

# Innovative Management of Hazardous Waste

A complete digital solution for processing and tracking hazardous waste

### Summary

Suez has more than 150 years of water and waste management experience. As France's No.1 and Europe's No.2 in this sector, the Group supplies 92 million people with drinking water and 65 million with sanitation services.

With its role of processing and recovering hazardous waste in Europe, Suez's Industrial Waste Specialties (IWS) unit turned to Liferay to create a web and mobile-based digital solution available to the various players in this waste management process.

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### In Brief

### **INDUSTRY:**

Environmental services

### **COUNTRY/REGION:**

France

### **USE CASE:**

B2B Portal, Mobile application

### **KEY FEATURES:**

Responsive web design, integration to the business ERP and the weighing system



Amid a complex regulatory environment, stringency and traceability are essential to our business. Thanks to our customer portal and a perfectly synchronized native mobile application, we bring efficiency, speed, and reliability to the tracking and processing of hazardous waste.

Pascal Gruau, Project Leader, Information System Process

### Challenges

- Ensuring the traceability of the received waste, the protection of the staff, and the environment
- · Demanding customers regarding the tracking and handling of their waste, as well as the speed of unloading on-site
- Complex regulations, by involving certain administrative overheads

### Results



### INTEGRATED SOLUTION

Connected in real time to the business ERP and weighing system



### RELIABILITY, EFFICIENCY, SPEED

In unloading, processing and tracking waste



### TIME SAVING

Which will allow more trucks to be received every day



### GLOBAL SATISFACTION

Through personalized support for various teams



# Paperless Management

Every year, the Suez IWS entity handles several hundreds of thousands of waste packed inbags, barrels, containers, etc. It needs to know precisely what is being received so it can ensure the waste is traceable and that the staff and the environment are protected. The waste comes from local government, public or private construction companies, who are all becoming increasingly demanding in terms of how their waste is tracked and handled, as well as how fast it is unloaded on-site.

This all goes hand in hand with a set of fairly complex regulations entailing a certain administrative overhead in managing the documents required for good waste traceability.

This is why Suez IWS decided in 2013 to create a B2B portal to make its customers' everyday lives easier. It provides a paperless solution for handling requests for waste services (recovery, processing or disposal) and sending delivery tracking information.



"Regulatory restrictions force our customers to keep records detailing the processing and disposal of their waste. By connecting our business ERP to the portal, we now provide online all the necessary traceability information on waste shipments that are received", explains Pascal Gruau.

Since they first set up the portal, Suez IWS has been enhancing it with new features to provide new services to its customers and simplify the waste management process.

In 2015, in an effort to modernize the on-site waste deposit process and switching from a paper-based traceability system to a more efficient digital equivalent, the GAMA project was born.

# Towards Digital Traceability

GAMA—acknowledged as one of Suez Group's most innovative projects—was launched in mid-2016. It is a web and mobile-based digital solution available to the various teams in the delivery process; in other words, to customers, reception staff making the administrative checks, and unloading operatives.

"With its real-time connection to the business ERP system and weighing system, the solution brings reliability, efficiency, and speed to the waste unloading process" adds Pascal Gruau.

Waste management now follows a four-steps digital process:

STEP 1: REGISTRATION OF THE CUSTOMERS' LOADING PLAN Customers produce their truck inventory using their computer or smartphone via the B2B portal, which provides a multi-device responsive web design (RWD) solution.

### STAGE 2: ADMINISTRATIVE CHECK WITHIN SUEZ

The onsite reception agent then checks the administrative documents with the digital loading plan submitted by the customer; this method replaces the old paper-based check.

### STAGE 3: WASTE UNLOAD AND WEIGHT MEASUREMENT

Using a native mobile application on their smartphone, the unloading operators access the submitted loading plan, identify each waste, and weigh it on a Bluetooth-connected scale. No more printing out weight tickets! In the event of non-conformity, they can even take a photo and send it in real time to the sales manager to ensure a solution is found as quickly as possible.



#### **STAGE 4: DATA VALIDATION**

#### AND INTEGRATION—TRUCK DISPATCH

The administrative team checks all data via the portal and integrates it into the Business ERP system without having to re-enter weights. Traceability information is then uploaded online.

By combining two complementary technical solutions and keeping the existing IS as is, Suez IWS succeeded in introducing an innovative digital waste management system. "The time this solution saves us should enable us to increase our capacity to receive more trucks per day," adds Pascal Gruau.

# Development in Agile Mode

"Liferay was chosen not only for the rich range of functions its platform offered, but also because it was a tried and tested market solution, with an attractive mix of large-scale rollouts and a strong community," says Pascal Gruau.

Today, the B2B portal is run in agile mode with 3-week iterations and with a development cycle of around 6 months per year. Between 2 and 3 production releases are produced per cycle. Furthermore, the change is being supported gradually. Adopting a UX approach, developments such as future interfaces and smartphone-based simulations have been presented.

"The fact that the platform allows for development work in parallel has proven to be a significant advantage for working on two projects at once: the enrichment of the existing portal and the GAMA project," concludes Pascal Gruau.

