

A case study in combating bias

Following several disappointing investments, the German electric utility RWE overhauled its decision-making processes. Learn how from the CFO who spearheaded the effort.

The Quarterly: *Tell us a bit about the circumstances that motivated RWE's management to undertake a broad debiasing operation.*

Bernhard Günther: In the second half of the last decade, we spent more than €10 billion on big capital-expenditure programs and acquisitions in conventional power plants. In the business cases underlying these decisions, we were betting on the assumptions of ever-rising commodity prices, ever-rising power prices. We were not alone in our industry in hitting a kind of investment peak at that time. What we and most other peers totally underestimated was the turnaround in public sentiment toward conventional power generation—for example, the green transformation of the German energy system, and the technological progress in renewable generation and related production costs. These factors went in a completely opposite direction compared to our scenarios.

Conventional power generation in continental Europe went through the deepest crisis the industry has ever seen. This ultimately led to the split of the two biggest German players in the industry, E.ON and RWE. Both companies separated their ailing conventional power-generation businesses from the rest of the company.

The Quarterly: *Was it difficult to convince members of the executive and supervisory boards to scrutinize your decision-making practices?*

Bernhard Günther: Actually, it was the supervisory board asking, “Where has the shareholders’ money gone?” and we in the executive board wanted to learn our lessons from this experience as well. So we embarked on a postmortem analysis to understand what went wrong and why, by looking at a sample of these €10 billion investments. We asked ourselves, “Is there anything we could

have done differently, and if so, how can we learn from this in the future?” The spirit of it was not about shaming and blaming, but about learning from our own mistakes.

The Quarterly: What were the main contributing factors that you identified in your investigation?

Bernhard Günther: There were a few outright areas of managerial under-performance such as some time and cost overruns on the €10 billion investments, totally unrelated to external factors. There were also exogenous factors that were not in our base-case assumption but that should have been within our solution space—the most obvious being the political intent to push renewables into the market, which was publicly known at the time our investment decisions were made. There was also at least one unforeseeable factor—the Fukushima disaster. The German government reacted by rushing into a sudden exit from nuclear-power generation. Roughly half of the nuclear plants were switched off immediately, significantly shortening the economic lifetime of the remaining plants. But even if you discount for Fukushima, I think the ultimate end game wouldn’t have looked much different from today’s perspective; it just speeded the whole thing up.

The Quarterly: As you analyzed the decision-making dynamics at work, what biases did you start to see?

Bernhard Günther: What became obvious is that we had fallen victim to a number of cognitive biases in combination. We could see that status quo and confirmation biases had led us to assume the world would always be what it used to be. Beyond that, we neglected to heed the wisdom of portfolio theory that you shouldn’t lay all your eggs in one basket. We not only laid them in the same basket, but also within a very short period of time—the last billion was committed before the construction period of the first billion had been finalized. If we had stretched this whole €10 billion program out over a longer period, say 10 or 15 years, we might still have lost maybe €1 billion or €2 billion but not the amount we incurred later.

We also saw champion and sunflower biases, which are about hierarchical patterns and vertical power distance. Depending on the way you organize decision processes, when the boss speaks up first, the likelihood that anybody who’s not the boss will speak up with a dissenting opinion is much lower than if you, for example, have a conscious rule that the bigwigs in the hierarchy are the ones to speak up last, and you listen to all the other evidence before their opinion is offered.

And we certainly overestimated our own abilities to deliver, due to a good dose of action-oriented biases like overconfidence and excessive optimism. Our industry, like many other capital-intensive ones, has had boom and bust cycles in investments. We embarked on a huge investment program with a whole generation of managers who hadn't built a single power plant in their professional lives; there were just a few people left who could really remember how big investments were done. So we did something that the industry, by and large, hadn't been doing on a large scale for 20 years.

The Quarterly: *On the sunflower bias, how far down in the organization do you think that went? Were people having a hard time getting past their superiors' views just on the executive level, or all the way down?*

Bernhard Günther: Our investigation revealed that it went much farther down, to almost all levels of our organizational hierarchy. For example, there was a feeling within the rank and file who produced the investment valuations for major decisions that certain scenarios were not desired—that you exposed yourself to the risk of being branded an eternal naysayer, or worse, when you pushed for more pessimistic scenarios. People knew that there were no debiasing mechanisms upstairs, so they would have no champion too if they were to suggest, for example, that if we looked at a “brilliant” new investment opportunity from a different angle, it might not look that brilliant anymore.

The Quarterly: *So, what kind of countermeasures did you put in place to tackle these cultural issues?*

Bernhard Günther: We started a cultural-change program early on, with the arrival of our new CEO, to address our need for a different management mind-set in light of an increasingly uncertain future. A big component of that was mindfulness—becoming aware of not only your own cognitive patterns, but also the likely ones of the people you work with. We also sought to embed this awareness in practical aspects of our process. For example, we've now made it mandatory to list the debiasing techniques that were applied as part of any major proposal that is put before us as a board.

It was equally important for us to start to create an atmosphere in which people are comfortable with a certain degree of conflict, where there is an obligation to dissent. This is not something I would say is part of the natural DNA of many institutions, including ours. We've found that we have to push it forward and safeguard it, because as soon as hierarchy prevails, it can be easily discouraged.

So, for example, when making big decisions, we now appoint a devil's advocate—someone who has no personal stake in the decision and is senior enough in the hierarchy to be as independent as possible, usually a level below the executive board. And nobody blames the devil's advocate for making the negative case because it's not necessary for them to be personally convinced; it's about making the strongest case possible. People see that constructive tension brings us further than universal consent.

The Quarterly: How did you roll all this out?

Bernhard Günther: There were two areas of focus. First, over a period of two years, we sent the top 300 of our company's management to a two-week course, which we had self-assembled with external experts. The main thrust of this program was self-awareness: being more open to dissent, more open to a certain amount of controlled risk taking, more agile, as with rapid prototyping, and so forth.

RAPID REFLECTIONS FROM BERNHARD GÜNTHER

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2 WHICH HISTORICAL FIGURES DO YOU ADMIRE THE MOST?

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4 WHAT SKILL DO YOU THINK IS MOST UNDERVALUED IN LEADERS TODAY?

Listening

Then we also launched a training program for managers and experts, especially those involved in project work—for example, the financial controllers that have to run the models for big investment decisions. This was a combination of a training course, some desktop training you could do on your own, and some distributed materials.

This program explicitly focused on debiasing. It started with these typical examples where you can show everybody how easily we fall into those cognitive traps, framing it not as a personal defect but as something that's just there. Secondly, it emphasized that debiasing can be done much more easily within a group, because it's a collective, conscious effort. And not some kind of empty ritual either. We taught very specific things that people could apply in their daily practices. For example, you can do a kind of premortem analysis and ask your team, "Imagine we are five years into the future, and this whole project we're deciding on today has turned out to be a complete disaster. What could have happened in the meantime? What could have gone wrong?" This is something that we are now doing regularly on big projects, especially when there are uncertain environmental factors—whether macroeconomic, technological, ecological, or political.

The Quarterly: *Could you tell us about an example or two where you made a different decision as the result of debiasing practice, where it went the other way from what you initially thought was the right answer?*

Bernhard Günther: Two examples immediately come to my mind. The first one came up in the middle of 2015, when it became obvious that our company was in a strategic deadlock with the power-generation business—the cash cow of the company for years but now with a broken business model. There was a growing awareness among senior management that trying to cure the crisis with yet another round of cost cutting might not be good enough, that we needed to consider more radical strategic options. We established a red team and a blue team to come up with different proposals, one staffed internally and one with externals. We wanted an unbiased view from the outside, from people who were not part of our company or industry; in this case, we brought in external people with backgrounds in investment banking.

The internal team came up with the kind of solution that I think everybody was initially leaning toward, which was more incremental. And the external team came up with a more disruptive solution. But because it was consciously pitched as an independent view, everybody on the board took their time to seriously consider it with an open mind. It planted the seedling of the strategy that we adopted to split the company into two parts, which now,

a good year later, has successfully concluded with the IPO of Innogy. If we hadn't taken this approach, maybe months later or years later, somebody would have come up with a similar idea, but it wouldn't have happened that fast, with that kind of momentum.

The second example is a recent potential investment project in renewable energy that carried high reputational value for us, so there were emotional issues attached to winning the project. We were bidding for a wind park that was to be built, and the lowest bidder wins by offering the lowest electricity price. We knew it would be a very competitive auction for that project, and we had already decided in the run up to the decision making that we wanted to have a devil's advocate involved.

We had the project team make the case first in the board meeting. Then we had the devil's advocate put forward analysis of the risk–return trade-offs. All of this was in written form, so everybody had to read it before the meeting. This certainly helped our discussion a lot and made it much easier to have a nonemotional debate around the critical issues. And we came out of it with a different and I think better decision than we would have if we had just taken the proposal of our internal project team at face value.

The Quarterly: *Now that these decision-making changes have taken hold, how do you see things running differently in the organization?*

Bernhard Günther: Looking back at where we were three or four years ago, I'd say that this practice of awareness and debiasing has now become almost a part of our corporate decision-making DNA. But it's something you have to constantly force yourself to practice again and again, because everyone at some point asks, "Do we really need to do it? Can't we just decide?" It's a very time-intensive process, which should be utilized only for the most important decisions of strategic relevance. About 30 percent of our board's decisions fall into this category—for example, major resource-allocation decisions—and it's similar elsewhere in the company.

Also, people's general awareness of the complex set of issues around cognitive biases has grown dramatically. Before this, things easily degenerated into blaming exercises going both ways. The naysayers were critiquing the others for wanting to push their pet projects. And the people promoting these projects were saying that the naysayers were just narrow-minded financial controllers who were destroying the company by eternally killing good business ideas. But now there's more mutual respect for these different roles that are needed to ultimately come up with as good a decision outcome as possible. It's not just about debiasing; it's given us a common language.

It's now routine for somebody to say in a meeting, "I think we need some debiasing here." And then everybody can agree to this without any need to get emotional. When in doubt, we just go through the process.

The Quarterly: *Do you have any recommendations for other senior leaders who might be reading this interview?*

Bernhard Günther: I think when you read about these issues, it can seem a bit esoteric. You might say, "Well, maybe it's just their problem, but not mine." I think everyone should just do it; just start with it even on a pilot basis. You don't have to start rolling it out across 1,000 people. You can start with your own board, with a few test examples, and see if you think it helps you. But if you do it, you have to do it right; you have to be serious about it. Looking back, there were a few key success factors for us. For one, top management has to set an example. That's true of any kind of change, not just debiasing. If it's not modeled at the very top, it's unlikely to happen further down the hierarchy. Second, everyone has to be open to these ideas or it can be difficult to really make progress. At first glance, many of the tools might seem trivial to some, but we found them to have a very profound effect. 

Bernhard Günther joined RWE in 1999 and served as the company's chief financial officer from 2013 until the 2016 spin-off and IPO of Innogy, where he is now CFO. This interview was conducted by **Sven Heiligtag**, a partner in McKinsey's Hamburg office, and **Allen Webb**, *McKinsey Quarterly's* editor in chief, who is based in the Seattle office.

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