

Midor is a major Swiss producer of confectionery, baked goods and ice creams. Midor relies on innovation, market knowledge and high-quality standards to “make people happy, all day long”.

Midor has embraced the Qlik Sense and GeoQlik complementary solutions to monitor, analyze and improve their production line productivity.



Midor is a Swiss market leader in confectionery, baked goods and ice creams. Launched in 1928, Midor is part of the Swiss retail group named Migros. Midor produces 940 branded and own-brand goods on 32 production lines within their factory based in Meilen, near Zurich in Switzerland. As a proud and committed ambassador of the Swiss quality abroad, Midor exports their products to 20 countries. [www.midor.ch](http://www.midor.ch)

### Business & Decision

Business & Decision is a global management, strategy consulting and system integration group, helping their customers to break through barriers to innovation and business transformation. [www.businessdecision.com](http://www.businessdecision.com)



Business Geografic is a French innovative software provider in the fields of Geographic Information Systems (GIS) and Geo-Analytics. Business Geografic is the software provider of GeoQlik for QlikView and Qlik Sense, today integrated within their GEO Software platform. [www.business-geografic.com](http://www.business-geografic.com)

GeoQlik is an intuitive and powerful professional GIS component for Geo-Business Intelligence within QlikView and Qlik Sense. GeoQlik enables you to easily geo-analyze your contextual and business data and indicators on dynamic maps that are integrated right within your Qlik applications. GeoQlik is the world leading Geo-Analytics extension for QlikView and Qlik Sense, providing a wide range of advanced GIS features. [www.geoqlik.com](http://www.geoqlik.com)

### Background

Based in Meilen, near Zurich in Switzerland, Midor's 52,500 square meter factory is equipped with 32 production lines that have a combined daily output of 250,000 items in 940 different varieties.

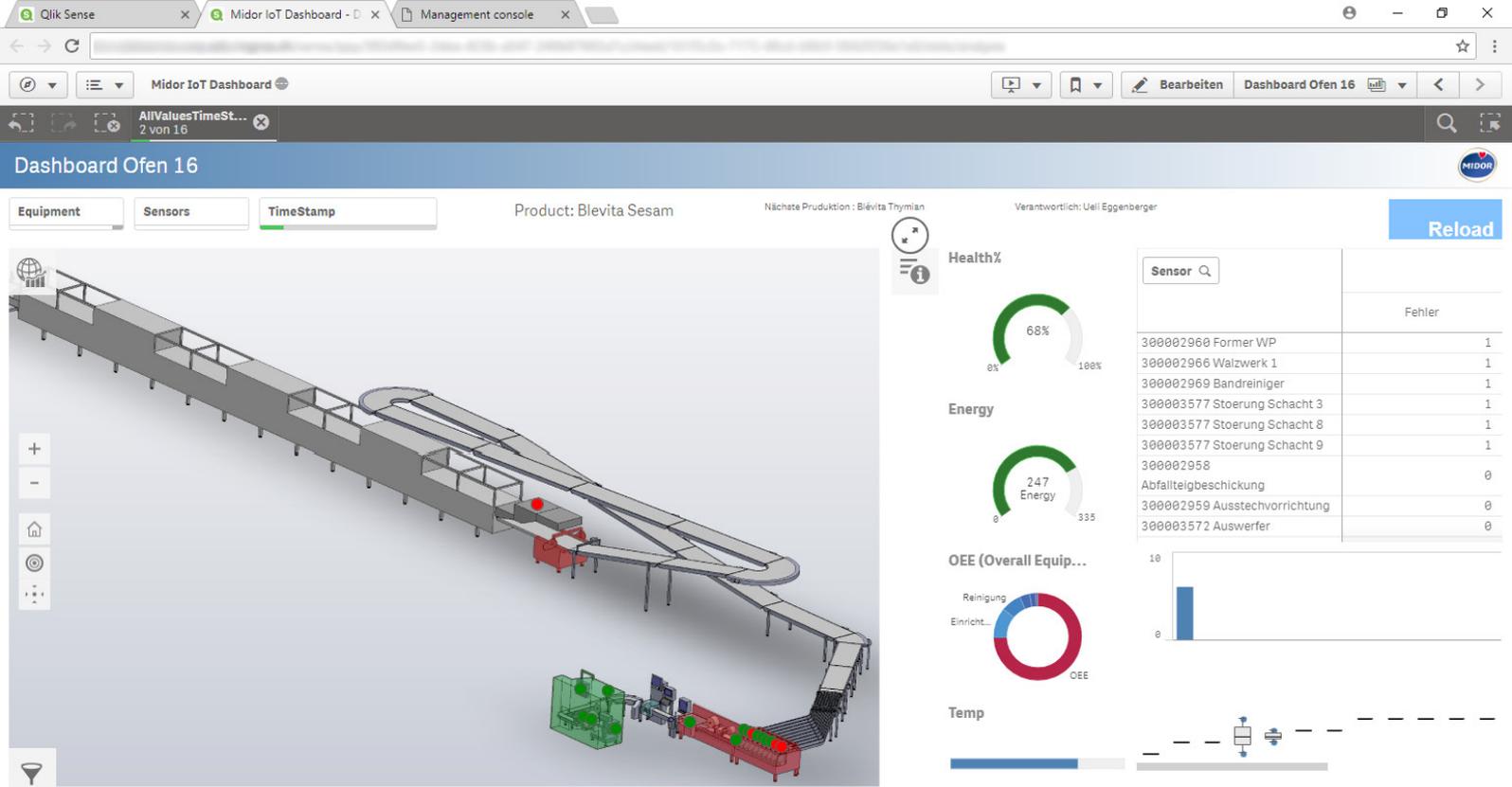
Some of Midor's production lines were subject to frequent, unaccounted-for malfunctions which disrupted the production process and hampered productivity.

The lack of uniformity among the factory controllers made it impossible to achieve a one-size-fits-all oversight and left Midor wondering where the root of the problems lay.

Did it have something to do with the nature of the products themselves? Was it of human origin? Or were environmental factors to blame?

Looking for answers, Midor turned to Business & Decision, a GeoQlik Partner Reseller present in several countries, to find a data visualization and analytics solution that would help them to production while leverage the full potential of the company's untapped big data resources to understand, analyze and ultimately improve their production efficiency.

As a strong believer in optimisation through innovation, Midor knew one thing: IoT and machine learning were the way to go!



« We were looking for a dashboard that would be both professional and attractive. We wished to display a 3D visualization of the production lines with sensor data, key performance indicators and other options... and our Qlik Sense + GeoQlik solution actually exceeds our requirements! »

**Urs WEBER, Automation and Electrical Maintenance Team Leader**

## CHALLENGE

Midor cultivates excellence and taste. When they noticed that some of their production lines suffered sudden and repeated interruptions, Midor wished to prevent them as much as possible.

The question was: How to identify the reasons for these interruptions? How to determine whether products, employees, environmental conditions, etc. were involved? How could they minimize these interruptions on the production lines?

Midor owns a large database with over 20 years of production data stored within it. Midor also uses MES (Manufacturing Execution System) and ERP (Enterprise Resource Planning) tools, as well as a production monitoring dashboard fed by machine-learning processes to lead simple analyses. The challenge lay in gathering and analyzing all of this data.

## SOLUTION

The solution requirements included processing and analyzing large volumes of local and remote data and key performance indicators. The project solution also required no coding on the part of Midor's teams.

Midor built an IoT Cloud architecture to enable data to flow from their sensor-equipped production lines to their Qlik Sense + GeoQlik IoT dashboard, with OPC (Open Platform Communications) compliance to ensure a seamless flow of information from the various equipments and devices.

The production lines' activity is sent in its entirety to the Cloud before being processed and analyzed. For each incident that occurs on the production lines, a message is generated in an "event hub" that triggers an almost real-time visual alert on the Qlik + GeoQlik IoT production activity dashboard.

## BENEFITS

Three of Midor's 32 production lines have been connected to the Cloud so far. This represents 66 GB of data being collected and processed through the Cloud for production line monitoring and supervision within Midor's Qlik Sense + GeoQlik IoT dashboard.

This experiment is a true success. It shed much-needed light on various malfunctions along the production lines. Today, Midor relies on this strategic IoT tool based on Qlik Sense + GeoQlik to further improve the quality of their production.

The project will be progressively scaled up and enriched. Among other plans, Midor will integrate even more data sources in order to take into account data and performance indicators regarding temperature and humidity production conditions, equipment energy consumption, maintenance malfunctions, data from vibration measuring devices and more.

The schematic display of production lines is one of the many and various representational possibilities offered with GeoQlik, the mapping component for QlikView and Qlik Sense. GeoQlik integrates the spatial dimension within Qlik users' dashboards using all kinds and formats of spatial, business and contextual data. In this specific use case, the production lines are being represented with polygons (machines) and points (sensors), with which Midor can easily perform spatial analyses to monitor their production processes.