Saint-Gobain CPS

Giving clients real-time order status updates through innovative mobile apps

Overview

The need

To boost efficiency, reduce working capital requirements and avoid out-of-stock scenarios, Saint-Gobain CPS's clients were demanding more accurate and timely information on delivery schedules and status.

The solution

Engaged IBM® Global Business Services® to design and implement iOS and Android mobile apps, using IBM MobileFirst™ technology for app development and IBM WebSphere® Cast Iron® to integrate with SAP ERP.

The benefit

Real-time delivery status saves time and effort for Saint-Gobain CPS, its haulers and clients. Full visibility into the delivery chain and advance warning of delayed deliveries improves efficiency.

Saint-Gobain creates and delivers sustainable, innovative, high-performance habitat solutions. The group designs, manufactures, and distributes advanced materials for the construction, automotive, transportation and packaging industries. The Saint-Gobain group as a whole employs nearly 190,000 people, has operations in 64 countries and achieved sales of EUR42 billion in 2013.

The Saint-Gobain Construction Products Sector (CPS) offers interior and exterior solutions to enhance the comfort of commercial buildings and homes. With a global footprint, Saint-Gobain CPS operates through high-profile brands including ISOVER, PAM, Weber, Placo, Gyproc and CertainTeed.

Building a better delivery experience

A client satisfaction survey conducted by Saint-Gobain CPS in 2012 revealed room for improvement in the provision of information about deliveries. However, this information was effectively inaccessible even to Saint-Gobain CPS. Between the time that goods were loaded onto trucks at the factory and the time they were delivered to client sites, Saint-Gobain CPS had little or no visibility of status. The first the company would hear about a problem was when the client called to say their delivery had not arrived, or that the goods had been damaged in transit.

"For a mobile app, you need to be very focused on the end-user. We spent a lot of time getting the customer journey right, and then building and testing prototypes to see how they would actually work. Using IBM MobileFirst Platform Foundation made it easy to accomplish this iterative process in an efficient way," says Yan Steinberger, Chief Digital Officer, Saint-Gobain CPS.

Solution components

Software

- IBM® MobileFirst™ Platform Foundation
- IBM WebSphere® Cast Iron® Live
- IBM Sterling B2B Integrator

Applications

- SAP ERP

Services

- IBM Global Business Services®

Yan Steinberger, Chief Digital Officer for Saint-Gobain CPS, takes up the story: "Our customers place a great deal of emphasis on reducing costs wherever possible. For wholesaler clients, one way to do this is to reduce the levels of stock they hold. Of course, if you want to hold less stock in your warehouse or distribution center, you need to have better information on the timing of deliveries. Better and more timely information means that you can avoid disappointing your own customers with out-of-stock situations, and avoid tying up warehouse staff waiting for deliveries.

"Equally, if you are a wholesaler expecting multiple deliveries from different suppliers, a late arrival can mean that no personnel or unloading bays are available, potentially causing further disruption downstream. So the strong message that came out of the 2012 survey was that we needed to improve the timeliness and quality of information about delivery status."

Improving efficiency and visibility

Saint-Gobain CPS recognized that improving the availability of information would also enhance its own efficiency, and that of its network of transportation partners. In some scenarios, there is a long chain of people involved in the delivery of a consignment of building materials.

Yan Steinberger explains: "The head of construction on a building site will have a team of people waiting to unload the truck. If the delivery is delayed, the head will need to call the sales contact at the POS, who will need to call a customer service rep at Placo, who will need to call a contact in the factory, who will need to call a contact at the relevant hauler, who will need to contact the relevant truck driver to get the estimated time of arrival. The time and effort required for information to travel up and down this chain is significant for all parties involved."

Equally, many of the products that Saint-Gobain CPS ships to clients are fragile—for example, the plasterboard produced by its Placo division. The company had problems with breakages in transit, and these were difficult to resolve because it could not see where and how the breakages were happening. This was another reason why Saint-Gobain CPS wanted to improve visibility throughout the delivery chain.

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—Yan Steinberger, Chief Digital Officer, Saint-Gobain CPS

Comprehensive approach

Saint-Gobain CPS set out to create a real-time mobile app to keep clients informed about delivery schedules. The solution would need to exchange information with both the company's SAP ERP application and its IBM Sterling B2B Integrator solution, and would take input from delivery drivers on delays and other changes to schedules.

"It was clear that this would be a complex, multi-dimensional solution involving multiple technologies and points of integration," says Yan Steinberger. "We considered offers from six vendors; IBM offered a comprehensive solution presented in very clear language. We were able to explain what we wanted in business terms, and let them choose the most appropriate technical options."

Saint-Gobain CPS engaged IBM Global Business Services to design, build and deploy its new digital information platform. There are four parts to the solution: a mobile app for clients to check the status of their deliveries; a web portal for clients who prefer not to use the mobile app; a second mobile app for delivery drivers to input their estimated arrival time and provide updates on any unforeseen delays, and to take photographs of damaged goods or incorrect deliveries in the event of a delivery claim; and an intranet portal for the Saint-Gobain CPS service desk.

Rapid and agile construction

Working from Saint-Gobain CPS's brief on the customer journey through the new solution, IBM Global Business Services started by designing a consistent multichannel user experience.

"My challenge was to make sure that the app would be accepted and used by both clients and by haulers, so we needed to get the front-end experience right before we thought about the integration with our back-end systems," recalls Yan Steinberger. "Involving the end-users made us really focus on the essentials, so that we got an app that people would actually want to use—that's the key to acceptance."

Figure 1: Employé et client chez POINT.P Matériaux de Construction (France).

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— Yan Steinberger, Chief Digital Officer, Saint-Gobain CPS

IBM Global Business Services used IBM MobileFirst Platform Foundation to build and deploy the front-end mobile apps for clients and delivery drivers. The team adopted a highly agile iterative approach, placing strong emphasis on performing very early prototyping and validation of the customer experience with genuine users. IBM MobileFirst Platform Foundation enabled the creation of a single, cross-platform app in HTML5 and CSS, from which the apps are packaged for use on both Android and iOS, saving significant development time, effort and expense.

The combination of IBM MobileFirst Platform Foundation and the experience of the IBM Global Business Services team enabled extremely rapid development of the mobile applications. The team was able to complete nearly 90 percent of the design in less than three months.

To handle the integration of the new front-end services with SAP ERP and IBM Sterling B2B Integrator, IBM Global Business Services selected IBM WebSphere Cast Iron® Live. The actual point of integration is a new mobile Oracle database created by IBM. Bi-directional data flows to and from the Sales and Distribution application within SAP ERP (via SAP IDocs) pass through this point of integration to reach the mobile apps and web portals. The mobile database also acts as a staging post for uni-directional data flows from IBM Sterling B2B Integrator to the front-end apps and portals.

"In addition to ensuring a great user experience at the front end, IBM demonstrated excellent technological skills in handling the integration with our complex back-end landscape," says Yan Steinberger. "This project is a transformational one for us, and IBM has helped to transfer knowledge to our new in-house digital team, which is responsible for ongoing development of the mobile apps."

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End-to-end transparency

While most of the haulers working with Saint-Gobain CPS are equipped with on-board telematics, they have generally switched to using the mobile app. For the minority that prefer to keep to the original way of working, updates—for example, goods loaded, now in transit—are sent from the embedded telematics system to IBM Sterling B2B Integrator as EDI messages. The IBM WebSphere Cast Iron Live integration technology captures this information and passes it to the mobile database.

After each delivery has been completed successfully, the embedded telematics system notifies the mobile database, which then informs the client and other parties via the client mobile app and web portal. This change in the order status is also pushed to the SAP ERP application—via the Cast Iron integration through IDocs.

In practice, the majority of haulers used by Saint-Gobain CPS now take advantage of the mobile app, because it offers reduced costs and enhanced capabilities versus the telematics approach. They use the new mobile app to report when goods are loaded, when they depart the depot and when there are delays en route. The app also allows them to provide new estimates for delivery time, and to report when goods have been delivered successfully.

When a new order is initiated by a client and entered into SAP ERP, the order confirmation is immediately pushed to the mobile database and made available to view through the mobile apps or portals. Likewise, when goods are prepared for dispatch, that information is pushed from SAP out to the new front-end services, keeping all parties informed.

The app for delivery drivers also enables the driver to use a smartphone camera to gather evidence of damage or incorrect quantities in cases where a customer wishes to make a claim. The use of this app along the full delivery chain enables Saint-Gobain CPS to see when damage occurs to goods, whether during loading, transit, or unloading. New functionality will be developed based on this photographic evidence.

"The integration and development work executed by IBM Global Business Services is the first step in our digital transformation, providing us with a real-time, multichannel information platform that is already unlocking significant cost and time efficiencies. It is also a platform on which we can build new services that enable us to use the data in our SAP ERP system to create new value-added services for our clients and partners."

—Yan Steinberger, Chief Digital Officer, Saint-Gobain CPS

Digital transformation

The new mobile apps and web portals delivered by IBM Global Business Services have enabled Saint-Gobain CSP to achieve its goal of giving clients more accurate and timely information about delivery status and schedules. More reliable information on delivery schedules means less time spent waiting for delayed shipments, increasing efficiency throughout the entire chain.

The IBM solutions enable the sharing and updating of information in real time by both static teams (sales administrators in both Saint-Gobain CSP and its wholesaler clients) and mobile teams (delivery drivers, building site managers, builders, and so on). In addition, Saint-Gobain CSP has gained a better picture of the end-to-end supply chain, bringing full transparency to what was previously an opaque stage between the dispatch of goods and their arrival at the client site.

Before the introduction of the new platform, it could take as much as one hour for a client to get a response to a question about delivery schedules, given that the request would potentially be passed from person to person up and down an extended chain. Today, clients have all the information they need (quantity of goods ordered, scheduled delivery date and time, any reported delays en route) instantly at their fingertips—effectively more than a 99.9 percent improvement.

For delivery drivers, the mobile app makes it easy to keep clients informed about their progress and about any unexpected delays, to the extent that some companies have discontinued their costly telematics solutions in favor of this more simple approach. The app can be downloaded easily and reliably from the Apple and Android app stores.

Figure 2: Le confort selon Saint-Gobain

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"The integration of the mobile apps with our SAP ERP application is key to the success of the project: it's the backbone of our digital transformation. The solution gives us a clear competitive advantage, and it closes the loop from factory to client site."

—Yan Steinberger, Chief Digital Officer, Saint-Gobain CPS

"The mobile apps and web portals reduce administrative effort for everybody in the chain, eliminating uncertainty and bringing a new level of clarity to the delivery process," says Yan Steinberger. "Our client service personnel have largely been released from the tedious task of chasing up information, and can focus instead on their core role: building great client relationships. And if a client does choose to call for information, the client service team can use the internal portal to find the answer instantly rather than ringing round."

Integrated information

Introducing the new digital platform had further benefits for Saint-Gobain CSP, because it required the company to standardize and industrialize a number of its internal processes and business practices. This increased standardization increases efficiency and ensures greater consistency when dealing with clients.

"Together with greater consistency, we have a super-robust, integrated architecture," says Yan Steinberger. "For me, the integration of the mobile apps with our SAP ERP application is key to the success of the project: it's the backbone of our digital transformation. The solution gives us a clear competitive advantage, and it closes the loop from factory to client site."

He concludes: "The integration and development work executed by IBM Global Business Services is the first step in our digital transformation, providing us with a real-time, multichannel information platform that is already unlocking significant cost and time efficiencies. It is also a platform on which we can build new services that enable us to use the data in our SAP ERP system to create new value-added services for our clients and partners."

For more information

To learn more about IBM Global Business Services, contact your IBM representative or IBM Business Partner, or visit the following website: **ibm.com**/gbs

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