

SANDVIK MINING & ROCK TECHNOLOGY INNOVATES WITH CULTURE-CHANGING EHS REPORTING

Company evolves from manual spreadsheet-based process to a fully-integrated EHS solution to drive cultural change



THE SANDVIK STORY AT A GLANCE

Sandvik's Mining & Rock Technology (SMRT) operates in an industry where risk management is vital. In 2006, Sandvik began utilizing spreadsheets to gather and evaluate EHS information, monitor performance, and comply with reporting requirements.

Over time, the number of its spreadsheets exploded, and SMRT had 76 interlinked files with over one million calculations. From these spreadsheets, the company would parse the data and report different metrics to various groups around the globe.

The manual process not only put the security of the data at risk, but it was also time-consuming and limited, and by 2007, SMRT had exhausted the viability of the spreadsheets. In addition, the company recognized the need to begin utilizing the information qualitatively to drive cultural changes for more effective risk management.

That same year, SMRT reviewed software providers to identify a flexible, configurable solution and selected SAI Global's EHS solution. It rolled out the solution initially in Australia in 2008, then globally in 2010. The database, together with the company's increasing focus on leading indicators and a more holistic view of the information, inspired positive culture change that reduced its Total Recordable Injury rate over ten years from 19.6 to 4.0 in 2018.

15% REDUCTION

IN TOTAL RECORDABLE INJURY RATE

"The spreadsheets were about numbers, But it's not just about what gets measured; it's what gets talked about that changes things."

Stuart Evans, Global EHS Vice President, SMRT



BACKGROUND

With over 43,000 employees across the globe, Sandvik (including Sandvik's Mining & Rock Technology) is a leading supplier of equipment and tools as well as service and support for the mining industry in a range of applications, including quarrying, recycling, demolition, tunneling, civil engineering, and dimensional stone. The Mining & Rock Technology division encompasses eight product areas: crushing & screening, load & haul, mechanical cutting, parts & services, rock tools, rock drills & technologies, surface drilling & exploration, and underground drilling.



GRC CHALLENGE

In 2006, SMRT initiated spreadsheet reporting to capture and communicate EHS data. To present the data in a way that was valuable to each audience, it sliced and diced information from 76 interlinked spreadsheets with over one million calculations. The manual process was not only time-consuming, but it was pushing the spreadsheets beyond their limits. Over time, SMRT's reporting needs became even more complex, requiring a robust solution that could keep pace.

SMRT's EHS ambition is to continually improve both its EHS culture and management systems to, in turn, improve its performance results. Historically, it had been difficult to target areas or issues requiring improvement because of a lack of current, consolidated EHS data. SMRT understood it needed to leverage its reporting to not only track results but also enable a broader, more holistic view of the data to ensure greater accountability, support strong decision making, and identify key areas requiring improvement and investment.

SMRT AIMED TO TURN DATA INTO KNOWLEDGE TO HELP ELEVATE THE IMPORTANCE OF EHS

To maintain its market-leading position, SMRT sought a solution provider that would enable it to measurably change behavior by reporting both quantitative and qualitative data. With this approach, it aimed to turn data into knowledge to elevate the importance of EHS across the organization, create and embed a safety-aware culture, and encourage staff to take individual ownership of EHS.

"The SAI Global Solution has enabled us to be creative and agile and innovate existing practices in a way that continually improves our performance," said Evans. "We really view the platform as the 'window' through which our leaders can see both a reliable measure of the EHS work they have been doing and the benchmarked outcomes from their effort. Armed with this, leaders have a powerful tool to make significant change."



SOLUTION

SMRT sought a software platform that could handle large amounts of data and a variety of processes that would enable it to use its metrics in a new way. After evaluating eight solutions, Sandvik selected SAI Global in 2008 because of its across-the-board performance in all identified criteria, including:

- Cost
- Proven global and international performance
- · User support
- Ability to initially customize and implement
- · Ease of maintenance
- · User friendliness
- Quality and availability of training
- Availability of components required currently and in the future

While the initial configuration was the best choice for SMRT as an out-of-the-box solution, what made the solution even more valuable was its flexibility. SMRT viewed the SAI Global Solution not simply as a repository for event data but also as a tool to map and measure EHS processes in a way that would foster discussions among employees, managers, and supervisors.

These discussions were initially around the traditional lagging indicators of EHS performance (e.g. numbers of injuries and the frequency at which they occurred.) To support its efforts, in 2013, Sandvik identified an opportunity to improve EHS performance by measuring and monitoring leading indicators to identify the effectiveness of the actual activities being used to prevent incidents and injuries.

Moreover, because the SAI Global Solution is fully configurable, the company began to utilize the platform in novel ways to further address issues impacting its EHS performance. Today, SMRT leverages powerful reporting and analysis to create its EHS League Tables, a holistic, standardized set of meaningful metrics to support monitoring of both lagging and leading indicators.

The principle behind the EHS League Table concept is to firstly identify a "wanted behavior" that will improve EHS performance (e.g. an improvement in the completeness and quality of incident investigations), and then embed the work processes that drive the behavior, recording and measuring the steps involved. After the numbers are normalized, weighted and benchmarked within the SAI Global Solution, they can be used a performance index. The outcome is a set of indicators that can be used by leaders to have a meaningful discussion with their teams about both what they are (and are not) doing and the success (or failure) that has resulted.

SANDVIK EVALUATED EIGHT SOLUTIONS BEFORE THEY SELECTED SAI GLOBAL

This type of informed narrative is a very powerful agent for improving both the EHS culture and management systems in an organization. And because the indicators, weightings and factors can be regularly (currently annually) modified, SMRT can easily make adjustments to maximize its progress based on trends. Not only have the League Tables made the right data available to drive change, but they have ensured the impact of the data on future improvements that can be measured by site and organization-wide.

RESULTS

With SAI Global's EHS solution, SMRT accomplished what it set out to do: significantly improve worker safety and incident management by optimizing the system to change the culture. In fact, in its last employee survey, 88% of employees rated the EHS culture as strong or very strong. That's because, in the ten years since SMRT introduced the solution, its Total Recordable Injury rate has dropped from 19.6 to 4.0 in 2018 and the Lost Time Injury Frequency Rate now sits below 1.0. But that's not all. With greater transparency and a shared understanding of the value of EHS performance, the culture is different, and employees are taking individual ownership and accountability.

Moreover, since leveraging SAI Global's EHS solution to produce the League Tables, the company has realized other changes as well:

- Hazard close-out rates have improved from 59% to a consistent 98%, while the number of hazards identified, thanks to a dramatically improved safety culture, increased by 200% during the same period.
- The annual site based EHS plan completion rate is now almost 93% for all sites. Before, they were not completed in time or were done at the end of the year.
- In just 10 months, the average number of days it takes
 to complete a Supervisor Assessment of the Future
 Risk Potential of an incident has dropped 38%, and the
 average days it takes to complete Investigation
 Findings has also dropped by nearly 60%; these are 2
 of the factors that make up the 'process' that is
 measured as one of the league tables factors.
- The company has improved its rate of compliance with corporate standards, such as EHS leadership, planning, legal obligations, and hazard and impact management, from 40% three years ago to an average of 80% for all major sites today.





"Improving EHS culture across a diverse organization with significant differences in EHS maturity is a challenging task, but we knew with the right tool, we could transform EHS data into meaningful metrics that employees understand and relate to."

Contact us to learn more, or to request a demo to see how SAI Global can help your organization

advance confidently

Learn more at saiglobal.com/risk/contact

ABOUT SAI GLOBAL

SAI Global helps organizations proactively manage risk to create trust and achieve business excellence, growth, and sustainability. Our integrated risk management solutions are a combination of leading capabilities, services and advisory offerings that operate across the entire risk lifecycle allowing businesses to focus elsewhere. Together, these tools and knowledge enable clients to develop an integrated view of risk. To see our tools in action, request a free demo.

We have global reach with locations across Europe, the Middle East, Africa, the Americas, Asia and the Pacific.

For more information visit www.saiglobal.com/risk.

