



CUSTOM DATABASE APPLICATION IS DEVELOPED TO MANAGE VESSEL BILLING ACROSS THE GLOBE

THE BACKGROUND

Acrowire collaborated with APM Terminals N.A., part of the A.P. Møller – Mærsk Group, to design a mission critical billing system for their stevedoring business. APMT was in need of a custom database application to handle its billing process. The application would need to support the complexities and volume of data associated with a company of their size and scope. Because of the complexities of their billing logic, the existing process was very manual and time consuming. APMT has thousands of clients in dozens of countries and the system must be able to accommodate their internal needs as well as the needs of their clients. Internally, the application must support dozens of concurrent global users and interface with existing terminal operation and accounting systems. It must also interface with the company's external clients using standard interchange methods such as EDI.

When a ship pulls into a port operated by APMT, a unique rate must be calculated for every container move associated with that vessel call. The complexity lies in the number of factors which must be considered when calculating the rate charged for each container move. Each of APMT's clients has close to a dozen unique parameters that must be evaluated for each move including the type and size of container, port of call, time of day, route sailed, and vessel operator. Because APMT moves millions of containers every year, their billing system must be able to evaluate any possible parameter combination instantaneously and generate the client invoices without delay.

THE APPROACH

Accommodating this level of complexity in an off the shelf system would require extensive customization and unpredictable costs. Instead, Acrowire could develop the billing system with a predictable timeline and budget. Acrowire met with key stakeholders to further refine requirements and understand the unique constraints. Acrowire defined the architecture and delivered a working prototype within a few months. Version 1.0 of the Vessel Billing System (VBS) was put into production using a combination of Microsoft technologies including SQL Server, the .NET Framework, and the Microsoft Office suite. The architecture was designed to take advantage of existing database infrastructure so that licensing and administration costs were kept to a minimum. Other TCO components such as system downtime have been minimized as VBS has experienced virtually no downtime since its inception as a result of its lack of dependencies.

THE OUTCOME

VBS has been a resounding success by nearly every measure by maintaining platform independence, demonstrating high levels of resiliency and adaptability and sustaining an extremely low TCO.

The system has managed billing activities for tens of millions of container moves and several billion dollars worth of revenue. VBS has successfully integrated with countless CRM and accounting platforms over time. Custom interfaces can be written to any system giving VBS full plug-and-play capabilities.

Acrowire has helped APMT keep up with the ever changing landscape of the transportation business by being more than just a technology resource. The relationship between APMT and Acrowire has grown into a multi-year partnership where both companies are focused on ensuring each others success.



PROFILE



INDUSTRY
Transportation

PORTS
50

EMPLOYEES
19K

COUNTRIES
34