



Global Transportation Company Puts its IBM i Applications Firmly on the Path to a Modern Development and Database Framework

From time to time, every company is faced with the reality that deep, foundational changes are required to reverse an increasingly untenable situation. Reshaping any area of an organization isn't easy; it typically requires much soul-searching and discipline, and the solution can require months if not years to bring online. Nonetheless, successful companies aren't those that avoid dramatic restructuring events—no company is immune. Successful companies are those

that face facts quickly, make a thorough assessment of the situation, and invest the necessary effort and resources to implement a solution that will turn things around.

Averitt Express, a Tennessee-based, global transportation and logistics company, recently encountered such a challenge when it became clear its internal IBM i software development team was being pushed to the limit. The team was spending



AVERITT



nearly 70 percent of its development time maintaining existing programs within the company's massive logistics applications, putting a real strain on its ability to develop new business functions. Given the dynamic nature of the company and the new business services it regularly rolls out to customers, Averitt's IBM i development group of 20+ programmers was working feverishly just to keep up.

Michele Wilborn, Director of Information Services at Averitt, worried that the situation could become even more difficult because of several RPG developers being close to retirement and the increasingly difficulty of finding programmers familiar with RPG environments. Given the situation, Michele and her team were even considering whether it might be in the company's interest to move off the platform.

It was during the process of looking for a tool that might solve a persistent issue around the length of fields contained in thousands of Averitt's programs that Michele was struck by a comment made by **Neil Woodhams**, President of Databorough Services and a TEMBO partner. "I'll never forget what he told me," says Michele. "Neil said: 'Instead of just focusing

on changing field size, have you thought about modernizing your database so that in the future you can actually change something like field size without having to modify thousands of programs?'"

"I was amazed to hear this was even possible," Michele continues. "Neil put us in touch with TEMBO, and we began to learn about the myriad ways our applications could benefit from modernizing our massive database."

Michele and Sr. Programmer Analyst Kay Newman learned that TEMBO does much more than just sell an innovative solution for database modernization. "Our initial conversations with TEMBO about database modernization rapidly became an in-depth discussion about modernizing our entire software development effort," says Michele. "It became clear that database modernization was one component of a broader modernization effort that would be required to gain the efficiencies we need for our software development projects. We were also reminded about the value of the information and knowledge that's been accumulated within our programs and database over the years, and how much of that might be lost if we started over on another platform."

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“We have invested deeply in creating the most innovative database modernization tools for IBM i,” says **Marinus van Sandwyk**, CEO of TEMBO. “AO Foundation modernizes legacy databases from their current ISAM CQE format to the powerful native SQL database engine, which makes it possible for companies to benefit from a true data-centric, multi-tier, MVC application architecture. This is implemented through a gradual modernize-as-you-maintain approach that ensures no loss to business continuity.”

“We are also keenly aware that database modernization efforts must work in lockstep with modern software development practices, including the use of modern IDE tools like Rational Developer for i (RDi) and free-form RPG,” continues Marinus. “In order to get the most from this modern development approach in which database modernization is a critical element, we have developed an extensive curriculum on modern software development for IBM i, and we encourage every customer to have their development team trained on this curriculum.”

Michele and Kay became convinced that a comprehensive modernization effort, which includes RDi, free-form RPG, and TEMBO’s AO Foundation for database modernization, was the best way to resolve the increasing number of obstacles their IBM i development team was facing. The good news was this approach would cost significantly less than starting from scratch on a new platform, take less time, and best of all, preserve the value accrued in Averitt’s programs and database. In addition, by utilizing RDi and free-form RPG, the company would

be able to more easily attract younger developers who would be comfortable using this modern IDE. Michele and Kay made the case to management and received approval to move ahead.

Averitt began by having a core group of its developers attend TEMBO’s software modernization training course. The sessions were recorded so that all members of the IBM i development team could eventually learn the same things and work together toward a modern development approach.

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asking each developer to spend 10 percent of their time, or four hours a week, learning something about modernization and then trying it out,” says Michele. “We hold regular ‘modernization’ meetings with the developers to answer questions, discuss issues, and keep everyone motivated. Whether it’s service programs, normalization, constraints, triggers, activation groups, commitment control, or DDS-to-



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DDL, we’re tracking how each developer increases his or her knowledge in these areas of modernization. Concurrently, we do weekly calls with our TEMBO consultant, who answers questions, reviews our development standards, and addresses any issues we encounter. As a team, we regularly decide on an area of the code or database to focus on modernizing and work together to get it done.”

After months of steady efforts, Averitt is experiencing real benefits. “I’m seeing a spirit of rejuvenation among our developers, especially the more experienced ones,” says Michele. “It’s great to see them excited as they learn about modernization and experience the difference it makes in their work. Certainly, many of the larger benefits of our

modernization effort are still to come, but we’re seeing tangible results today. One example is the creation of service programs that work across multiple applications; for instance, we have one that monitors for errors and another that validates email addresses.”

“Best of all, we feel we’re on a path to a future in which we’ll be able to do so much more with the decades of accumulated functionality in our programs and the valuable business information we have in our database,” continues Michele. “I’m confident that in time our ongoing modernization effort will shift the majority of our development time away from maintenance tasks and toward the creation of new functionality for the company.”

