



JARVIS

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Building A Personalized Dashboard For An Industry-leading Building Material Company To Enhance Security Automation

UP 436 789
Dwell Time: 7 min

✔ What we have done

With multiple manufacturing sites across the country, JK Cement wanted to automate its security processes to decrease theft and pilferage. As a result, Staqu, with its team of AI researchers and developers, customized a dashboard of JARVIS to verify the data the hardware sensor-based systems were previously recording. This included baggage counting and analyzing ANPR routes. The system was used to learn about the TAT (turnaround time) of the vehicles used in the business process.

👤 About the client

In addition to being a top producer of white cement globally, JK Cement Ltd. is also a top producer of grey cement in India. On the basis of its superior products, focus on customers, and technological leadership, the Company has worked with India's multi-sectoral infrastructure demands for more than 40 years. The commercial production of grey cement at JK Cement's flagship facility in Nimbahera, Rajasthan, started in May 1975. JK Cement strives to provide customers with cutting-edge goods and services that meet their requirements

Client: JK Cement Ltd. | **Location:** Global

💡 Situation

The customer had a unique idea to automate the security process while visualizing a fast and swift operating process.

Features



ANPR Route Monitoring



Smart Conveying



Safety Gear Detection



Access Based Attendance



Smart Parking Management

The client had a lot on its plate, with several locations functioning at the same time. The counting of cement bags loaded on a vehicle was previously done by sensors, which did not provide the level of accuracy that the client wanted. The production costs were not equalizing with the revenue generated. Hence, the security of the manufacturing plants was in question. Additionally, the parking management system for the vehicles that came in for loading products and materials was poorly managed. This increased the downtime for the loading process, ultimately resulting in less revenue generation.

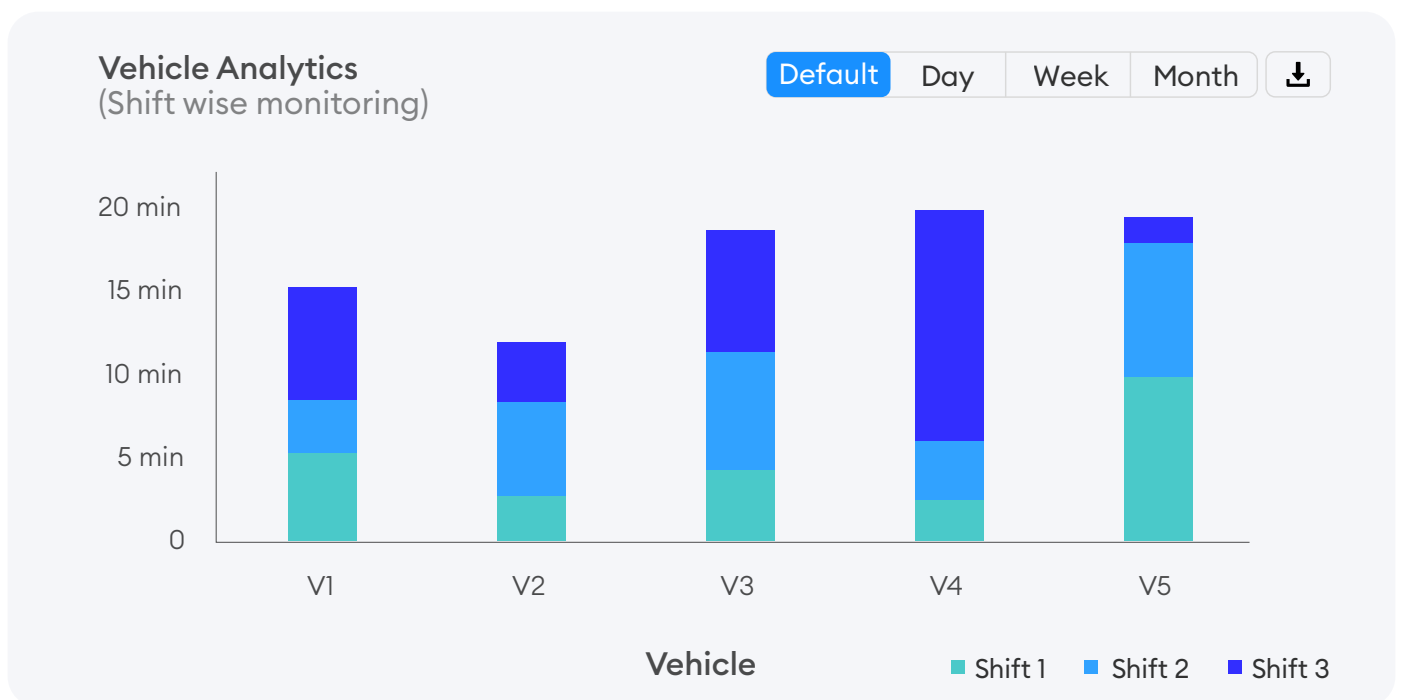


Solution

JARVIS video analytics solution enabled the proper automation of the security and operations of the manufacturing plants. Before building the personalized “Vehicle Analytics” dashboard, the Staqu team initiated a walkthrough of the client’s requirements to provide better and more accurate results. Through this, we defined the best solution architecture, product design, and technology stacks.

The end solution enables:

- Creation of secure premises
- Tracking & managing vehicles
- Accurate counting process



Security Automation

To collectively resolve the issue of theft and pilferage, our team worked towards providing accurate baggage counting results while also specifying if a vehicle has left empty, half empty, or full while leaving the premises. The client also received historical data on each vehicle that has entered a certain manufacturing premise to understand the route and efficiency of the said vehicle.

Track Operational Efficiency

Implementing ANPR routes and tracking the vehicle route on the premise was made easier. Through this, effective parking management systems were implemented, thus automating operational processes. Signifying the in-time, dwell-time, loading and unloading time, and the out-time, the management could focus on any operational loopholes that needed to be mended.

Vehicle & Baggage Analytics

(13-01-2023 to 27-01-2023)

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Search:

Vehicle No.	In Time	Out Time	Total Bags (In Vehicle)	Status
VH 1	10: 07 AM	-	457	In Process
VH 2	9:50 AM	10:10 AM	421	Completed
VH 3	9: 00 AM	-	-	Waiting
VH 4	10:50 AM	11:25 AM	621	Completed
VH 5	9: 55 AM	-	-	Waiting

Traceable Insights

With systematic graphical insights, the “Vehicle Analytics” dashboard also specified the most efficient shift timings of the manufacturing plants. It classified the shifts according to the vehicles that took the least amount of time in the entire loading process. This not only made the entire operational process swift and efficient but also was a step towards generating ROI.

Safety Regulation

The manufacturing plant's primary objective was the safety of its workers to enhance productivity as well as confirm a safe working place. With JARVIS’s safety gear detection feature, we ensured that the client had a safe and efficient environment. Proper utilization of the feature enabled the creation of a secure premise.



Impact

75%

automated security

66%

decrease in theft & pilferage

43%

increase in operational efficiency

100%

traceable insights

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"We have already closed 10-12 features and we are looking for 25 more. JARVIS has made our process more fluid, safe and efficient."

Mr. Jitendra Singh
Group CIO JK Super Cement

The scope of the implementation process was not limited to only automating the security process, although initially, that was the goal. The JARVIS platform identified any and all loopholes and decreased theft and pilferage by 66% by running accurate bag counting analytics due to its 3D tracking technology. With the introduction of traceable trends, generating insights from data became easier and helped recognize operational efficiency by 43%. The client utilized the various features that our video analytics solution had to offer to maximize the revenue invested in these manufacturing plants.

Our Clients



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