

CUSTOMER CASE BEKAERT

// Interview with Sophie Van Nevel, Global IT Lead Strategy and Governance | Data and Analytics at Bekaert

Data quality and reliability of sensor data is crucial within Bekaert's digital transformation journey. As more people and processes will be data-driven in the future, data quality and observability is imperative to move towards sustainable impact at scale. Therefore, Bekaert started a partnership with Timeseer by running its unique 'sensor data vulnerability assessment'. The aim of this project was to create insights into Bekaert's current sensor data usage, to quantify its quality, and to increase the understanding of its potential impact by scanning the performance of their sensor data.

INTERVIEW SOPHIE VAN NEVEL

We talked to Sophie Van Nevel, Global IT Lead Strategy and Governance for Data and Analytics, about the importance of sensor data, data governance and a management that is convinced this is the right way forward.

“The indisputable need of verified sensor data in Bekaert’s digital journey.”

// When we talk about data, we usually refer to the traditional data sources: ERP environments, spreadsheets ... but Bekaert has always been a manufacturing organisation. How important are the manufacturing data in your strategy?

Sophie: “They are extremely important. We do believe we can benefit from this data, but we need to ensure the quality before actually deriving insights from them. Sensor data quality is crucial for scalable AI/ML data applications.

At Bekaert, we like to compare our data to water: omnipresent, and it only becomes valuable when you start putting it to good use. Water can be used as a cooling mechanism, as a specific ingredient or as an irrigation solution. The use of water and of data will be defined by the application that it serves. In each case we look at how it can generate business value.

We have three levels of ambitions regarding the use of data.

First, we focus on insight: using visualization and PowerBI to look for new findings. This is applied in all environments, ranging from manufacturing over finance to HR.

Next, we have advanced analytics. This is mostly applied in our production environment: we make use of AI to optimize specific processes.

Finally, we have started IoT initiatives: capturing sensor data and analyzing them for internal use while considering how we can use them to serve our customers. We are for instance looking at adding sensors to our steel cords, which are

commonly used by tire manufacturers, and creating scenarios where we can exchange this sensor data with the tire manufacturers in order to create added value for them. This value creation process from data capturing to extraction and quality assurance will be defined by data governance. Together with change management and data literacy, data governance will play a major role in the success of our data strategy.”

// These 3 data ambitions require you to have reliable data across the organization. Was that the case for Bekaert’s sensor data?

Sophie: “Data governance is a key factor in the digital transformation strategy for Bekaert’s board. Last year, we rated our data governance on a maturity scale from 1 to 5 and we scored 2. To become a data-driven company, this needed to improve considerably. We have already taken some initiatives – strengthened focus on Data Governance policies, roles and responsibilities, and data catalogue – which have led to us reaching level 3 on the maturity scale, but we know we can do much more.

We have started lots of initiatives in the data space in the past few years, but none of these addressed this specific issue of time-related sensor data. We didn’t even really understand the impact this data could have on the quality of our data-based decisions or we haven’t defined a proper definition with criteria that sensor data must meet before it’s consumed in downstream applications. Having talked with Timeseer about the issue and the opportunities that your solution could provide, we realized there could be a significant added value for us.

The first project we embarked upon together aimed at evaluating and measuring the quality of our sensor data. It also helped us in setting up a sound definition of what sensor data should be. And it helped us understand the importance of adding time-related information, such as the duration of any downtime. More generally, we obtained a better understanding of the value of analyzing sensor data.

The three initial main objectives we wanted to achieve with these tests were: to link to the data governance cockpit and data catalogue setup, to test out sensor data quality and improvements for existing and new digital projects, and to reduce the preparation time for data scientists. This helps us evaluate if the Timeseer.ai technology helps us accelerate data quality optimisation in our key digital projects.

We also valued Timeseer because of their ecosystem. The Timeseer customer base is interesting to us because we are convinced that we will often struggle

with the same questions and challenges. As part of the Timeseer community, we can reach out to each other and start investigating together how to deal with specific situations. Additionally, being a Microsoft-oriented organization, we obviously appreciate Timeseer's familiarity with the Microsoft Azure cloud environment."

// Can you expand on Bekaert's general vision on digital transformation?

Sophie: "Bekaert used to be a very traditional, product-focused organization. The company started its digital transformation trajectory - which included the strategic use of manufacturing and other data - about two years ago, when Gunter Van Craen joined Bekaert as Chief digital & Information Officer. His presence in the Bekaert Executive Group (BGE) has been instrumental to the progress we have made these past two years. Without a full management support, you are bound to slow down or even come to a stop, because the business benefits are not always visible from the start.

The digital transformation strategy is powered by several types of enablers; the platforms, security, and infrastructure, but also the data and an innovation mindset and culture are among the most important enablers to realize this digital transformation strategy.

The overarching data and analytics strategy has been clearly communicated in order to help all employees see the general picture. It all starts with the business strategy: where do we stand, and where do we want to go, where can we create a competitive advantage, and how can data and digital assets help us achieve this objective?"

// Speaking of data literacy: how aware and involved are the Bekaert teams when it comes to data?

Sophie: "We can see a very positive evolution. Compared to last year, we have seen many more useful ideas arise from the user community. This proves that they have become much more aware of the potential of data, which is an encouraging observation. We have discovered during the vulnerability assessment that teams have difficulties to understand if their data is of high quality. Data quality is clearly one of our biggest priorities for Bekaert Data Governance team. Our priority is to implement data standards first."

// Where would Bekaert like to be 3 years from now, in terms of data governance?

Sophie: “One of the key lessons we have learned from our joint project with Timeseer is that we now fully understand the importance of gathering all data, of optimizing its quality and of obtaining an overarching view on all data. Therefore, we need to put in place processes to improve data ownership to distil the qualitative data and to optimize the quality before we go any further. This is essential because we know there’s so much more data we can still capture and work with at scale.

Similar to our other divisions (commercial, procurement, enterprise functions ..)we are appointing manufacturing data owners who are in charge of the data and the data quality, data stewards who look after the practical side, and the IT staff in charge of defining and selecting the right technical solutions to achieve the business objectives. This means that adding, collecting and analyzing sensor data will always be considered in terms of their usability for the production business.

This is a very pragmatic and focused approach: selecting the data we need for a specific project instead of selecting the data based on their inherent value and criteria.

// This project has taught us a lot about the value of sensor data and the importance of applying good governance in this area as well. But it does not always immediately show any direct business benefit. Is this one of the challenges for data governance initiatives: stressing its importance without anything tangible to illustrate this importance?

“So true. The same goes for master data. Everybody wants to ‘do’ master data, but when they realize what it involves, without direct results to show for it, they are far less enthusiastic. It is hard to assign a specific value to data quality. Yet, even without an exact ROI, we are fully convinced of the importance of data governance as it serves as an accelerator, both for sensor data and for all other data. Fortunately, as discussed before, with Gunter van Craen we have a true believer in the importance of data governance in Bekaert’s BGE.”