your counterpart: emotions and stories for intuitive listeners; facts and figures for analytical ones. Balance doubt with confidence. Inspire by using honesty and authenticity about your idea.

UNIMAGINABLE: IGNORED, RIDICULED, FOUGHT... AND WON. "First they ignore you, then they laugh at you, then they fight you and then you win." In predictions, we take mental shortcuts and often misjudge the situation. People see patterns and structures where often there are none. You have to fight for the unimaginable and win to create change.