

# AI can accelerate life closed-block migration



Operating legacy life insurance systems is expensive, but AI is opening up new possibilities to efficiently migrate closed blocks to new platforms, increase profits, and help insurers provide a more seamless experience for insureds, employees and agents.

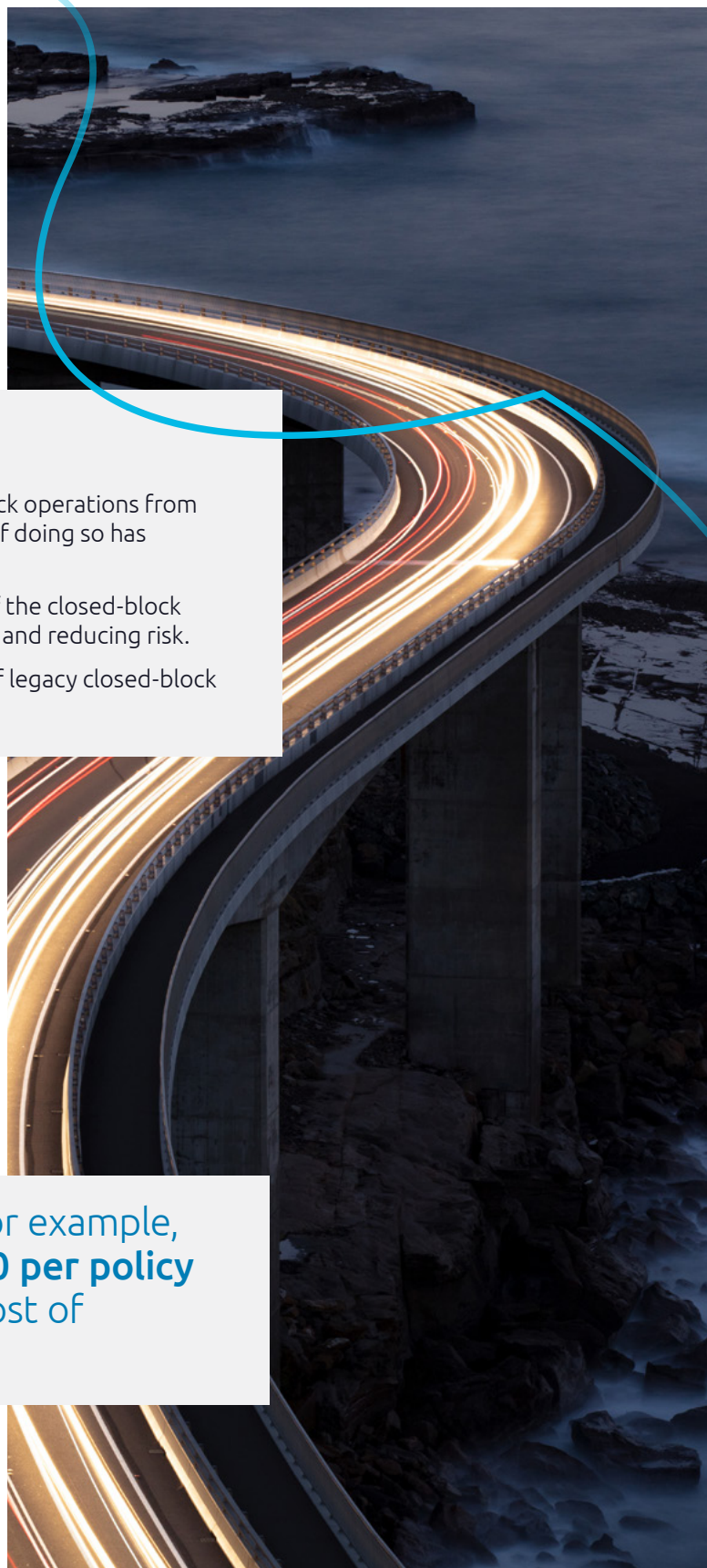
## In brief

- There is great value in migrating life insurance closed-block operations from legacy to modern systems, but the cost and complexity of doing so has traditionally created significant challenges.
- The application of AI can help accelerate the migration of the closed-block business to new platforms while also improving accuracy and reducing risk.
- The use of AI can cut 20% to 40% of time and costs out of legacy closed-block migrations.

Closed blocks can easily be overlooked when prioritizing system upgrades – these life policies that are no longer for sale but that continue to require service for existing clients are often left behind to be managed on legacy systems while resources are devoted to current and future products.

But there is significant business value to be gained from moving closed blocks to more modern platforms. Legacy closed-block systems can be costly to maintain, and migration can dramatically reduce operating expenses.

For a block of **10 million policies**, for example, a company might need to spend **\$10 per policy annually** on servicing—an annual cost of \$100 million.



In addition, it can be difficult to find the skilled professionals needed to keep aging legacy systems running, presenting an ongoing and costly human resources challenge.

Migrating closed blocks over to newer systems, on the other hand, can considerably reduce legacy system maintenance costs.

But closed-block migration is no easy task. The complexity and age of the legacy systems supporting closed-block systems, and of life insurance policies themselves, present significant migration challenges.

### Why is closed-block migration so complex?

Any migration from legacy to modern systems requires careful, sophisticated planning, but the migration of life insurance closed blocks is especially difficult for several reasons:

- The legacy systems involved are often four or five decades old and have been highly customized over the years.

- Product rates and calculations are often embedded directly in the code, rather than being externally calculated or held in tables as they are with modern systems.
- Legacy code was often written to minimize the use of then-expensive storage, making it more complex to migrate.
- Legacy systems typically have millions of lines of old code rather than the modern open-source programming languages widely used today, making it hard to find IT professionals with the skills needed to keep them running.
- Legacy systems are often comprised of multiple systems that have been purchased or acquired over time, which means that migration is not a “one-to-one” transfer — there may be multiple systems that have to be mapped onto one new system.

These complexities necessitate an extensive investment of time and resources into comprehensive testing cycles during the planning and execution phases to ensure new target systems are working correctly.

Figure 1: Challenges with legacy life closed-block systems

## Product -specific challenges contribute to the complexity and cost of closed-block migration



### Whole life

- Incorrect cash value calculation
- Errors in loan value calculation in arrears/advance
- Issues in dividend calculations



### Universal life

- Issues in reinstatements due to incorrect transaction processing
- Impact of face amount changes
- Found value calculations



### Annuities

- Incorrect Payouts
- Errors in calculating annual increase amounts
- Contract fee waivers

### Additional challenges

- Multiple plan variations due to limitations in product configuration
- Incorrect coverage/rider termination log
- Issues in actuarial/valuation calculations
- Failed transactions resulting in suspended policies
- Incorrect processing of waiver functionality
- Calculations and payout of commission
- Missing or handwritten/scanned documents, such as product plans, policies, rules, etc.

## Bringing AI into the process

Artificial intelligence (AI) has unlocked faster, more cost-effective ways to approach life closed-block legacy system migration. AI streamlines and automates processes, making it possible to:



- Analyze vast amounts of code and data quickly



- Reverse-engineer legacy code



- Extract processing logic and product rules



- Speed up data profiling and data mapping from legacy systems to target systems



- Discover gaps between legacy program code and current product specifications and processing rules for calculating interests, state taxes, surrender value, etc.



- Create efficient code in modern programming languages

Beyond these key functionalities, generative AI can automatically translate processes that are embedded in legacy code into “plain English” that can be easily understood not only by IT professionals, but by business and product professionals as well.

AI can analyze **up to 90% of data in a legacy system** with nearly 100% accuracy—representing a huge time savings.

## Understanding the legacy business processes

A critical first step in migration is to engage in business rule mining and extraction to develop a complete understanding of the legacy policy administration system. This process uncovers what information is on the legacy system, how it behaves and what needs to be migrated.

Years of legacy modifications and additions, poor or inaccurate documentation and lack of first-hand knowledge of how the systems were implemented present significant hurdles to understanding legacy system code. People who built them are typically no longer accessible, and documentation of past fixes and changes are often incomplete, inaccurate, or captured only in handwritten/scanned notes.

AI can quickly analyze business functionality and code to provide a clear understanding of the legacy system structure and guide migration efforts.

## Preparing old data for the new system

Legacy systems often store data in multiple different formats. There may be 4,000 types of data elements across the legacy system, for example, while the target system is built for 1,500, without AI, rationalizing the legacy data and correctly mapping it to the new system could take years.

AI can automatically analyze, map and convert up to 90% of source data to the new system with nearly 100% accuracy.

## Checking your work

After the migration is complete, validation and reconciliation stages ensure the accuracy of calculations such as loans, withdrawals, dividends and commissions in the new system. These crucial steps must account for life insurers’ complex, customized rules about things like dividend scales, late payments and how policy values accumulate.

AI can automate the manual validation and reconciliation processes to enable significantly faster testing and ensure greater accuracy.



## The AI advantage

AI is not a replacement for humans in the migration process. Instead, this sophisticated technology augments their efforts and empowers them to focus on more value-adding and critical decision-making tasks. The result: shorter migration timelines, reduced costs and high levels of accuracy and quality.

AI and generative AI-based approaches have been used by several insurers to support closed-block migration already. For example, when a global insurer recently used an AI-enabled approach in a proof-of-concept initiative, it was able to automatically analyze and extract business rules from more than 20,000 lines of code, map large portions of legacy data to the new system and create detailed, plain language documentation of the code and rules — all in just over two weeks. The insurer achieved 60-90% automation at multiple points during the migration initiative that included code assessment, reverse engineering, data mapping and code documentation.

The overall improvements when employing AI technology are likely to be as high as 40%.

## Five steps to develop a successful migration plan

Moving a life insurance closed block from legacy to modern systems is a massive shift, and each company will need to develop its own unique migration plan. Here are five key steps to guide your approach:

**1. Begin with a thorough assessment of current systems.** This should encompass the full cost of operating legacy technologies as well as factors such as the coming retirement of legacy talent, the business risk of running older, difficult to maintain systems and the projected lifespan of the closed block business in question.

### 2. Gain a full understanding of potential benefits.

Assess the cost, reliability and resilience improvements of moving to a new system. Use migration as an opportunity to rethink policy management, improve efficiency and deliver a superior experience to employees and policyholders.

**3. Determine the right migration approach.** AI can be used to enable the shift of an entire closed-block business to a new greenfield system, or it can support a more gradual approach that uses APIs to connect the legacy system with other systems. Decide whether your organization will be best served by completing the entire migration all at once or incrementally transitioning to a new system over time.

**4. Factor in multidiscipline input.** IT, compliance and security experts should be involved to ensure that AI use meets regulatory requirements and that sensitive policyholder data is kept safe through the migration process.

**5. Plan ahead for change management.** Equip IT personnel with the skills needed to maintain the new closed-block business platform and provide training to all employees who will be required to work within the new system.

AI is changing the calculus for insurers that want to migrate their life closed blocks to new systems, making it a more feasible and less-costly option. Now is the time for insurers to chart their course forward using powerful AI technology to migrate legacy operations, achieve greater profitability and deliver a best-in-class user experience for policyholders.

## Ready to give an AI edge to fuel profitable growth?

## Meet our experts



### **Samantha Chow**

Global Head, Life Insurance, Annuities, and Benefits Leader,  
Capgemini Financial Services  
[samantha.chow@capgemini.com](mailto:samantha.chow@capgemini.com)



### **Pinaki Bhagat**

Head of AI and Generative AI solutions  
[pinaki.bhagat@capgemini.com](mailto:pinaki.bhagat@capgemini.com)



### **Dhinakar Jacob Selwyn**

Global Head – Mainframes and Core Technologies  
[dhinakar.selwyn@capgemini.com](mailto:dhinakar.selwyn@capgemini.com)



### **Ajish Gopan**

Global Head – Insurance, Insights & Data  
Capgemini Financial Services  
[ajish.gopan@capgemini.com](mailto:ajish.gopan@capgemini.com)



### **Ravinder Khokhar**

Global Head, Cloud  
Capgemini Financial Services  
[ravinder.khokhar@capgemini.com](mailto:ravinder.khokhar@capgemini.com)



### **Sudarshan Damle**

Global Head, Cloud Portfolio, Insights & Data  
Capgemini Financial Services  
[sudarshan.damle@capgemini.com](mailto:sudarshan.damle@capgemini.com)



### **Aman Khan**

Head of I&D UK Insurance Practice  
[aman.a.khan@capgemini.com](mailto:aman.a.khan@capgemini.com)



### **Alexander Stufflebeam**

Fellow of the Society of Actuaries, CERA  
[alexander.stufflebeam@capgemini.com](mailto:alexander.stufflebeam@capgemini.com)



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