



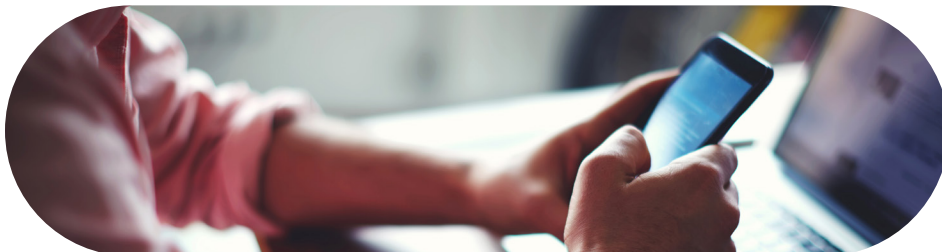
An IT Leader's Guide to Legacy Modernization:

Real-world stories of how leading companies used low-code to modernize and get more value from their existing technology.

Organizations in every industry are prioritizing digital transformation to improve their efficiency, profitability, and competitive posture. Yet many companies' core systems are difficult to enhance or update, or they're completely outdated, which drives up the costs and risks associated with delivering mission-critical innovations.

However, there is an option that can streamline and circumvent barriers to execution: taking a managed-risk approach to modernization. This strategy allows companies to build and deploy new and updated capabilities at a lower cost, with faster time to value and lower effort than traditional methods. Depending on their needs and current technology, companies can use a best-in-class low-code development platform to extend legacy applications with new UIs or user journeys, refactor current applications to composable components, or rebuild core systems from the ground up faster than using traditional tooling or COTS applications. Rather than letting legacy systems hinder agility and innovation, a high-performance low-code platform enables companies to gain greater efficiencies with their existing technologies.

Need proof? We thought you'd never ask. Read on for examples of organizations that have successfully modernized their legacy systems by extending, refactoring, or rebuilding them using a low-code development platform.



1 **Extend** enterprise applications with new capabilities

Extending core systems means adding easy-to-use front ends to improve productivity, efficiency, and user experience. Companies take this approach when their core systems continue to perform but lack the flexibility to add new features and interfaces, such as mobile apps.

2 **Refactor** to build a modern composable architecture

Decoupling and refactoring existing systems lets you create a modular composable architecture that provides the flexibility to innovate quickly and leverage cloud-native technologies. Refactoring makes sense when you need to drive more value from legacy systems but can't replace them easily due to the cost or risk involved.

3 **Rebuild** outdated systems with low-code

When a legacy system has reached the end of its useful life, you can rebuild your core systems with low-code to meet your unique needs in months instead of years. Eliminate the technical debt that keeps you from competing effectively without the risk, cost, and complexity of traditional development or the limitations of COTS.

Van Ameyde: Improving productivity with modern applications

Global insurer Van Ameyde provides complete claims management services to over 1,000 businesses and insurance companies in more than 16 countries. But its off-the-shelf installation of SAP lacked the flexibility necessary to provide customers with the best service and transparency levels in the market. Van Ameyde needed the ability to customize the claims management process for each client, from the call center to the claims workflow, while retaining full control over each backend claim resolution and payment through SAP. What's more, the system had to be flexible enough to adapt to each customer's requirements in a matter of weeks.

That was a tall order. The new application would have to provide employees with standard processes, but with the ability to customize each client's processes and workflows, while reflecting each country's specific legal, currency, and language requirements. Van Ameyde also needed a system that would allow for easy changes in the future, supporting the company's planned growth.

Van Ameyde selected the OutSystems low-code application platform to build and deploy its European Claims Handling Optimization (ECHO) system, which now provides customized claims handling based on each customer's service level agreement and their home country's requirements. The choice was an easy one. Not only did OutSystems offer extensive integration with SAP, but it also provided robust business process management capabilities, an agile methodology, and multilingual and multi-country support. Best of all, the solution required zero customization of the SAP systems.

ECHO has exceeded Van Ameyde's expectations, generating a 30% improvement in the time to resolve a claim. The system is also highly flexible, needing only four weeks to push out new releases and just 20 days to add a new feature.

[Learn more about Van Ameyde and OutSystems.](#)

Van Ameyde 

Organization: Van Ameyde

Industry: Insurance

Location: The Netherlands

Use case: Customized claims portal

Approach: Extend SAP and build customizations to speed claims management

Results: 30% reduction in time to claim resolution



Cengage: Unleashing the power of Salesforce

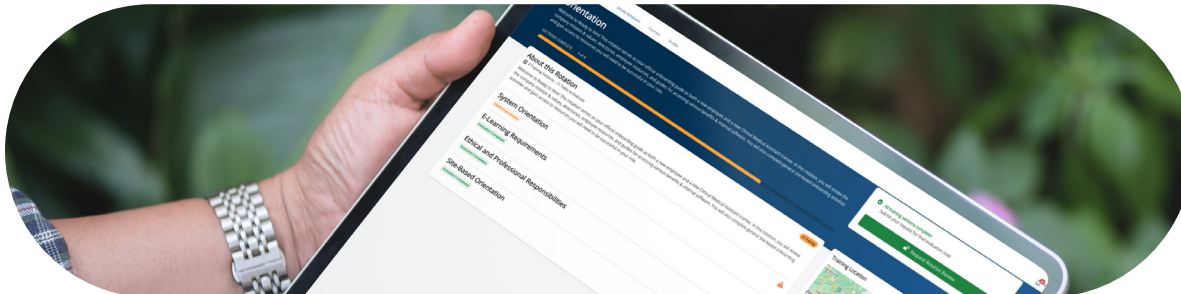
Cengage focuses on workforce skills training and job placement, and it was looking for a way to reduce the time and money spent on app maintenance and deliver new features faster. Cengage also needed to enhance Salesforce with new workflows, but using the CRM's customization capabilities was too costly and time-consuming.

"We looked at building workflows fully in Salesforce and just integrating with the data that we might have. But the time and cost to build inside of Salesforce and then maintain that was significantly more than to do it in OutSystems," says Doug Mealing, Divisional CTO at Cengage. With OutSystems, Cengage built front-ends to Salesforce that integrate data (including course attendance and performance), and streamline workflows, enabling a seamless experience for its employees. The UI on top of Salesforce unlocks course data and makes it accessible through a single sign-on.

Cengage's Ready to Hire solution was fully built on OutSystems, saving 66% of the estimated cost compared to a Node.js and React hybrid approach. The solution supports the entire hiring process, including advertising, training, and evaluating potential employees, until they become full-time employees.

Now, for every legacy migration or new app need, the team uses OutSystems instead of 3rd-party tools or traditional development, ensuring the integration of data and workflows, lowering costs and helping deliver more value to the business.

[Learn more about Cengage and OutSystems](#)



Organization: Cengage

Industry: Computer & Technology

Location: United States

Use case: Salesforce extensions and solution to support the entire hiring process

Approach: Extend the power of its CRM and provide employees with a seamless experience

Results: Streamlined workflows and processes; Faster business value delivery; 66% cost reduction vs Node.js and React.js development

"Any application that we need to build or any legacy application, we can rewrite that in OutSystems, significantly lower maintenance costs and deliver more value across the business than traditionally we could using classic .NET or Java development approach."

Doug Mealing, Divisional CTO, Cengage

Green Cargo: From legacy freeze to innovation

When Ingo Paas arrived at Swedish rail company Green Cargo to take on the CIO role, the company was preparing to rip and replace its mainframe logistics system and SAP ERP, which were severely hampering digital innovation. The company was outsourcing much of its IT development, and it lacked both a strategy and the ability to innovate. Ingo suggested an alternative: leveraging the OutSystems low-code platform to bring development in-house and shift digital innovation to the cloud while still accessing data in the legacy systems.

Using OutSystems, Ingo and his team of developers refactored the company's systems, migrating each new component to Microsoft Azure. In less than a year, his sustainable innovation strategy put several significant applications into production. One was a mobile app for rail yard workers that streamlined processes such as schedule change notification, wagon pick-up, safety checks, ready reports, tag assignment, and carriage damage reporting. The app integrates with the mainframe logistics and SAP systems to provide real-time information and runs on standard smartphones. This enabled Green Cargo to retire dedicated mobile devices with outdated and unreliable software.

Other applications include a predictive maintenance app that receives real-time telemetry from sensors, as well as a customer portal to dramatically improve customer service. Meanwhile, each innovation that Green Cargo releases via its cloud platform moves the company closer to turning off its mainframe and SAP system. With a track record of successful and fast app delivery, Ingo's budget is up and his team's headcount is expected to grow.

[Learn more about Green Cargo and OutSystems.](#)



Organization: Green Cargo

Industry: Rail logistics

Location: Sweden

Use case: Mobile applications for logistics management, predictive maintenance app, and customer portal

Approach: Refactor SAP and mainframe logistics application into a composable architecture

Results: 80% time savings for mobile app development

"To digitize this company, we had to bring innovation and development in-house and get the business and IT collaborating effectively. OutSystems gives us the agility to make that possible. By comparison, if we were doing traditional development, five to ten years from now, we'd have built a new legacy."

Ingo Paas, CIO, Green Cargo

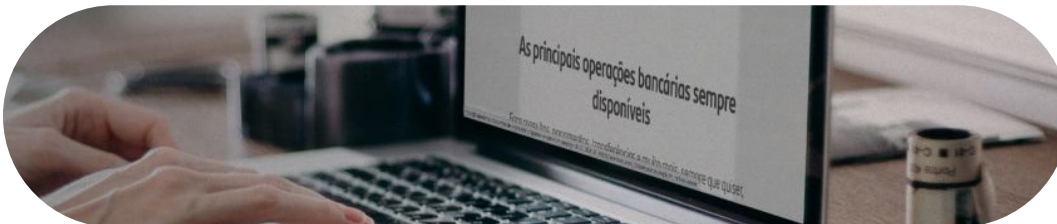
Banco Santander: Digital transformation with minimal resources

Struggling to adapt to a fast-changing market and seeking to diversify its offerings, the Portuguese consumer division of the global Santander Group put together a company-wide taskforce in 2016 to digitally transform every aspect of the business, including products, processes, channels, compliance, and IT. The digital transformation required a new, agile IT architecture to replace many of the bank's 20-year-old systems. Fundamental to this was the creation of an enterprise service bus, a new business process management layer, and new channels for all product stakeholders. With guidance from transformation partner KPMG, Santander chose the OutSystems low-code platform and built 14 new solutions in three years with a team of 20 people from IT, operations, and various business departments.

In late 2018, the first solutions went live for consumer credit and personal loans, followed by applications for ecommerce payment processing, digital cash loans, complaint management, and B2B solutions for used car and durable goods dealers.

By the beginning of 2020, Santander had replaced 70% of the processes that were in its legacy core systems. As Domingos Ferreira, IT & Operations Director, puts it, "In just three years, we have replaced and improved a technology architecture that took us 20 years to develop." Even better, the bank now has the agility to quickly launch new propositions to market with streamlined, digitally optimized processes and significantly improved customer experience while, at the same time, providing an overall lower cost of maintenance compared to the previous systems.

[Learn more about Banco Santander and OutSystems.](#)



Organization: Banco Santander

Industry: Financial services

Location: Portugal

Use case: Customer-facing credit and loan applications, payment processing

Approach: Refactor aging systems to increase agility in a highly competitive market

Results: 70% of core systems replaced; >90% of partners adopt digital onboarding; 14 new applications

"Working with OutSystems and KPMG, we have built a new IT architecture, replaced 70% of our core systems, and streamlined our operations. We are now executing the business vision and delivering new digital channels and solutions to lead in the consumer finance market."

Domingos Ferreira, IT & Operations Director,
Banco Santander Consumer Portugal

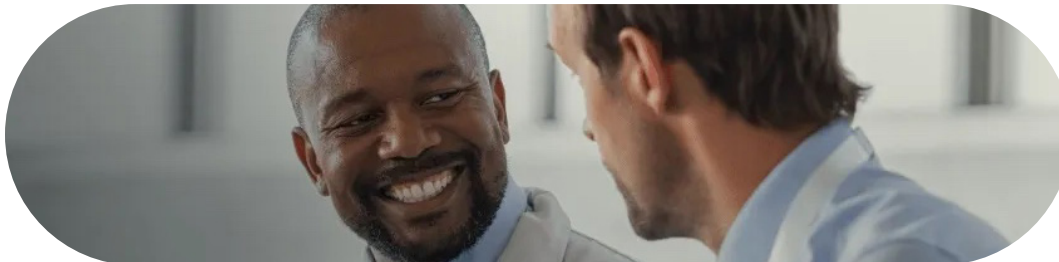
US Acute Care Solution (USACS): Embracing rapid development to reduce technical debt and dependence on external vendors

When Ohio-based Emergency Medicine Physicians became US Acute Care Solution (USACS), it relied on an OpenText patient portal called MyPulse. But as the organization grew through acquisitions and demands for new features accelerated, it proved impossible to update this legacy portal at the pace the business required.

USACS engaged OutSystems professional services to deliver its new portal while at the same time training its small in-house app development team. Using the OutSystems low-code platform, the organization modernized its portal in five months and launched an accompanying mobile app in three months. The results include increased adoption, personalization, improved user experience, and mobile access. Now, USACS's two in-house developers deliver continuous improvements to the portal every two to three weeks.

Since the portal's launch, USACS has also been able to eliminate its outdated Lotus Notes applications, either by rebuilding the apps' functionality on OutSystems or moving commodity functions to its ERP and HR systems. The organization has built a wide range of web and mobile applications, including a work tracker, a risk tracker, and a dedicated mobile app that provides more than 90 percent of the original portal's functionality. The new systems ensure that USACS can quickly onboard each acquired acute healthcare practice onto a uniform suite of built-for purpose applications, quickly weaning them off legacy systems and eliminating SaaS sprawl.

[Learn more about US Acute Care Solution \(USACS\) and OutSystems.](#)



Organization: USACS

Industry: Healthcare

Location: United States

Use case: Patient portal

Approach: Rebuild legacy patient portal to support rapid growth

Results: \$2 million annual savings

“We’re now much more in control of our product roadmap. By eliminating SaaS sprawl and legacy debt, we’re no longer dependent on external vendors for new features. We’re now much more responsive to business requirements.”

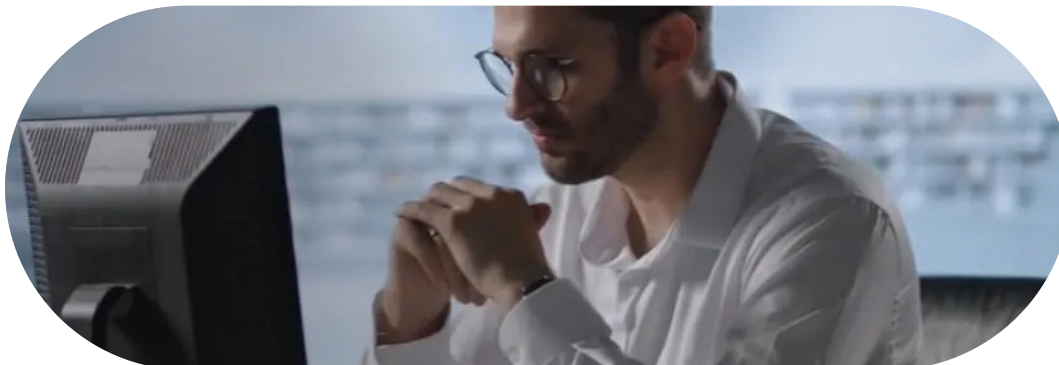
Jesse Eterovich, Vice President of Technology, USACS

PLANgroep: Rebuilding a legacy SharePoint system for greater efficiency

Dutch financial care provider PLANgroep relied on SharePoint as a core business system to help more than 20,000 people manage their finances every day. After a decade of individual clientspecific customizations and numerous complex integrations, however, the company's custombuilt deployment had become too difficult to enhance. In order to offer clients new self-service options and improve the user experience for debt counselors, PLANgroep needed to break free of its legacy gridlock with a flexible technology stack that would support continual innovation and meet rapidly changing customer and legislative requirements.

Delivery partner IG&H built the new system in fewer than 18 months using the OutSystems lowcode development platform, providing all the necessary functionality as well as the flexibility PLANgroep needed to build for the future. The new system improved user experience and provided easier access to all client information, which boosted counselor productivity and helped them serve more than 20,000 people every day. Now that the company has an agile development platform, the best is yet to come, with opportunities to build new innovations and connect with other systems.

[Learn more about PLANgroep and OutSystems.](#)



PLANGROEP

Organization: PLANgroep

Industry: Financial services

Location: The Netherlands

Use case: Self-service portal that services over 20,000 clients per day

Approach: Rebuild aging SharePoint applications to increase agility

Results: Higher productivity resulting from improved user experience and easier access to client information

“We’re already looking to the future. We see lots of opportunities to build in new innovations and connectivity with other systems, which is easy with the OutSystems platform. So, the best is yet to come.”

Jeroen Ekkel, CEO of PLANGroep parent company, Cohedron

Sarawak Energy: Modernizing core apps for efficiency improvements and better CX

Sarawak Energy is an energy development company and a vertically integrated power utility serving a population of nearly three million in Sarawak, Malaysia. The company chose the OutSystems low-code application platform to update its contractor-facing portal to make it easier to customize and integrate with back-end systems.

The portal modernization was such a success that a year later, the company embarked on a broad Lotus Notes and Domino migration program, which will ultimately see around 280 Notes databases replaced by mobile-friendly, integrated, and more powerful OutSystems-built web applications. First was a crucial field service mobile app for meter reading that allowed Sarawak to retire outdated handheld devices used for this purpose. The team also delivered 15 other apps in just 16 weeks. The new applications have streamlined processes, eliminated rekeying between disconnected systems, modernized the user experience for customers and employees, and improved mobility for field staff.

With OutSystems, Sarawak Energy's IT team is escaping from a legacy of siloed Notes applications by building more powerful apps that integrate directly with enterprise applications, including Maximo, SAP, Ariba, and SuccessFactors. What's more, the company now has a multipurpose application development platform and single skill set that can address numerous use cases, including CX, UX, mobility, and core system replacement and extension.

[Learn more about Sarawak Energy and OutSystems.](#)



Organization: Sarawak Energy

Industry: Power utility

Location: Malaysia

Use case: Mobile field service apps for meter reading; contractor-facing portal

Approach: Rebuild legacy Lotus Notes applications to improve CX and agility

Results: 16 apps in 16 weeks; replaced outdated technology in favor of modern mobile apps and multipurpose app development

"OutSystems gives us the agility to modernize our customer interfaces quickly with limited in-house resources. We look forward to OutSystems further accelerating our digital transformation journey towards a modernized enterprise."

Sim Ko Sin, Senior Vice President,
Information and Communications
Technology, Sarawak Energy

Modernize your applications with OutSystems low-code

Extending, refactoring, rebuilding. Whatever modernization approach — or combination of approaches — you take, the OutSystems high-performance low-code development platform can get you there more efficiently — faster and with a lower investment than traditional methods.

But as these companies have learned, that is just the beginning of the digital transformation journey. Even with limited development resources, they now have a solid foundation for future agility and innovation. OutSystems has changed the way these companies develop software, so they can rapidly create and deploy critical applications that evolve with their businesses. What about yours?

To learn more about how you can modernize your legacy applications with OutSystems, visit OutSystems.com.

[Learn more](#)





About Xebia

Xebia is a trusted advisor in the modern era of digital transformation, serving hundreds of leading brands worldwide with end-to-end IT solutions. The company has experts specializing in technology consulting, software engineering, AI, digital products and platforms, data, cloud, intelligent automation, agile transformation, and industry digitization. In addition to providing high-quality digital consulting and state-of-the-art software development, Xebia has a host of standardized solutions that substantially reduce the time-to-market for businesses. Xebia also offers a diverse portfolio of training courses to help support forward-thinking organizations as they look to upskill and educate their workforce to capitalize on the latest digital capabilities.

The company has a strong presence across 16 countries with development centers across the US, Latin America, Western Europe, Poland, the Nordics, the Middle East, and Asia Pacific.

About OutSystems

Thousands of customers worldwide trust OutSystems—the only solution that enables the visual development of entire application portfolios that easily integrate with existing systems.

Learn more at www.outsystems.com



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