

CASE STUDY

Transforming Agricultural eCommerce and Logistics

Client: A French eCommerce company

Tableau de bord: Commande de la journée

Achat fournisseur

N° de commande	N° de brouillon	Fournisseur	État	Réception	Paiement	Pois
		0 of 82	0 of 8			
PO-391213 - LIVRAISON URGENTE		DERIPLAST GROUP	En attente de validation du fournisseur (10.0 %)	0,00%	0,00%	7
PO-966204 / GR 169		SOCOBATI	En attente de validation du fournisseur (10.0 %)	0,00%	0,00%	2
PO-107253 / WEBSHOP CDE 32629		EVERSOL	Réceptionné (80.0 %)	100,00%	0,00%	7
PO-859813 / GR 156		SOCOBATI	En attente de validation du fournisseur (10.0 %)	0,00%	0,00%	5
PO-913618 / GR 167		SOCOBATI	Réceptionné (80.0 %)	100,00%	0,00%	4
PO-175534		Dairy Spares SARL		0,00%	0,00%	
PO-823061		KERBL	En cours de fabrication (25.0 %)	0,00%	0,00%	
WEBSHOP 31753		Gallagher Europe B.V.	Réceptionné (80.0 %)	100,00%	0,00%	
PO-565407		KERBL	En cours de fabrication (25.0 %)	0,00%	0,00%	
PO-239122		Dairy Spares SARL	En cours de fabrication (25.0 %)	0,00%	0,00%	
PO-984994		Zetar Industry Co.Limited	En cours de fabrication (25.0 %)	0,00%	0,00%	
Pièces supp OS KIT		CLIPLEX	Réceptionné (80.0 %)	100,00%	0,00%	
PO-307620 SOMMET ELEVAGE		JFC Manufacturing Co. Ltd	En cours de livraison (50.0 %)	0,00%	0,00%	
SAV SOUS GARANTIE - Alexandre Didier		NEMTEK EUROPE BV	En cours de fabrication (25.0 %)	0,00%	100,00%	
PO-245687		KERBL	En cours de livraison (50.0 %)	0,00%	0,00%	
PO-340616 SAV SOUS GARANTIE		ENIX ENERGIES	En cours de fabrication (25.0 %)	0,00%	0,00%	
SAV HORS GARANTIE - WEBSHOP 32534		Gallagher Europe B.V.	Réceptionné (80.0 %)	100,00%	0,00%	
PO-321889		Dairy Spares SARL	En cours de fabrication (25.0 %)	0,00%	0,00%	
WEBSHOP 32324		Gallagher Europe B.V.	Reliquat (50.0 %)	0,00%	0,00%	
PO-970440 / GR 165		SOCOBATI	Réceptionné (80.0 %)	100,00%	0,00%	
PO-567004 / GR 164		SOCOBATI	Réceptionné (80.0 %)	100,00%	0,00%	
		SOCOBATI	En cours de fabrication (25.0 %)	0,00%	0,00%	
		SOCOBATI	En cours de fabrication (25.0 %)	0,00%	0,00%	

Overview

A French eCommerce company specializing in agricultural products sought to improve operational efficiency across sales, warehouse, and logistics processes. As their business expanded, their existing technology stack struggled to keep up, resulting in fragmented data, slow workflows, and limited scalability. The project's objective was to replace these legacy systems with a unified digital platform that connected every part of the supply chain, from customer orders to warehouse fulfillment and logistics management.

- Industry
Agricultural eCommerce & Logistics
- Market
Europe
- Frontend
Prestashop (PHP) for eCommerce
- Backend
Ruby on Rails (Warehouse Console)
- Mobile
Android (Java, Kotlin)
- Database
PostgreSQL
- Infrastructure
AWS
- Integrations
XPO Logistics, DB Schenker, GLS Group





■ THE CHALLENGE

Fragmented and Outdated Systems

Before modernization, the company's warehouse lacked clear product visibility, with no systemized way to track stock locations or manage pallets. Orders from the eCommerce platform synchronized only partially, creating frequent inconsistencies between what customers saw online and what was available in inventory. Communication between warehouse staff, managers, and logistics providers was largely manual, leading to inefficiencies and delayed shipments.

Moreover, their core eCommerce solution, built on Prestashop, had become increasingly fragile. Customizations to support complex agricultural products risked breaking the system, and every deployment required extensive testing and caution. It became evident that the company needed a robust, scalable infrastructure capable of uniting eCommerce, warehouse, and logistics operations under one cohesive architecture.

■ THE SOLUTION

A Comprehensive Digital Overhaul

Our team partnered with the client in September 2020 to build a long-term, scalable solution. The goal was to unify their agricultural eCommerce with warehouse and logistics management while preserving the flexibility required to handle complex, custom agricultural products.



Technology Stack & Architecture

We implemented a modern architecture designed for scalability and flexibility:

- **Prestashop (PHP):** The eCommerce storefront for customers and farmers.
- **Ruby on Rails:** A powerful warehouse console to manage stock, orders, purchase orders, and logistics.
- **Android (Java/Kotlin):** A mobile app enabling warehouse staff to pick, pack, receive, and ship products efficiently.
- **PostgreSQL:** A centralized database ensuring reliability and data integrity.
- **AWS Cloud Infrastructure:** Providing resilience, scalability, and security.



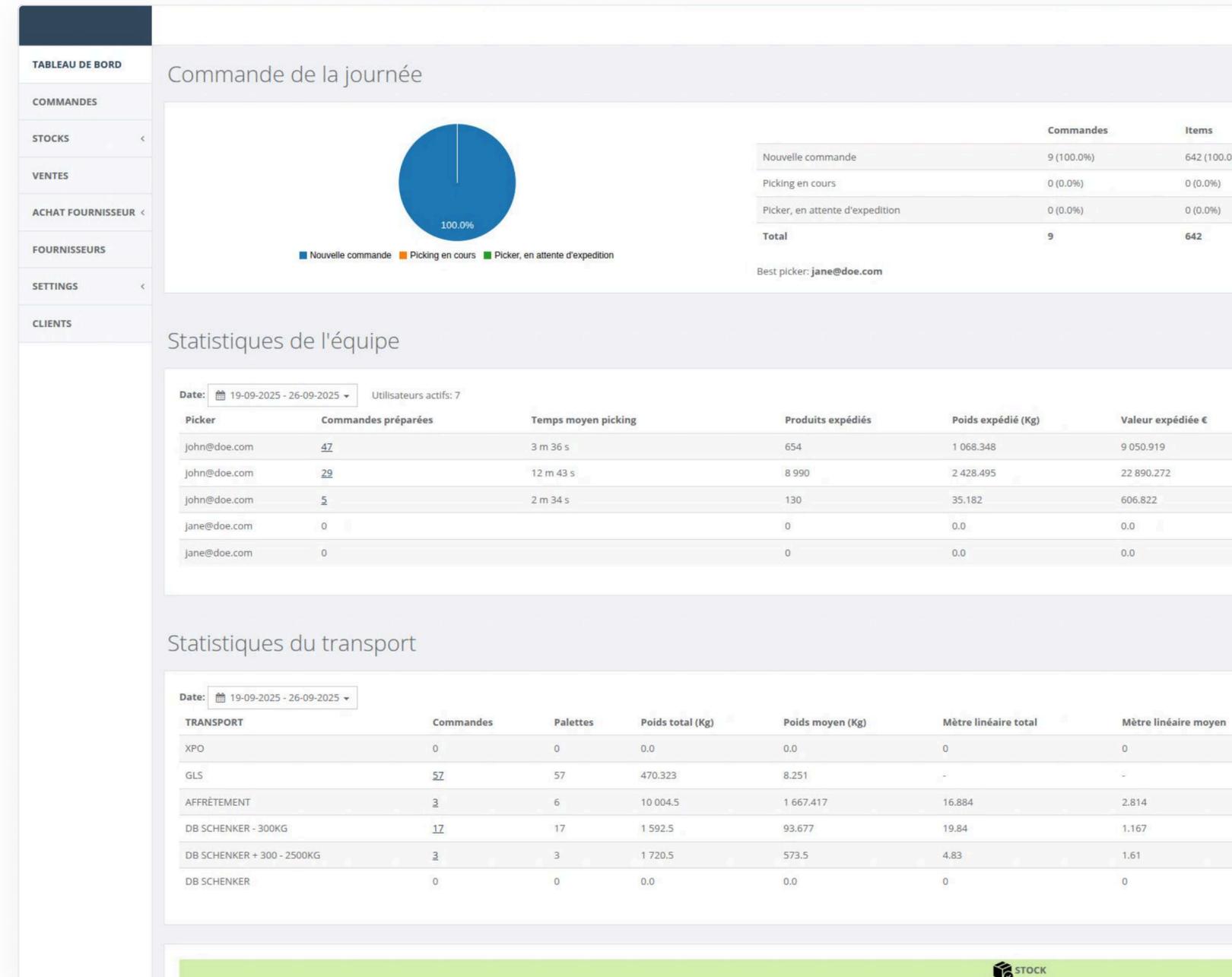
User-Centric Design

Warehouse Management

- Location and pallet tracking for full warehouse visibility.
- Syncing products and orders between eCommerce and warehouse systems.
- Mobile barcode scanning with Android devices for accurate product handling.

Order & Customer Lifecycle

- Custom-built lifecycle stages: Booked → To Be Picked → To Be Shipped → Shipped.
- Enhanced synchronization of orders and products between Console and Prestashop.



Supplier & Purchase Orders

- End-to-end PO management: draft, approval, document handling, reception, and payment.
- Mobile updates for warehouse staff to receive supplier deliveries directly.

Logistics & Transport

- Integrated with leading logistics partners (XPO Logistics, DB Schenker, GLS Group).
- Mobile app support for handoff and transport tracking.

Advanced Features

- Dynamic, seasonal, and quantity-based pricing models.
- Custom quote and order management within Prestashop.
- Farm management software module on Prestashop for agricultural operations (fertilization, mowing, livestock tracking, and task sharing).
- Role-based permissions and sales analytics in the warehouse console.

Tableau de bord: Achat fournisseur

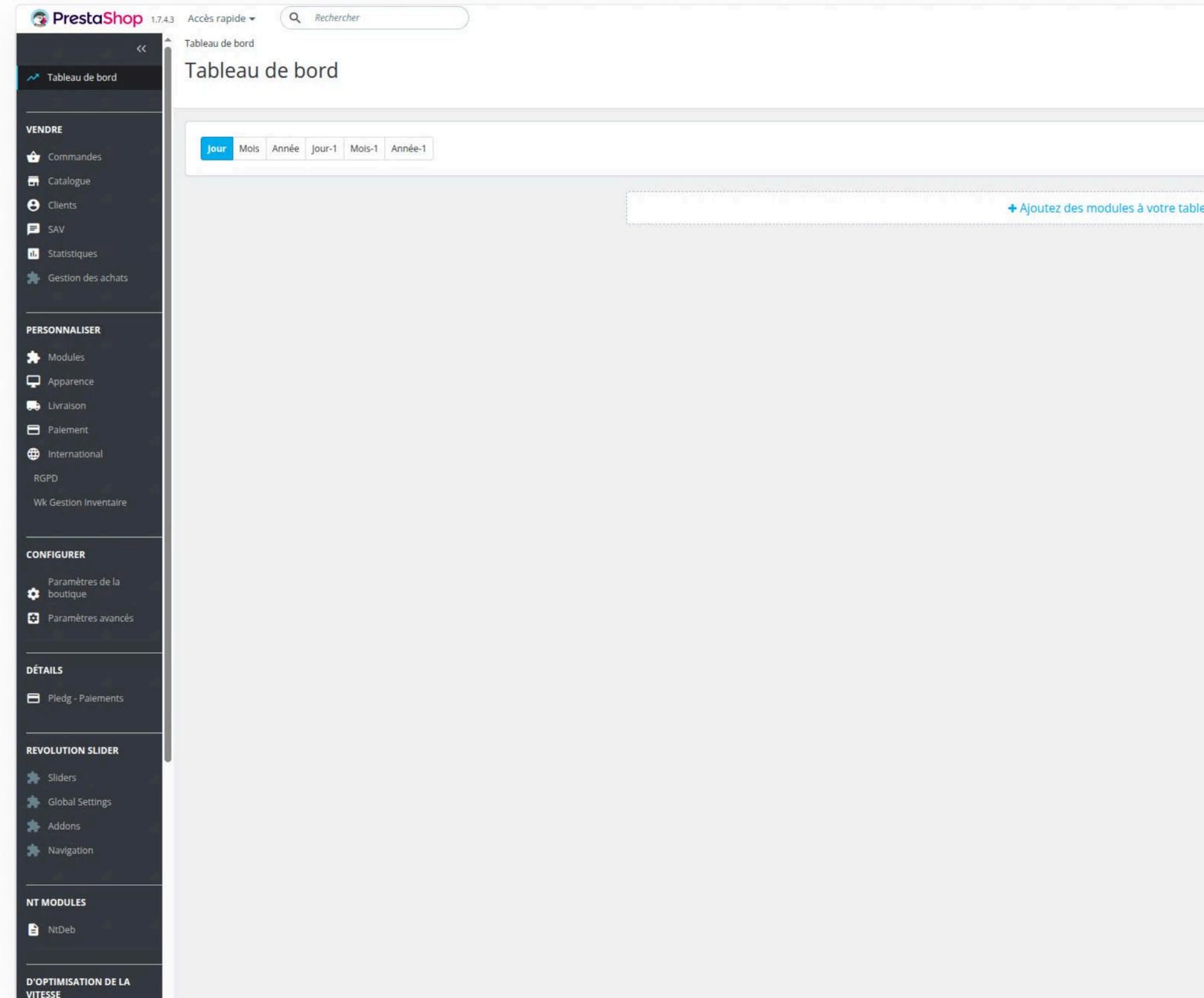
N° de commande	N° de brouillon	Fournisseur	État	Réception	Paielement	Poids	Gestionnaire	Date de validation
PO-391213 - LIVRAISON URGENTE		DERIPLAST GROUP	En attente de validation du fournisseur (10.0 %)	0,00%	0,00%	7 961,0 Kg	jane@doe.com	26-09-2025 09:02:18+02:00
PO-966204 / GR 169		SOCOBATI	En attente de validation du fournisseur (10.0 %)	0,00%	0,00%	2 652,0 Kg	jane@doe.com	25-09-2025 11:04:11+02:00
PO-107253 / WEBSHOP CDE 32629		EVERSOL	Réceptionné (80.0 %)	100,00%	0,00%	71.45 Kg	jane@doe.com	25-09-2025 10:17:52+02:00
PO-859813 / GR 156		SOCOBATI	En attente de validation du fournisseur (10.0 %)	0,00%	0,00%	5 280,0 Kg	jane@doe.com	25-09-2025 09:45:32+02:00
PO-913618 / GR 167		SOCOBATI	Réceptionné (80.0 %)	100,00%	0,00%	6 408,0 Kg	jane@doe.com	25-09-2025 09:03:41+02:00
PO-175534		Dairy Spares SARL		0,00%	0,00%	7.73 Kg	jane@doe.com	25-09-2025 08:27:56+02:00
PO-823061		KERBL	En cours de fabrication (25.0 %)	0,00%	0,00%	164.81 Kg	jane@doe.com	24-09-2025 15:07:34+02:00
WEBSHOP 31753		Gallagher Europe B.V.	Réceptionné (80.0 %)	100,00%	0,00%	2.4 Kg	jane@doe.com	24-09-2025 14:50:18+02:00
PO-565407		KERBL	En cours de fabrication (25.0 %)	0,00%	0,00%	54.5 Kg	jane@doe.com	24-09-2025 12:25:06+02:00
PO-239122		Dairy Spares SARL	En cours de fabrication (25.0 %)	0,00%	0,00%	12.59 Kg	jane@doe.com	24-09-2025 11:51:25+02:00
PO-984994		Zetar Industry Co.Limited	En cours de fabrication (25.0 %)	0,00%	0,00%	480,0 Kg	jane@doe.com	24-09-2025 10:26:46+02:00
Pièces supp OS KIT		CLIPPEX	Réceptionné (80.0 %)	100,00%	0,00%	105.4 Kg	jane@doe.com	24-09-2025 10:01:35+02:00
PO-307620 SOMMET ELEVAGE		JFC Manufacturing Co. Ltd	En cours de livraison (50.0 %)	0,00%	0,00%	23.66 Kg	jane@doe.com	23-09-2025 15:01:05+02:00
SAV SOUS GARANTIE - Alexandre Didier		NEMTEK EUROPE BV	En cours de fabrication (25.0 %)	0,00%	0,00%	0.05 Kg	jane@doe.com	23-09-2025 08:25:02+02:00
PO-245687		KERBL	En cours de livraison (50.0 %)	0,00%	100,00%	100,0 Kg	jane@doe.com	22-09-2025 15:34:44+02:00
PO-340616 SAV SOUS GARANTIE		ENIX ENERGIES	En cours de fabrication (25.0 %)	0,00%	0,00%	0.7 Kg	jane@doe.com	22-09-2025 10:59:00+02:00
SAV HORS GARANTIE - WEBSHOP 32534		Gallagher Europe B.V.	Réceptionné (80.0 %)	100,00%	0,00%	0,0 Kg	jane@doe.com	19-09-2025 09:11:28+02:00
PO-321889		Dairy Spares SARL	En cours de fabrication (25.0 %)	0,00%	0,00%	47.44 Kg	jane@doe.com	17-09-2025 11:42:37+02:00
WEBSHOP 32324		Gallagher Europe B.V.	En cours de fabrication (25.0 %)	0,00%	0,00%	0,0 Kg	jane@doe.com	17-09-2025 11:02:53+02:00
PO-970440 / GR 165		SOCOBATI	Réceptionné (80.0 %)	100,00%	0,00%	880,0 Kg	jane@doe.com	16-09-2025 16:47:25+02:00
PO-567004 / GR 164		SOCOBATI	Réceptionné (80.0 %)	100,00%	0,00%	1 468,0 Kg	jane@doe.com	16-09-2025 16:25:44+02:00
PO-604965 / GR 163		SOCOBATI	En cours de fabrication (25.0 %)	0,00%	0,00%	682,0 Kg	jane@doe.com	16-09-2025 16:04:44+02:00
PO-403106 AV01 - 02		SEEDS - CARHARTT	En cours de fabrication (25.0 %)	0,00%	0,00%	3,0 Kg	jane@doe.com	16-09-2025 11:19:57+02:00
PO-649300		KERBL	En cours de livraison (50.0 %)	0,00%	100,00%	169.44 Kg	jane@doe.com	15-09-2025 14:17:04+02:00
PO-329627		KERBL	Achat terminé (100.0 %)	100,00%	99,98%	164.81 Kg	jane@doe.com	15-09-2025 11:38:11+02:00

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Overcoming Technical Hurdles

- **Aging Platform:** Prestashop's limitations required expert engineering and careful testing to deliver custom pricing and product logic without destabilizing the core system.
- **Complex Product Models:** Agricultural packs, accessories, and bundles had no native templates; all were developed from scratch.
- **Device & Deployment Challenges:** Warehouse barcode scanners had unique hardware specs that were difficult to emulate in development. In addition, the production Prestashop had custom modifications absent in staging, requiring cautious, precise deployments.



THE RESULT

A Unified Agricultural Commerce Platform

The partnership transformed the client's business operations. The new integrated platform delivered significant benefits:



Improved Warehouse Visibility

Managers and staff gained clear, real-time insight into stock, locations, and pallets.



Streamlined Logistics

Direct integrations with transport providers reduced errors and delays in shipping.



Supplier Efficiency

A modern purchase order system brought order and transparency to supplier management.



Agility in Pricing & Sales

Custom seasonal and bulk pricing empowered them to serve diverse agricultural clients with flexible models.



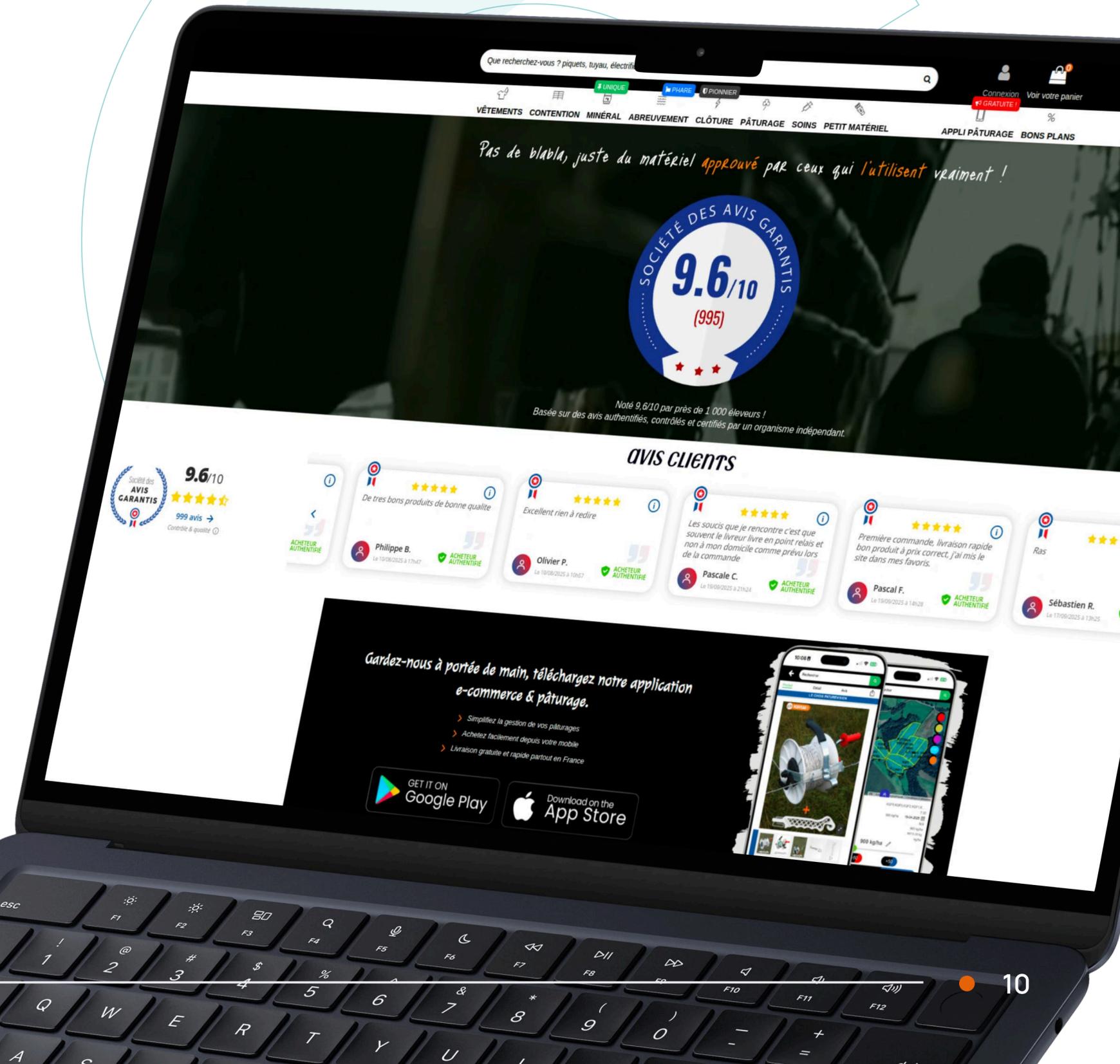
Operational Confidence

With mobile-first workflows and unified systems, warehouse staff and managers could work more efficiently and reliably.

Conclusion

By combining a modern technical foundation with deep customization, our team helped a French eCommerce company evolve from fragmented, outdated systems into a comprehensive agricultural eCommerce and logistics platform. The solution not only streamlined daily operations but also equipped them with the flexibility to grow, adapt, and lead in the European agricultural supply chain.

Today, the company continues to thrive, with our partnership providing the foundation for ongoing innovation and success.



What Our Client Says



Joey Lole-Bailey
CEO



A Serious Company

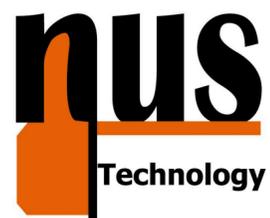
I have been working with this company for a while now, and they are serious about their business. They have a wide range of developers with different coding expertise, as well as project managers and team managers, which means they can achieve advanced and complicated tasks without a problem. They take great pride in their work, and the result is the delivery of high-quality products.

Special thank you to the team that has been working on my projects: Amy, who is a great project manager and does her job with a lot of pride and respect; and Nick, who is a great developer that can code almost anything, from Ruby to PHP to JavaScript. He also takes huge pride in his work and makes great efforts to deliver the best quality products!

They have been very available, respond quickly, and in case of emergency, they pull in resources to get things fixed if needed. My overall experience with Amy and Nick, and thus this company, has been nothing but positive.

THANK YOU

For Reading Our Case Study



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