

Success story

Developing a centralized reporting system for a US-based leader in custom signage products



About the client

The client is a leading e-commerce company specializing in high-quality, customizable signage solutions for various industries. With a network of 12 specialized factories across the US and over 60 dedicated websites for niche products such as safety signs, security signs, traffic signs, facility identification labels, tags, mats, and more, they offer a comprehensive catalog of over a million products. The client empowers a global clientele to design and order bespoke signage through an intuitive online tool, tailored to meet specific needs.

Tech stack











Addressing the need for a unified reporting system for streamlined operations

Each of the client's 60 websites operated as a separate entity, generating a huge amount of data related to inventory, marketing, sales, customer service, etc. This siloed setup led to overwhelming volumes of unstructured data scattered across platforms, making it nearly impossible to unify information into a single, actionable dashboard. This fractured reporting infrastructure created strategic blindness at the enterprise level, where leadership couldn't identify cross-brand opportunities or risks emerging across multiple properties.

To address these challenges, the client wanted to implement a centralized data integration platform that could aggregate information from all 60 websites into a unified system. By automating data pipelines and standardizing data formats across inventory, marketing, sales, and customer service channels, the client envisioned a real-time, 360-degree view of their operations.

Building on our previous successful collaboration, where we developed a <u>comprehensive inventory management application</u> that enhanced operational efficiency through improved stock tracking, automated replenishment, and seamless system integration. For this project as well, the client chose to augment their in-house development team with experts from Daffodil Solutions. This approach enabled them to leverage our specialized expertise, accelerate development, and ensure uninterrupted business operations while developing the centralized reporting system.

The key requirements were:

- Create a centralized reporting system that consolidates performance metrics across all websites, including inventory levels, sales data, marketing campaign performance, and customer engagement insights.
- Augment the existing development team with skilled frontend and backend engineers to accelerate the delivery of the new platform without disrupting ongoing operations on other sites.
- Set up a robust and scalable backend system capable of supporting multiple websites, high-volume traffic, and an expanding product catalog, ensuring performance and stability.

Simplifying multi-site data management with a unified reporting system

Our experts followed a structured approach to ensure efficiency and quality. We started by adopting the MVC architecture to maintain a modular and scalable structure to enable easier updates and organized development.

We utilized .NET Core as the backend framework for its cross-platform capabilities, performance, and seamless integration with other services. For data management, we relied on SQL to ensure consistency, efficient querying, and secure data handling.

Throughout the project, we utilized Azure DevOps for source control, continuous integration/continuous deployment (CI/CD), and agile sprint planning. This approach ensured smooth collaboration among team members and efficient progress tracking, resulting in a well-coordinated development workflow.

The key features we incorporated were:

Sales report by site

This feature enabled the client to track sales performance across their entire network of signage websites. By consolidating sales data in a unified dashboard, the client could easily compare revenue trends and identify top-selling products. This visibility enabled data-driven decision-making and the optimization of sales strategies.

Payment management

By centralizing payment data from all websites into one dashboard, financial operations became significantly more manageable. The client could access a complete view of revenue streams, payment statuses, and financial metrics in one place. This consolidation streamlined reconciliation processes, minimized manual errors, and improved financial reporting accuracy, leading to more transparent and efficient payment tracking.

Customer conversation

This feature centralized customer interaction data from various channels, including support tickets, chat conversations, and emails. By organizing this information into a unified dashboard, the client could efficiently track customer queries, analyze response times, and assess communication quality. This comprehensive view helped improve customer service strategies and maintain consistent interaction standards.



Order management

By centralizing order data from multiple signage websites, the client was able to streamline the entire order management process. With a clear, consolidated view of order statuses, processing timelines, and fulfillment updates, the client could quickly identify bottlenecks and resolve issues. This approach improved efficiency, reduced errors, and ensured that all orders were fulfilled accurately and on time, even during high-volume periods.

How our augmented team empowered the client with a centralized reporting system

The centralized reporting system changed the client's data management by providing a unified dashboard that consolidated data from over 60 signage websites. This integration eliminated the need to manually gather information from various sources, allowing the client to monitor key metrics like inventory levels, sales performance, marketing outcomes, and customer engagement in real time. As a result, decision-making became faster and more accurate with simplified data access, improving operational efficiency and reducing manual reporting efforts.

The collaboration with Daffodil Software through team augmentation was instrumental in achieving this transformation. By incorporating skilled frontend and backend engineers, the client accelerated the development process while maintaining uninterrupted business operations. The resulting system now supports scalable, data-driven insights, enhancing the client's ability to make informed strategic decisions.

60+ E-commerce websites

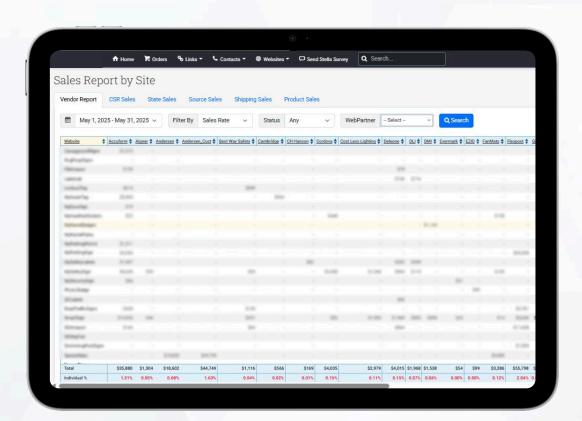
900,000+ customers

1M+ SKUs

Services used

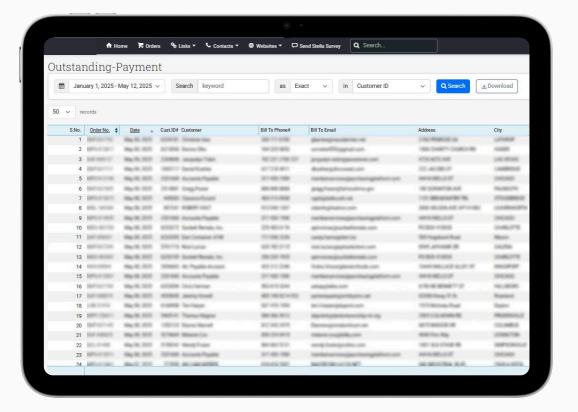
Team Augmentation

Product snapshots

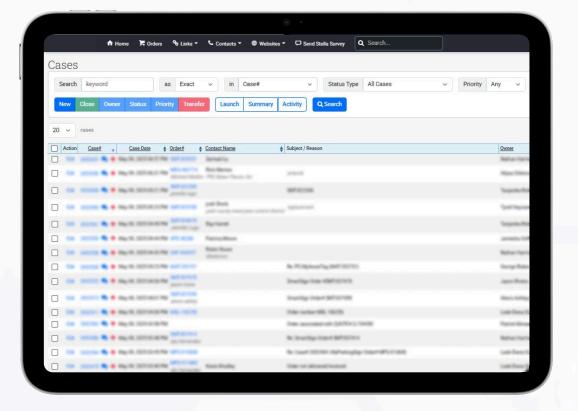


Sales report to track sales performance across their entire network of signage websites

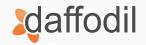


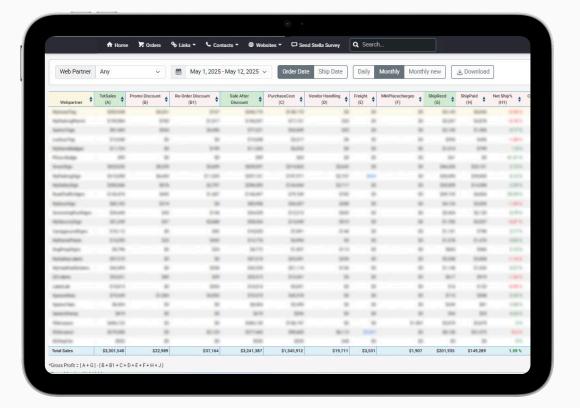


Payment report for a complete view of revenue streams, payment statuses, and financial metrics



Customer conversation feature to centralize customer interaction data from various channels





Order management for a consolidated view of order statuses, processing timelines, and fulfillment updates

Have a software product vision in mind?

Setup a personalized consultation with our technology expert.

Let's Talk





