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# Keane Modernizes Transportation Supplier's IT Application Portfolio

Keane's legacy modernization strategy and execution enables leading US-based rail transportation provider to cut costs, improve efficiencies, and prepare for future business challenges.

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## Abstract

A leading transportation services company sought to modernize its IT applications portfolio. Keane outlined a strategy and execution model that leveraged onsite and offshore resources. As a result of this work, our client reduced the number of components consuming maintenance and licensing costs by more than 50% and upgraded its portfolio to more efficient and flexible technologies.

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## Challenge

To keep moving forward, the railroad industry must continue to reduce operating costs, improve operational efficiency, and provide increasingly better service to its customers.

Our client, one of the US's leading providers of rail-based freight

transportation services, understood that a modern, future-ready IT application portfolio was crucial for accomplishing these goals.

Our client's application portfolio consisted of a variety of mainframe and mid-tier technologies (some new, some very old and unsupported). This led its IT organization to spend an enormous amount of time and money maintaining inactive components. This included paying for annual licensing costs as well as spending time and dollars analyzing or updating software components during enterprise-wide upgrades.

In addition, relying on unsupported technology posed operational and business risks. With no vendor to make functional changes or maintain compatibility, future upgrades to our client's operating or mid-tier system would be impeded.

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## Application and Infrastructure Solutions

## Solution

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Having supported 85% of the client's mainframe application portfolio, Keane was chosen to identify applications and modules to be retired, upgraded, or replaced.

Keane found that more than 50% of the mainframe and mid-tier components that were in the production library — and absorbing maintenance and licensing costs — were no longer used. We identified nine areas for modernization through conversion, retirement, or remediation using a factory model that leveraged onsite management and architects, and offshore development and testing resources.

Keane's onsite group worked closely with the client's technology teams to fully document the modernization process for each project, which enabled the offshore team to quickly ramp up and execute.

Keane kept several parallel projects running on schedule using project management discipline, frequent communication with our client's technical and business teams, and the insight and know-how of our experienced technology professionals.

In order to help the client create a future-ready IT application portfolio, Keane's solution included the following:

### Converting non-standard and obsolete programming languages to a standard version

Keane converted:

- » 14,000 legacy COBOL components and 1,000 Telon components to

Enterprise COBOL, improving CPU usage by 15%

- » 200 EZETRIEVE components to COBOL
- » 225 PL1 components to Enterprise PL/1

### Retiring inactive applications

Keane eliminated:

- » 50% unused mainframe and mid-tier application modules (about 19,000 components) associated with business applications

### Modifying printer applications

Keane modified:

- » 850 programs to remove invalid printers without impacting applications

### Remediating COBOL copybook components

Keane modified:

- » 1,800 legacy COBOL copybook components to facilitate migration to IBM Rational software

### Rewriting event services API

Keane modified:

- » 110 software components that used unsupported event services application programming interfaces (API) to use an MQ message bus

### IBM DB2 Enterprise Server Edition data sharing changes

To facilitate sharing of data among several DB2 sub-systems,

Keane modified:

- » 450 stored procedures to remove references to specific DB2

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Keane Client Story:

**Industry:** Transportation

**Offering:** Architecture & IT Consulting | Legacy Modernization

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sub-systems. This enabled software programs to execute from different business areas without limitations

### Rewriting legacy applications

Keane is engaged in rewriting applications in the mainframe environment by integrating them with Web-based front ends and ERP systems. This will enable the client to take advantage of more intuitive interfaces, robust functionality, and enterprise-wide visibility.

## Results

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Keane enabled this transportation client to execute a modernization project that touched almost its entire application inventory.

We reduced the number of software components consuming recurring maintenance and licensing costs by more than 50% by upgrading approximately 15,000 modules and retiring more than 19,000.

Through our modernization efforts, our client was able to reduce operating costs, improve efficiencies, and prepare for future business challenges, by:

- » Integrating Web-based business processes and applications into legacy systems

- » Eliminating costs associated with repeated analysis and modification of unused components
- » Reducing future costs associated with maintaining multiple COBOL compilers
- » Reducing annual licensing costs
- » Re-directing cost-savings into new technologies
- » Creating a more flexible and Web-friendly IT environment that is more responsive to business changes and demands
- » Mitigating risks associated with reliance on unsupported software

Keane delivered these projects on time, on budget and to the complete satisfaction of our client.

## What's Next

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With the success of these modernization efforts, the client has recently engaged Keane to re-platform its legacy accounts receivable (AR) system into Oracle Financials. This will enable the client to create detailed, auditable, reconcilable accounting from a variety of source systems.

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### About Keane

Keane, an NTT DATA Company, is an IT services firm headquartered in the US with more than 12,500 professionals worldwide. For 45 years, Keane has been an Application Services specialist with distinguished project management credentials. Today, we offer a flagship suite of Application Services, as well as Infrastructure and Business Process Outsourcing solutions delivered through onsite, nearshore, and offshore resources.

Visit [www.keane.com](http://www.keane.com) to learn how our projects, managed services, and outsourcing engagements deliver value for a range of businesses and government agencies.

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### Application and Infrastructure Solutions

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