



# Interview with Niels Simanis, Danske Bank

# **Effort and effect**

Niels Simanis is a cost hunter for Danske Bank, one of the largest banking groups in the Nordic countries. He leads a task force of less than ten experts at finding needles in haystacks – and since 2004 they have facilitated savings of more than 150 million Euros.

"If we didn't have SMT's software, we'd have had to spend a whole lot of time and effort in gathering that knowledge in other ways."

Niels Simanis' life is a constant balance between effort and effect. It doesn't take long to identify an effort – but accurately estimating its effect takes some systems.

"You don't get far in an organization such as Danske Bank if you're not able to very precisely describe what you want to do, what the results will be, and what costs will be incurred."

Niels Simanis uses his hands to visualize a given effort.

"Here's something we could do and which would lead to more effectiveness", he says. "Do we want it for 10 million Euros? No, we don't. Do we want it for 5 million? Still, no. How about 100,000? Yeah, we'll take it for 100,000 Euros. OK, so far so good. And that's exactly where SMT has contributed to making the cost side of things very clear to us, so we know what we're looking at. It gives us a valuable sharpness to our focus when it comes to costs. It makes it easy to achieve an overview of the best potential for savings.

Niels Simanis' department was founded in 2004 and tasked with finding and minimizing costs. As for means and methods the limitations were few. But the challenge was clear: To overcome a steep learning curve and meet great expectations as far as results were concerned. And to be able to fully document everything they did.

"You have to be able to describe an effort and its effect very accurately. Otherwise, it is very hard to get a management like ours to approve anything



### **About Danske Bank**

Danske Bank is Denmark's largest bank. It has 2.2 million private customers and services a significant part of the private, institutional and public sector in Denmark. It also has banking activities in Sweden, Norway, Finland, Ireland and Luxembourg.

Danske Bank has more than 300 branches, and 1,000 ATM's across the country. The bank employs 6,000 people in Denmark and it is a part of the Danske Bank Group, which employs 22,000 people in 15 countries.



at all. But that's where SMT's software makes it possible for us to paint a scenario with the overview that's asked for. We'd never be able to do that if we didn't know the costs. So in this way, SMT's product has been – and is – an enabler of cost reductions. And we're talking quite a lot of money. In the years this department has been operative we have saved Danske Bank more than 150 million Euros."

In Danske Bank an economic boom – such as Denmark had for the first twothree years of Niels Simanis' time with this department – goes fine hand in hand with a cost savings mindset. The bank has no trouble rationalizing sizable investments in, for example, acquisitions of other banks, while at the same time operating under a strategy that calls for cost savings wherever possible.

"Solving our task has called for the development of some pretty sophisticated processes", Niels Simanis says. "First we looked at systems. Then we looked at programs. Now we have dug ourselves all the way down to looking at what the compiler of the programs is doing – and we're starting to look at what can be done about the hardware. So we go everywhere to find optimizations. We have found ways to write programs more efficiently and learn how that affects the processes within the machines."

Even though the efforts to get inside the very fabric of the system are important a lot of resources are reserved for them, they have natural limitations, Simanis explains:

"We have to admit our systems are so complex that we can't juggle them around in our heads. We need to have in place systems to tell us if our systems are running as they should or not. You may have heard about fighter planes that have built-in instability to their aerodynamic characteristics. They have to be, in order for the planes to be able to withstand all kinds of stress in combat. And then you add computers that can compensate for the pilot's input. Only without the computers the pilot is not able to fly the plane. That's what you see in modern IT systems – they are so complicated that we don't know their normal mode of operation. And when we don't know that it's a question of are we running the systems – or vice versa."

Danske Bank runs app. 100,000 transactions per day – with upwards of six billion calls to databases. The bank has programs that are called 75,000 times per second, creating the occasional chaos, Niels Simanis concedes.

"When an event occurs that makes the system stop – just for a second – it means we have backlog of several thousand transactions when the systems starts up again. And even if it only means that some people have to log on to their online net bank again, that's not the kind of service the bank wishes its customers to experience."



"We constantly seek what we call normal state of operation. And I don't believe that's something you can achieve by hard work alone. Putting your shoulder to the grindstone doesn't do the trick. We have to step back – far back – from the detail to get the overview. An example is neural networks which we have been working on since 2005. This year we have made our first delivery in the shape of a tool we can give to our developers and which relates to the fact that we need to be able to handle 10 megabyte metric data per second and still be in control."

"It is vital to understand that you cannot manually control a large IT system. We have to build systems to watch the systems. And that's exactly where there is a tremendous growth potential for SMT. I am in contact with a major European supplier to the German banking industry. They run 50,000 cash machines and 65,000 branch offices. They're huge – twelve times our size. And they want to learn from us how we have put up golems around our costs. We have arranged a workshop to learn from one another. Obviously we also have a lot to learn from them, for instance how to present and implement new solutions in a complex system."



#### Challenge

To establish and run a special task force for cost detection, elimination and prevention.



#### Action

The task force combines a full SMT Data solution with serious inhouse capabilities. New solutions are developed and added continuously.



#### Results

Since its inception in 2004 the task force has realized savings of around 150 million Euros. Danske Bank's developers use SMT tools to regulate behavior and comply with budgets.

A new spirit of commonality and cooperation now exists between Software developers and IT-operation.



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