Softwire

Legacy modernisation: why doing nothing isn't an option

How insurance and financial services can change the modernisation conversation

Softwire

Content

Softwire

1.
Introduction

Financial services and insurance have long prided themselves on focusing on customer needs. But outdated data systems are now standing in the way—slowing innovation, compromising AI strategies, and inflating costs. While exciting new technologies dominate the spotlight, modernisation efforts quietly slip off the agenda.

This short lookbook helps leaders bring modernisation back into focus, offering insight into common challenges, how to drive better conversations with the business, real-world examples, and steps to get started today.

2.
Putting modernisation back on the agenda

Data system modernisation—like a burning platform or tech debt—is a pressing challenge that never goes away or gets any easier.

Nor is it ever far from any CTO or tech leader's mind. How could it be? Legacy pain expresses itself daily in nearly every meeting across the organisation.

Complaints about slow time to market, increasing risk, insufficient data, and rising costs are permanent agenda items. It's no secret that everyone hates the system, and rumours of shadow IT and elaborate workarounds abound, hindering both data accuracy and business agility.

At the same time, if creating a business case was difficult before, it's even harder in the age of AI and against unpredictable economic headwinds. As Gartner explains, thin budgets and a focus on things like AI mean it's harder to allocate time and money to modernising core platforms.[1]

Softwire

Legacy modernisation: why doing nothing isn't an option

Softwire

Doing nothing is always tempting, yet kicking the can down the road seldom works. Things will only get worse.

Legacy systems—now often spread across hybrid architectures and multiple platforms—simply weren't built for today's pace of change. Compounding matters, old and new systems don't play well together, hurting data accuracy, access, and any real AI ambition.

To make a case, you must put yourself in multiple pairs of shoes owned by the CFO, the Chief Risk Officer (CRO) and, to some degree, the CEO.

Only **15%** of respondents indicated that core insurance system modernisation and digital transformation are independent of one another[2]

Persuading stakeholders means shaping your business case around what matters to them:

CFO
Long-term cost reduction and efficient capital use

CRO
Reduced risk exposure and greater resilience

CEO
Competitive agility and alignment with strategic goals

You must also emphasise that modernisation, done the right way, will not disrupt all the things working for the business, customers, and employees.

Modernisation failure is often the result of organisational and cultural challenges, not just technical ones. Many efforts fall into the trap of "big bang" rewrites or layering outdated processes without addressing structural blockers like organisational silos or misaligned leadership priorities.

Success stems from a shift from "technology replacement programmes" towards steady incremental improvements, where outcomes are clearly defined and change is embedded into both systems and ways of working.

Legacy modernisation: why doing nothing isn't an option

Softwire

3.

Common pain points

So, what are your options? And where can you start modernising in a way that balances all those conflicting priorities?

While no journey is the same, there are some common challenges and pathways to modernise in ways that work best for you and your organisation.

Here are some of the most frequent barriers financial services and insurance leaders face →

Security vulnerabilities	Legacy systems often rely on outdated security architectures, making them more susceptible to breaches, ransomware, and cyberattacks. They lack the resilience and controls needed to withstand modern threats.
Escalating maintenance costs	Supporting ageing platforms becomes more expensive over time. Costs stack up with every patch, workaround, and integration layer needed to keep things operational—without delivering new value.
Integration headaches	Legacy systems often struggle to integrate with newer technologies, APIs, and cloud platforms, leading to siloed data, brittle workarounds, and slow delivery cycles.
Scalability limitations	Older architectures were never designed for today's scale of data, users, or computing needs. As your organisation grows or shifts, systems may buckle under pressure or require expensive manual scaling.
Regulatory and compliance risk	Keeping up with evolving regulations is harder with inflexible legacy platforms. You risk non-compliance, fines, and reputational damage.
Operational rigidity	Many legacy-bound processes are tightly coupled with the system itself. Making changes—whether to products, processes, or customer experiences—requires significant effort, slowing time to market and hampering innovation.
Talent and skills gap	Finding engineers and support staff with experience in niche or outdated tech is increasingly difficult and expensive. This knowledge gap puts pressure on resourcing and increases the risk of key-person dependency.
Feature parity fallacy	One common trap is promising to deliver exactly what the legacy system does but with "better tech". This often leads to bloated requirements, higher costs, and risk-heavy cutovers.

Softwire

4.

Realistic routes to take

Before choosing a path forward, leadership must align on clear business outcomes such as reducing the cost of change, improving processes, or strengthening technology resilience.

This shared vision is essential. Modernisation efforts often fail not due to technology, but because of cultural friction: a lack of stakeholder buy-in, or failing to engage subject matter experts (SMEs) early on.

Think of it like the organisational immune system: anything unfamiliar is rejected—not out of malice, but because established ways of working are designed to maintain the status quo, not support change.

Understanding your realistic options can help guide conversations and get everyone on the same page before a single line of code is written →

Apart from the first, all these options are valid in their own right. But talking through them with all key stakeholders and teams is a critical first step to set yourself up for success.

1.
Do nothing and muddle through, awaiting the miracle of AI

2.
Re-platform your legacy platforms to new technologies

3.
Start with a blank sheet, develop against business requirements internally, and run off legacy systems

4.
Outsource the problem by bringing in a specialist who can deliver all or part of the transformation when internal capacity and expertise are limited

5.
Build a middleware layer to enable modernisation in some focused areas where major changes to the core system are not needed

6.
Simplify business processes, align with off-the-shelf solutions, and accept the functionality compromise

Softwire

5.

Modernisation success stories

Modernisation journeys always daunting. But when done well, the rewards are great and form the foundation for sustainable evolution and high performance.

These case studies illustrate a number of common modernisation approaches to demonstrate what's possible:

Modernising legacy data systems for a leading pension fund

The challenge

A major UK pension fund needed to migrate critical accounting data processes from a legacy on-premise system to a new cloud-based data platform, following changes from an external data provider. The existing bespoke data feeds were being decommissioned, requiring a full re-implementation of the data extraction, transformation and loading (ETL) processes. The fund wanted a smooth transition with minimal disruption, using familiar tools where possible.

The solution

We delivered the project in two phases: Discovery and Implementation.

In Discovery, we analysed the existing ETL architecture and aligned our approach with the client's long-term vision and operational constraints. Given the preference for minimal tool changes, we proposed a solution that integrated existing on-premise systems—such as JAMS Scheduler—with a modern cloud-based architecture built using Azure Durable Functions.

The Implementation phase saw us build a parallel ETL pipeline, running alongside the existing system for three months. We used automated reconciliation testing with Redgate tools to compare old and new databases, with results visualised in Power BI dashboards for easy monitoring.

We also introduced best practices across development processes: version control, CI/CD pipelines, Dockerised workflows, and comprehensive testing.

The result

The client now has a modern, cloud-first ETL solution that integrates with their on-premise systems while significantly improving reliability, scalability and maintainability. The use of Azure Durable Functions enables parallel data processing and automation, reducing the risk of errors associated with the legacy system. Although the project followed a lift-and-shift model, we provided strategic recommendations for future optimisation based on our data analysis.

Legacy modernisation: why doing nothing isn't an option

Softwire | Case study

REDBURN

Turning a legacy system into a strategic asset

The challenge

Redburn, a leading equities research and execution firm, relied on a legacy Microsoft Dynamics CRM 4.0 system that was approaching end-of-life. The platform had become increasingly difficult to maintain and adapt, with fragmented data and limited accessibility across teams. This hindered the firm's ability to respond to changing market dynamics and deliver personalised, data-driven services to clients. The challenge was to modernise the system without disrupting critical day-to-day operations—and to unlock greater value from customer data.

The solution

Softwire partnered with Redburn to design and implement a modernised CRM platform based on Microsoft Dynamics 2016. We re-architected the data model to support consistent, flexible information management and reduce duplication. A key part of the transformation was making the system more accessible. We introduced a self-service portal, extending CRM capabilities to a wider range of users and reducing dependency on specialist CRM staff. Our parallel-build approach meant the legacy system could remain in use while we implemented and tested the new platform using live data, ensuring continuity and minimising risk. Integration with Redburn's broader digital infrastructure was handled with precision to maintain seamless operations.

The result

The new CRM system is now a strategic asset for Redburn, enabling more efficient workflows and stronger customer engagement. With improved data quality and usability, teams across the business are empowered to make faster, better-informed decisions. The CRM team has reclaimed around 50 days a year by reducing manual support tasks, allowing them to focus on strategic priorities. Redburn now has a stable, scalable CRM foundation that supports its long-term growth in a competitive market.

Accelerating change with a modern data platform

The challenge

A leading insurance company needed to show rapid progress toward meaningful technology change. However, the scale and complexity of its legacy systems meant that traditional transformation timelines were simply too long. Past failed attempts had resulted in partially-implemented systems being layered on top of one another, creating a tangled, siloed architecture, rising costs, and regulatory risk.

The solution

To break through the deadlock and accelerate visible progress, we used a two-phase modernisation approach.

The first phase focused on immediate impact. We delivered a lightweight system targeting critical areas, based on high-level understanding. This "throwaway" slice showed tangible progress within months—buying time, building confidence, and starting to untangle the legacy.

The second phase built on the learnings from phase one. It took a deeper, more strategic look at the business, especially in poorly understood areas. This allowed us to align closely with real needs and build a modern data platform that could evolve over time without being compromised by early decisions.

The result

This two-phased approach delivered rapid results without sacrificing long-term suitability. The initial system provided immediate value and momentum. The follow-up laid a solid, adaptable foundation—designed for change rather than permanence.

Together, the phases enabled streamlined modernisation at pace, helping the organisation keep up with change while avoiding new forms of legacy.

Legacy modernisation: why doing nothing isn't an option

RSA

A reusable system to accelerate time-to-market

The challenge

RSA, one of the UK's leading insurers, set out to modernise its digital platforms to improve customer experience, increase operational efficiency, and enhance delivery agility. The Morethan.com website and motor quote-and-buy journey were central to this transformation but required significant redesign to meet these goals.

The solution

RSA partnered with Softwire to co-design a scalable, cloud-based architecture and implement Contentstack CMS, enabling faster content updates and greater editorial control. We built a reusable design system with over 100 accessible components using Storybook, supporting rapid development across multiple insurance products. Softwire also helped mature RSA's digital delivery by embedding agile practices, in-sprint testing, automated pipelines, and a blue-green deployment model for zero-downtime releases.

The result

Morethan.com generated 350% more organic traffic, longer user sessions, and improved conversion rates. Meanwhile, the new architecture enables RSA and its partners to launch and adapt digital journeys faster, while the improved delivery model increases team autonomy and product quality—laying strong foundations for future innovation. The success of this project led to the eventual sale of the MoreThan brand to Admiral.

6.
Create your own success story

Assessing your legacy levels and where the highest-value opportunities are will help you tell the right story, choose the right path, and craft the right modernisation strategy.

If you'd like to build a business case sooner and get help with your legacy levels, **speak to us about our legacy kickstart program.**

We've seen it all and have the experience and patterns to ensure we move quickly, decisively, and safely.

We can help you with your business case to win the hearts, minds, and budget needed to drive a successful and focused modernisation journey.

Enquire about our legacy kickstart >

Softwire

Legacy modernisation: why doing nothing isn't an option

Softwire

"Our industry can be complicated, and Softwire's team got their heads around the terminology and the way things work very quickly. The team also understood the bigger picture in terms of what Redburn was trying to deliver. The whole experience was very good and I fully endorse Softwire."

Alex Cardell, Client Relationship Management, Redburn

RSA

"Softwire has been a hugely valuable partner... helping us mature into a more rounded digital function than we would have been without them."

Jen Dallas, Head of Digital UK&I at RSA

Starling Bank

"Softwire was in a position to mobilise quickly, and bring a variety of different skills into our team as required. This worked really well for Starling Bank as we grew and hired over two years, to deliver our CIF programme."

John Mountain, CIO at Starling Bank

RSA   Tax Systems   HAVELOCK LONDON   ZURICH   Profile Pensions.   Starling Bank   REDBURN

Legacy modernisation: why doing nothing isn't an option

Softwire

Do it right, faster, better.

Softwire is a UK-based technology transformation consultancy that is helping clients shape the future of insurance. We modernise and future-proof our clients' core technology infrastructure and deliver next-gen digital products, services and experiences.

With 25+ successful years in the public and private sector—including deep experience in insurance and financial services—Softwire has delivered transformative solutions for RSA, Zurich, BNY and Tokio Marine HCC, spanning data warehousing, migrations, dashboarding, and regulatory reporting—through to underwriting, actuarial functions, and GenAI/machine learning.

Providing a comprehensive service from idea to impact to scale, Softwire combines world-class digital, data and AI engineering with product design to deliver complex technical change programmes. Renowned for its workplace culture, Softwire has been named the "Best Large Company to Work for in the UK" in 2024, reflecting the trust cultivated between Softwire, our employees and our clients.