ABSENTEEISM INSIGHTS REINVENTED

- a 3 level deep dive with data analytics -

> *Big data. HR analytics. Machine Learning. Predictive Modelling. And Artificial Intelligence being the new kid on the block. Most CEO's of larger companies have these buzzwords on their agenda. Surprisingly, it is hardly used on the largest cost and most important asset,* ***people****! According to a Deloitte study 66% of CEO's have recruiting the right staff defined as a top priority. This makes managing absenteeism more relevant than ever.*

At Workmetrics we apply data analytics to workforce related topics. In this paper we focus on Absenteeism and explain how using a 3-level data analytics approach can generate insights enabling you to select the interventions that will be most effective for reducing absenteeism in your company. A short video and a free Quick Scan are included to provide you with some practical insights.

How we consider absenteeism & data analytics

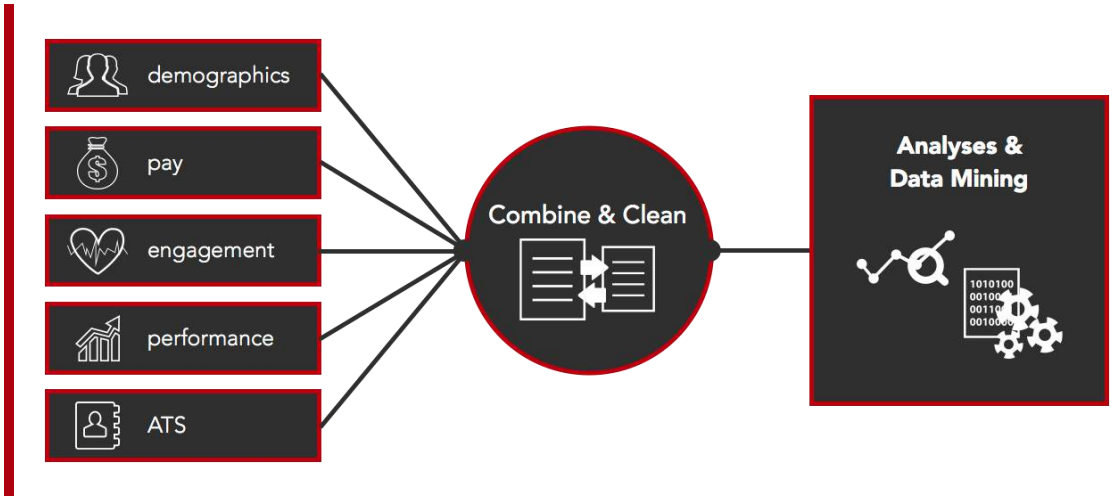
Taking the issue of absenteeism, it is our experience that most organizations merely use the very rudimentary data which is directly available from their absenteeism system. Data which is typically provided by their internal or external occupational health service provider. At best, these reports include absenteeism rates, differentiated by demographics and benchmarking figures for organizational units. This limited and static approach does not deliver the insights management needs to decide what interventions must be put in action for an effective reduction of absenteeism.

At Workmetrics we take a more sophisticated and comprehensive approach. We combine *multiple* data sources - already present in your organization - and apply state-of-the art data analytics techniques, combined with modern management science and senior level management experience. This way we can create more adequate performance indicators and provide much better insights for management.

LEVEL 1

Interactive Absenteeism Dashboard ("Identify")

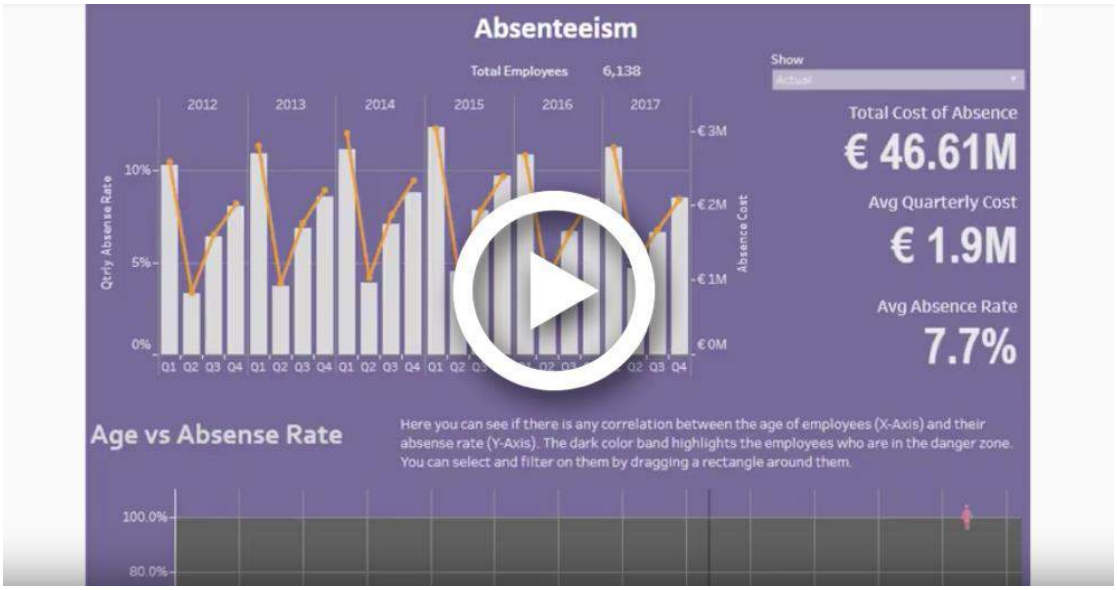
Workmetrics combines data from different, often segregated, data sources into one dataset. In the case of absenteeism, we combine absenteeism data and the data kept in the salary system and the personnel information system.



The approach consists of two steps. First, we calculate the total costs of absenteeism, being the sum of all direct and indirect costs, such as salary cost, replacement costs, opportunity loss, reintegration costs, and the cost of occupational health services.

Secondly, Workmetrics generates an interactive dashboard for you, dedicated to - in this case - absenteeism. These dashboards can be deployed using software like Tableau or Microsoft Power BI.

The dashboards enable you to '*slice and dice*' the data to any demographic set of criteria you might think is appropriate for your journey to identify the "hot spots" of absenteeism within your company. With these insights you determine appropriate interventions to cut off 'the top' of your absenteeism. In a 5 minutes video we demonstrate this is in action.



LEVEL 2

Simulation Analytics for a deeper understanding of Absenteeism ("Prioritize")

In the video above, you have seen that with our interactive dashboards you can do a lot of analyses yourself. Now we will dive into the next level Simulation Analytics for a deeper understanding.

The first step is expanding the absenteeism dataset with additional data sources, such as the results of employee surveys creating a richer set of variables. Next we can test different scenarios and the impact of specific variables. This generates a more enriched understanding of the challenges at hand. You are now able to prioritize the set of interventions according to impact, thus reducing absenteeism at the most effective and cost-efficient manner.

LEVEL 3

Predictive Analytics on Absenteeism – ("Predict")

A more advanced application of data analytics is predicting and forecasting. There are several predictive techniques that all have specific requirements to the quality and the quantity of the available datasets.

One of the applications can be a classification model. We have built such a model for absenteeism and tested it with a result of 73% accuracy. By applying machine learning techniques, we can even improve the 73%. The HR staff can compare the features of individual employees and groups of employees with the classification model and determine which support package is most effective to prevent and reduce absenteeism. Individualized tailored support is much more effective compared to generic absenteeism.

ESTIMATING YOUR COSTS OF ABSENTEEISM

A free Quick Scan – No Registration needed

Workmetrics has developed a Quick Scan that can give you a first indication of the absenteeism costs in your organization. We think it is interesting to compare the result with your internal figure. The Quick Scan also delivers 2 more KPi's: Costs of Performance Loss and Costs of Employee Turnover. Click the visual below to start the Scan and see the results in 3 minutes.

Summary

Identifying the most critical areas of absenteeism and its related costs is the scope of Level 1 - Smart Dashboards. At Level 2 we identify using simulations the impact of specific variables thus reducing the set of interventions by ranking them on impact and cost. We concluded our deep dive at level 3 by applying predictive analytics to add value to the effectiveness of absenteeism policies, both with respect to prevention as well as reduction.

At Workmetrics we also apply the framework described in this paper to other workforce risks, such as sustainable performance and managing Big Risks. Together with you and your team we can align our solutions with your focus and configure the techniques and software in such a way that they generate the insights you need to make data-driven workforce decisions.

More about Workmetrics: https://workmetrics.nl/