

Insurance Analytics part 3: Increased efficiency at a Dutch insurer by applying Operations Analytics

A Deloitte point of view on Data Analytics within the Dutch Insurance industry

“Insurers have invested in Data Analytics but see a limited return in business value”. This is one of the outcomes of a research amongst Insurers in [EMEA](#). This third blog will give a concrete example of how Deloitte’s Operations Analytics approach resulted into value for a Dutch insurance organization.

Introduction

Over the last years most insurers have invested in Data Analytics solutions and understand that investing in these solutions is key to survive in a fast changing environment. However, [a recent study among 68 EMEA Insurance companies](#) showed that 90% of interviewed firms struggles to see a positive business case on Data Analytics solutions.

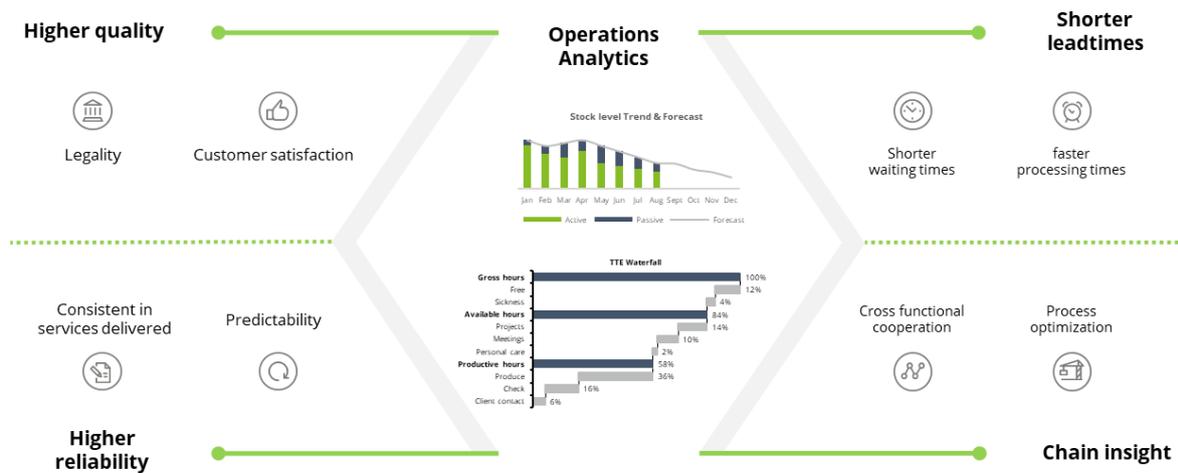
In our first blog different operating models for Data Analytics capabilities were described, including their respective pros and cons. It was explained that there is no one size that fits all. In the second blog the process for setting up a business case for a Data Analytics organization was explained and examples of impact and required investments were given.

This blog will give a concrete example of an Analytics solution delivered within an Insurance organization. The case described is from our Operations Analytics approach which was implemented in multiple Dutch and International Insurance organizations. We’ll describe the details of this approach and explain how we have reached a positive impact at a large Dutch insurance organization in terms of managing stock levels, increasing efficiency and optimizing capacity.

The world is changing faster than ever and companies with a large operations workforce are experiencing this. Earlier, improvements in efficiency were achieved by for example implementation of the LEAN philosophy and by improving process flows. The rapid technological shift that is now taking place requires a new mind set towards the topics of operations data, improvements and analytical thinking. How do you transform your operations to become more efficient in this new world? Deloitte’s Operations Analytics can help you answer this question.

Where LEAN and Six Sigma are usually focusing on individual processes, Operations Analytics applies a broader view in terms of performance. In this methodology, operations themes are linked to a certain amount of required and planned capacity, focusing on the gap between them. In the situation where there is too much overcapacity, a back-office has the possibility to cut costs by downsizing. In the reverse situation, undercapacity, employees are not able to make deadlines, resulting in lower customer satisfaction and an unmotivated workforce. Of course, both situations

are hurting an organization in the long run. Therefore, it is key to match the required and planned capacity as close as possible while retaining the flexibility to deal with unexpected peaks.



Deloitte's Operations Analytics applied

This is where Deloitte's Operations Analytics comes in. It is successfully applied at a Dutch insurance organization by making use of Deloitte's tooling which allows you to gather data, create an operational planning, set norms, forecast, measure performance and register improvement ideas. Five operational themes were touched, as described below:

- Stock and lead times**

Stock and lead times are the most important of almost all back offices. In the ideal world, the backlog has a maintainable number of items on it, such that every employee is fully utilized and required client service levels are satisfied. During the program at the Dutch insurance organization, the backlog shrank over 75% due to efficient workforce utilization. When forecasting with historical data, trends in terms of inflow are spotted, which can be used to optimize the required workforce. Insights into lead times of the current and processed stock are used for input to optimize client servicing and meeting customers' expectations. This led to an increase of the percentage handled within client expectations from 64% to 95%.
- Quality**

The quality of the work done by employees is very important. The throughput of a back-office environment can be increased by minimization of rework. This can be achieved by using generalized quality checklists that identify the process steps with a higher error rate. The operations manager is able to spot those process steps and is able to act on that by providing training and clear instructions.
- Productivity and efficiency**

The two operations themes productivity and efficiency are closely related, but not exactly equal. Productivity is concerned with the use of time, i.e. how much of the time that the employee is planned, is used on productive tasks? Of course increasing productivity has a positive effect on outflow of stock. In the specific case, the time spend on production over gross hours improved from 43% to 58%. Efficiency is defined as the ratio between the actual time spend on assignments and the earlier defined norm time on these assignments. In laymen's terms this describes your workforce's speed of processing. In the Dutch insurance organization efficiency was

monitored and the norms were continuously adjusted. Insights in underperformed processes leads then to the bottlenecks which could potentially be improved.

- *Capacity*

All of the earlier described topics lead to a required, forecasted capacity. Firstly, a baseline is determined for an assignment and multiplied by the forecasted inflow, which leads the amount of work to be done expressed in hours. By now factoring in the rework done due to human error, the productivity and the efficiency of the workforce a required capacity are calculated. This forecast is be compared to the planned capacity from the employee schedules, which allows you to optimize your capacity towards future workload. In our case, this led to an improvement of the deviation between planning and realization of 10%.

- *Continuous improvement*

Continuous improvement closes the learning loop on all operations processes. Employees are able to register their improvement ideas themselves in a dedicated system. In this system the ideas can be tracked, the benefits can be totaled and the ideas are coupled to the insurer's strategic goals.

Tooling

The Operations Analytics framework provides guidance, based on the five themes, to improve the operational performance, but how does an organization gather all this data?

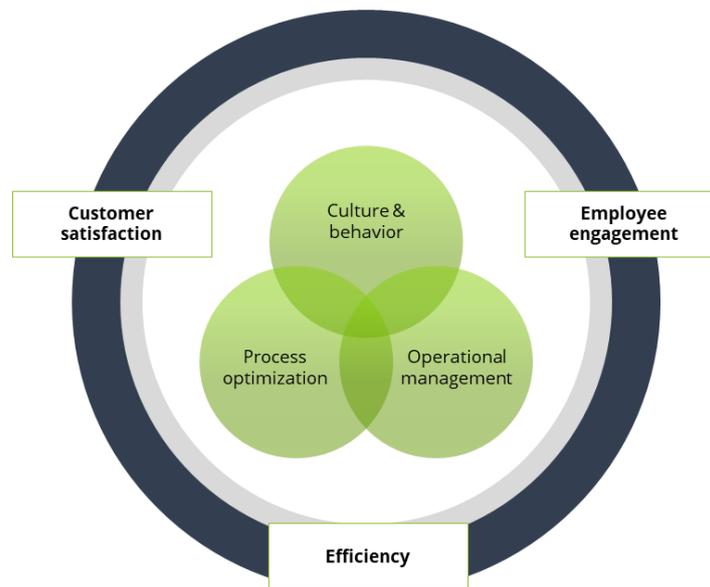
Deloitte developed tooling which can be used by all levels in your organization. With this tooling the employee has real-time insight in the current stock level and is able to plan the day accordingly. Moreover, the tool enables the employee to allocate time on tasks on a real-time basis, register the quality of processes and submit improvement ideas.

On top of this, Deloitte delivers a dashboard solution that provides the managers with not only the current status of the five themes, but also the historical performance. These insights support fact-based decision making. By enabling managers to use filters, instead of pre-made reports, they automatically become more comfortable with data. One of the most important parts of this dashboard is having a reliable forecast on the teams. Of course this helps in estimating the required capacity in the best possible way.



Impact

Earlier in this article, the difference between regular efficiency frameworks and Deloitte's Operations Analytics is explained. The former focusses on specific processes, while Operations Analytics takes a step back and has a broad overview of the performance of the organization by using insights from data and enabling continuous improvement. This has a positive impact on the customer satisfaction, the organization's efficiency and your employees' engagement.



When the insights are centrally available and understood, operations managers can start steering their operation with data. Transitioning from managing on “gut-feeling” to using facts and figures on a daily basis requires a significant culture change which must not be forgotten in these transitions. Therefore, the aftercare part of Operations Analytics projects is equally important as the first part. To embed this fact-based approach in the organization, we supported in setting up daily and weekly standups, provided training on how to use the insights and shared success stories.

Having all the basic insights in terms of operational performance available opens the door to more sophisticated analyses and applications. Repetitive and error prone processes can be robotized by Robotic Process Automation (RPA). Insights about hidden relationships in the data, that were not spotted by analysts, can be made available with AI techniques. In both cases Operations Analytics acts as a foundation and enabler for more advanced techniques.

Conclusion and follow up

Summarizing, the benefit of Operations Analytics instead of normal process optimization is the broader view on your operational performance, made measurable by your goals, KPIs and measures. By bringing this all centrally together with easy-to-use tooling and closing the learning loop by implementing a continuous improvement culture, the Dutch insurer started leveraging the power of data for improving operational performance. This data is used to spot RPA opportunities and gain insights by applying advanced analytics techniques to be ready for the next technological shift.