

Green light means “go” at Novo Nordisk



THE SPEEDOMETER IS PLAYING A CENTRAL ROLE AT THE PHARMACEUTICAL GIANT, NOVO NORDISK. THE COMPANY MEASURES ITS OPERATIONS INTO THE TINIEST DETAIL, BUT HAS CREATED AN EXTREMELY USER-FRIENDLY SYSTEM WHICH GIVES A QUICK OVERVIEW.

- Look at this, most factories have met their targets. But here is one which has not produced the required volume of insulin, so the speedometer has gone into the red area.

Peter Grand points to the screen, showing how to go deeper into the information about the unfortunate factory. Through the underlying source systems, you can see that the factory has had some temporary logistics problems. Peter Grand is project manager at Novo Nordisk and responsible for the advanced Data Warehouse system which enables the company to monitor the operations in the global group down to the tiniest detail.

- We measure across geography and organization, and with the Data Warehouse solution we have an amazing system to control operations and make quick, strategic decisions, he says.

However, not many years ago, the decision-making process was quite different and much longer at Novo Nordisk. Until 1995, each department and factory would

use different IT systems, and therefore meetings were often spent discussing figures instead of making decisions and setting up plans.

- At the time, Novo had reached a size where overview and the ability to act were absolutely business critical and the old IT structure did not allow this. On the contrary, it created separate information islands in the company, therefore, we decided to invest in a new business solution, Peter Grand explains.

CLOSE CO-OPERATION

Novo Nordisk contacted three IT consulting companies with expertise within Business Intelligence and Data Warehouse. In addition to Platon, they were Oracle and SAS Institute.

- We chose to continue with Platon, because they had the best business understanding. At the same time they challenged the habits at Novo Nordisk. They also dedicated a permanent team to us, which is incredibly important when you

are dealing with a system as complex as this, says Peter Grand.

He continues to say that even today, Novo Nordisk has a close co-operation with Platon, for the solution which was at first developed for the factory and headquarters in Bagsværd is now being implemented in all strategic factories. Today the system is fully operational in ten factories, and several factories are lining up to use the system fully.

NO WASTE

The system developed by Novo Nordisk and Platon is called PEIS (Pharmaceutical Executive Information System). The system has from day one influenced the way in which the factories in Novo Nordisk operate. The company now has the overview of what happens in the organization which was previously missing, and this has led to several additional bonuses. One of the most important is an optimization of the production. Peter Grand mentions the filling of insulin into small vials as an example.

NOVO NORDISK:

- Market leader within the treatment of diabetes
- Represented in 68 countries
- Production in 8 countries
- Represented in 68 countries
- Production in 8 countries



Novo Nordisk



- The system enables us to compare the volume of insulin we discard in a production process and why. We discovered that there was considerable waste when the automated robots poured insulin into vials. We lost several percent of the insulin in that process. We have now introduced improved sensors on the robots and we now have no waste, says Peter Grand.

Novo Nordisk also uses the PEIS system for benchmarking of the individual factories. The management keeps an eye on whether some factories are doing better or worse than others. The depth of the system is an advantage here, because it does not only enable the business to see how things are going, but also why.

- We can look at the performance in the individual factory and department, and we can even compare at machine level. This enables us to learn from what is going well and make corrections where the targets are not met, says Peter Grand.

FROM RED TO GREEN

The PEIS system is based on the Balanced Scorecard principle. The core of the system is a number of strategic measuring points. KPI (Key Performance Indicators) within finance, business processes, customers and organization. The system collects data from all source systems in the company, including among other things the production system, the warehouse management system and the HR system,

and compares the figures with the targets which have been set up.

The result is shown pedagogically and transparently as speedometers which are green when the targets have been met and red if you are behind schedule.

- A KPI may for example measure production lead time for the products in the factories. Novo Nordisk has defined an acceptable limit for the period from a product has been produced and until it is released. If the limit is exceeded, it will immediately appear in the system, says Peter Grand.

SYSTEM FOR EVERYBODY

The data captured from the PEIS system is user-defined, so that the user will only have access to data which is relevant to his/her function. Thus the system is not just a management information system as is often the case for Business Intelligence systems, but a system for everybody at Novo Nordisk – hourly workers, salaried employees and the management. They all use the system with different qualifications and aims, but with the same result – an overview and evaluation of the work processes.

The roll-out to the factories and the integration of the system is relatively simple. The server is in Bagsværd, and Internet access is all that is needed to connect to the other factories in Denmark, France and the USA.



RESULTS:

- As soon as the meaning of the figures and their purpose have been explained to the employees, a favorable attitude to the system is soon created. The employees know that we are all working together and that we need the figures to progress, says Peter Grand.

THE PEIS SOLUTION:

Front-end:

- Pilot Balanced Scorecard

Data Warehouse Database:

- Oracle

ETL tool:

- DataStage

Number of users:

- More than 800 users