Insurance Legacy Applications: Consolidation in Modernity

A look into how application modernisation helps insurers become future-ready

L^ZLabs[®] Set IT Free



Hello, Verti

Insurance is clearly centred around data—and insurers today deal with more volume and sources of data than ever before. Their ability to extract insights from complex data streams and draw the right conclusions is and will continue to be fundamental. But challenges are piling up.

It couldn't be otherwise. New technologies reach maturity faster and enable profound socioeconomic changes. The dominance of online platforms and the rise of the sharing economy are just a couple of examples.

As individuals and organisations develop new conceptions of risk, the role of insurance changes accordingly. As do the expectations of customers. Insurers' best response is to develop personalised products and improve the customer experience.

This gives insurers a unique opportunity to strategically review their portfolio of legacy

applications that run business-critical functions. Modernising decades-old applications, and consolidating the platforms they reside upon, will have a seismic impact on how insurers adapt to the future.

This eBook compiles the key 'pain points' that we have identified through our work with leading insurance organisations—pain points that can be solved by a step-by-step, incremental application modernisation and platform consolidation strategy.

I trust that you find it useful.

With compliments, Lisa Woelk Account Manager, LzLabs.



Contents

Answering a Critical Question	04
Customer Experience Unlock data and legacy assets to gain deeper insights	05
Product Differentiation Automate testing and integrate open-source DevOps	06
Talent Sustainability Turn a skills issue into an opportunity	07
Parallel Testing – Faster How BPER Banca is improving time to market	08
How LzLabs Helps	09
Become Future-Ready	10
Let's Connect	11

Answering a Critical Question

Insurance companies are challenged by growing demand for personalised products; nimble Insurtech players that capitalise on cloud and open-source environments; and a competitive landscape marked by intense regulation. Insurers' legacy application portfolios contain their unique business logic, but left unmodernised after decades in operation they have become barriers to innovation in terms of cost, speed to market, and flexibility.

Moreover, Big Tech companies are also penetrating the insurance market. With their deep and detailed customer data, BigTech firms are able to cater to customer needs and preferences at unprecedented speed. However, they lack the insights gained over decades by insurers—insights embedded in their legacy applications.

The critical question for insurers is how they can gain deeper insights from their data and applications and combine them with new information to improve customer experience, create new data-driven revenue streams and simplify business-critical operations.

The answer to that question necessarily passes through application modernisation. Insurers that take their valuable legacy assets to modern, open-source environments will be better positioned to take advantage of the unfathomable data streams that insurers will eventually need to manage to remain competitive.

Improving customer experience lies at the heart of digital transformation in the insurance industry. Most insurers have committed to a digital transformation with that goal in mind— and with the promise of technology to bring relief to operating margins under pressure.

This digital transformation has been accelerated not only by the pandemic but also by advanced business analytics and DevOps, which have become ubiquitous in the open-source world. Granted—doing DevOps on the mainframe is an option, albeit one that calls for increasingly scarce skills. This explains why insurers are more open to adopting cloud computing and seeking platform consolidations.

The key is modernising safely and securely, making changes with as few moving parts as possible to achieve innovation whilst maintaining business continuity. Do that, and your organisation will become more agile and capable today, and ready for tomorrow.

"Bringing valuable legacy mainframe applications into a modern, future-oriented environment whilst preserving their business logic, is key. Insurers are looking for ways to modernise incrementally, maintain interoperability, and transition towards faster testing."



Nick Hampson VP Product Management, LzLabs.

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Customer Experience

Unlock data and legacy assets to gain deeper insights



Insurance customers accelerated their demand for personalised products amid the pandemic. Insurers are pressured to create value through innovative products and experiences.

To tackle the challenge and develop new models of revenue, insurers need to consolidate, and modernise, their application landscape. Consolidating applications in open-source environments allows organisations to take back control over their most valuable legacy assets.

Consolidating the application landscape gives insurers flexibility to either develop microservices from application components, and/or plug-in APIs around special legacy functions without losing development time. A key driver of any holistic analysis of the application portfolio should be to identify solutions that keep the business logic intact.

The modernisation strategy must enhance agility. Consolidating platforms and environments helps insurers to safeguard data integration and standardisation, accelerate development and expand testing of new products, and run more efficient back-end processes. These factors pave the way to enhanced customer experience.

Cloud is gaining momentum as a preferred platform for consolidation. Insurtech players have leveraged it to build and deliver an engaging customer experience. But the cloud is not a 'must' for well-established insurers. Open platforms are paramount. A modernisation strategy should not impose upon organisations a pre-determined architecture. It ought to give them greater flexibility to achieve their business goals.

Insurance is the business of risk management. Therefore, a smart modernisation is one that minimises project risk by strictly limiting the number of moving parts in each step of the journey. This is key to ensuring business continuity and regulatory compliance.

When it comes to enhancing a customer experience that is ever more digitalised and personalised, the best opportunities lie in the open-system and open-source environments. Insurers will be looking for a tailored road map for the most valuable modernisation opportunities in the open-source/open-environments realm.

Key Takeaways



Consolidating applications in open-source environments gives insurers control back.







An incremental modernisation ought to be defined for each application in the legacy portfolio.

Product Differentiation

Automate testing and integrate open-source DevOps

their traditional legacy systems and consolidating their application portfolio.

The right modernisation strategy can reduce costs associated with mainframe performance at high workloads, so critical when it comes to accelerating and automating testing—key to improving time to market.

Moreover, with their huge volumes of data and risk management expertise, insurers have an option to become orchestrators of data ecosystems. Therefore, they will value the flexibility of choosing their own data architecture between cloud, on-premise and hybrid platforms.

Key Takeaways

Insurers look for solutions that give developers their own sandbox and enable earlier and cheaper testing.

Modernising legacy applications in a modern environment makes it easier to integrate open-source DevOps tools.

The right modernisation strategy lowers costs of mainframe resources allocated to testing.

Insurers have been comparatively slow in adopting digital transformation for product differentiation. The momentum gathered by Internet of Things and data analytics, along with new conceptions of risk by customers, make for attractive conditions for insurers to embrace testing and development environments that are not reliant on centralised computing capacity.

Whilst insurers continue profiling customers' lifestyle and risk tolerance, Insurtechs are leveraging the platform economy in collaboration with cloud providers, enabling other non-insurance (but data-rich) firms to build highly personalised products that Insurtechs then sell directly to customers via digital platforms.

Well-established insurers can compete by tapping into their strengths. But first they need to accelerate development through 'shift left' testing. Insurers are looking for solutions that give each developer their own sandbox in a modern environment, removed from a centralised architecture. Solutions that are easy to manage and cost-effective have the upper hand.

A modern development environment (e.g., Linux) is key to enabling the automation of the testing and development pipeline through the integration of open-source automation tools (e.g., Jenkins).

Technology details aside—what matters here is that insurers that move and modernise their legacy applications in a modern environment, can integrate DevOps tools available in the open-source world and which are already in use by Insurtech players.

As cost pressures mount, insurers are focusing on improving their operating models and accelerating their efforts to reduce expenses. They are doing this by moving away from



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Talent Sustainability

Turn a skills issue into an opportunity



The mainframe skills gap is a major cause for concern to insurance companies. But application modernisation turns the issue into an opportunity.

There is consensus amongst industry insiders that insurance needs to replace talent more quickly than other financial sectors. For years, insurance carriers have been trying to reinvent the way they attract, motivate, and retain talent.

The industry's skill requirements are shifting. Whilst carriers still need insurance-specific talent (e.g., actuarial and underwriting skills), they also need to design attractive IT careers with computer science as their backbone.

A modernisation strategy that consolidates legacy assets in a modern, open-source environment, contributes to making careers in insurance IT more attractive.

Therefore, modernising applications in an open-source platform such as Linux makes total sense for two main reasons. First, seasoned mainframe experts continue applying their expertise whilst integrating tools available in open-source environments. Second, new talents skilled in open-source environments can easily learn to run business-critical legacy applications directly from in-house experts.

A consideration that is often overlooked is the amount of training required in a modernisation project. Insurers should develop strategies that ensure steady application maintainability and reduce training costs and time.

It follows that a modernisation strategy that makes talent sustainability a priority will not corner an organisation into a 'Day Zero' situation, where all training must be complete and everyone must be up to speed on every application.

Insurers should not lose sight of long-term talent objectives, such as luring more millennials and Gen Z talents. A legacy modernisation strategy that is gradual, integrates modern languages as well as cloud and open-source tools, can help insurers attract millennials and Gen Z to an industry facing a shortage of talent.

Key Takeaways



Application modernisation can turn the mainframe skills gap issue into an opportunity for talent sustainability.



New talents skilled in open-source environments learn mainframe skills from in-house experts.

A modernisation based on open-source environments can make insurance IT attractive to millennials and Gen Z talents.

Parallel Testing – Faster

How BPER Banca is improving time to market

Modernising applications and consolidating your portfolio in a single open-source environment can help you be more agile, as one European bank discovered.

BPER Banca, a leading Italian bank, offers retail and corporate products and services to customers across Italy. Its mainframe systems have been running for over 40 years.

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"We chose LzLabs SDM as it is the only platform that could support the incremental migration of our applications to a modern platform, while meeting our requirements for testing, controlling IT costs and, ultimately, accelerating time to market in our application portfolio.

Our core banking applications can now be gradually moved to a platform for innovation that will better serve the future needs of our business."

Omar Campana, oversaw the migration project as BPER Banca Group Chief Information Officer

Challenge

BPER wanted a modern IT environment for enterprise applications to enable organic and inorganic growth and improve customer access to banking services, driven by regular technological change.

The bank faced IT budget constraints. BPER identified the company's mainframe estate as a key factor hindering both funds for innovation and technological change.

BPER's primary goals were to:

- improve time to market
- increase the pace of change within the business
- control IT costs

Click here to read the case study

Solution

BPER worked with LzLabs and its integration partner CWS to introduce LzLabs Software Defined Mainframe® (SDM) – a workload rehosting and legacy application modernisation platform – to incrementally migrate select core banking services.

The applications chosen for the first phase of migration control BPER's front-end customer portals which manage its retail banking account access.

This allowed BPER to safely migrate applications, and:

- Keep data on the mainframe initially, enabling incremental rehosting of transactional services and data to a modern environment
- Eliminate the need for source-code changes, recompilation or data conversion during each migration phase

- Deploy BPER's applications simultaneously on SDM and the mainframe during migration
- Begin the move towards container technology and DevOps for application testing and deployment.

Results

Incremental migration saw BPER sustain full access and security protocols around their data during the project.

The initial workload migration helped reduce the mainframe budget as mainframe consumption declines. BPER can now test and deploy applications in an agile environment, shortening time to market through more and faster parallel testing capacity.

Individualised testing means bugs are caught earlier in the development life cycle – significantly reducing the cost of fixes.

How LzLabs Helps

Mainframe applications are at the core of an organisation's critical processes. The organisation's unique know-how is embedded in its applications' business logic. A modernisation project must preserve that business logic and its data intact, so they become levers for innovation. And we understand that modernisation is complex and risky. LzLabs takes a pragmatic, incremental approach to migrate legacy assets to modern platforms, leaving applications' business logic and data encoding intact. Migrating assets piece by piece and running them on a platform of your choice delivers scalable benefits—like faster development and testing, liberation from data siloes, and freed-up funds for innovation—while minimising the risk of business disruption.

There are three stages to the LzLabs modernisation journey:



Unlock

Mainframe assets are the foundation of businesscritical processes. They are also a springboard for agility.

LzLabs helps you to unlock your legacy assets with minimal risk and no need to recompile, transcode, or rewrite:

- Speed up migration to modern systems, in the cloud, on-premise or hybrid
- Reduce risk with binary rehosting and incremental application migration
- Embrace real change from day one with no disruption.



Transform

Time-to-market has never been so critical to the insurance sector.

LzLabs helps you to transform your most valuable assets piece by piece and take back control of your digital transformation journey:

- Modernise the applications you want, when you want
- Use open-source tools that allow closer collaboration in environments familiar to developers
- Accelerate test and development of new products and features—at lower cost.



Accelerate

Insurers are under pressure to meet rising customer expectations around personalisation and value.

LzLabs helps you to deliver functionality at speed by consolidating your application portfolio in a modern environment.

- Become truly agile using modern DevOps pipelines
- Transform applications piece by piece into new microservices to support innovation
- Ensure interoperability between mainframe and modern interfaces, so customers get the experience they want, at the speed they expect.

Verti, Become Future-Ready

Insurers worldwide are looking for ways to develop new revenue models, modernise their operations and stand out from the crowd to remain competitive in an industry that is going through unprecedented change.

Achieving these goals whilst maintaining safe and secure business processes is a delicate undertaking in a risk-averse industry.

Nonetheless, application modernisation technologies and methodologies have reached a stage where organisations can become resource-efficient, innovation-focused, flexible and agile, and do so at low risk.

I hope that this eBook has given you some useful insights into your industry's priorities, pain points, and solutions—and that it has inspired you to see how you could set your mainframe applications free and take your place at the front of the line when it comes to being future-ready.

Have any questions? Or want to find out more about turning your legacy assets into enablers for your business?

Let's Connect.

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LzLabs Software Defined Mainframe®

At LzLabs our mission is to create revolutionary software solutions, leveraging the creativity of open-source innovation and the power of cloud computing to reduce the risk of legacy application modernisation.

The LzLabs Software Defined Mainframe® (SDM) eliminates the need to modify and recompile mainframe application source code, and preserves mainframe data in its native encoding format when migrating mainframe applications to an open-source architecture.

In doing so, we present companies with a low-risk method of modernising their mainframe architectures, whilst helping them to navigate the perfect storm of cost, skills and innovation challenges presented by their legacy platforms.

If you're seeking new opportunities to set your IT free, then let's work together to make them a reality.

About LzLabs

Our Vision

To unlock the value embedded in legacy systems.

Our Mission

Our unique software transforms existing IT into a modern computing environment and we are passionate about leading our customers to technology that is fit for the future.

Our Story

We love technology, but it's what people do with it that really gets us excited.

Since 2011, we have built and refined technology that revolutionises how our customers do business.

Along the way we have helped organisations on their modernisation journeys, joined forces with partners that help us deliver on our mission and built a team of 100+ brilliantly different people across the world.

Let's connect

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