



Break free from Legacy.

Get off the mainframe fast with AI-led transformation on the Pega Platform.

2025



ENTER THE AGE OF AI.

The next decade will be defined by the AI leaders.

AI & DIGITAL LEADERS ARE GROWING 2-6X FASTER THAN LAGGARDS.¹

AI & automation represent a massive opportunity for enterprises to cut costs & improve their customer experience.

Leading enterprises are harnessing AI to improve how they:

- **Engage with their customers:** personalizing every customer interaction to resonate & land more – leading to growth, acquisition, and retention.
- **Service their customers:** enabling 100% self-service outcomes across any channel – increasing NPS & decreasing cost-to-serve.
- **Operate their business:** automating end-to-end business processes & guiding employees at every step – saving costs & accelerating customer outcomes.



LEGACY IS HOLDING ENTERPRISES BACK.

The average
enterprise wastes
\$370 Million+
on technical debt.

THE IMPACT OF LEGACY IS HUGE.

- **Innovation slows:** 68% of enterprises say they spend time on legacy system maintenance which could better be spent making business more effective.
- **Automation lags:** 68% of enterprises say legacy systems are preventing their organization from operating as effectively as possible.²
- **Customers can tell:** 57% of enterprises acknowledge their reliance on legacy systems causes customers to leave due to slow or fragmented experiences.²



70% OF FORTUNE 500 STILL RUN MAINFRAME

92% are trying to get off the mainframe.¹

ENTERPRISES HAVE BEEN TRYING TO FIND A FAST PATH OFF MAINFRAME FOR DECADES, WHY?



Experiences are falling behind.

- Green screen & terminal emulators slowing down employees
- Lack modern API's to plug into customer facing self-service channels



Automation & AI are lagging.

- Brittle RPA scripts
- Difficult to connect to modern REST-ful automation platforms
- Lack native AI support



Data is trapped.

- Outdated protocols (JCL, FTP, EDI).
- Reliant on batch FTP exports, not real-time analytics
- Proprietary data formats (e.g. VSAM)



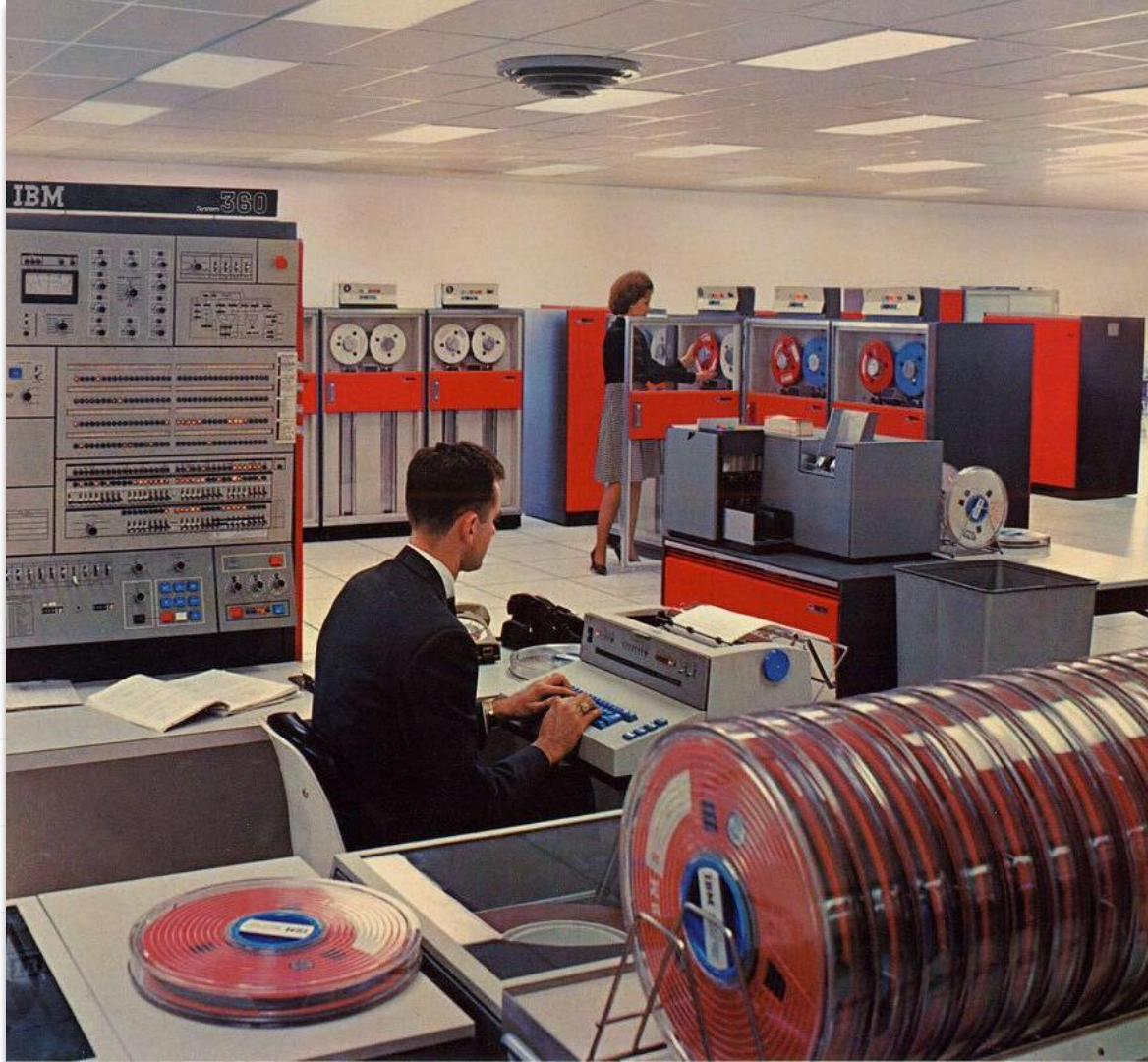
Talent is sparse.

- Lack of documentation
- Difficulty hiring & retaining
- Consultants & developers are costly



Maintenance is costly.

- Costly hardware upgrade projects
- Monolithic applications
- Expensive licensing fees



Mainframe Modernization Landscape

Approach	Description	Considerations	Benefits	Drawbacks
 Retain	Keep the application on the mainframe without making any significant changes.	Mainframe is a permanent part of your IT strategy & business value of modernization is low	<ul style="list-style-type: none"> • IT can focus on other priorities • Low risk 	Ties the enterprise to the mainframe With related operations & maintenance costs
 Rehost	Move the application to a new platform (like the cloud) with minimal or no code changes, also known as "lift and shift."	When seeking a quick exit from the mainframe on-prem into the cloud.	<ul style="list-style-type: none"> • Lower infrastructure costs • Simplify operations 	Does not address underlying code, process, and architectural flaws.
 Replatform	Migrate the application logic and code to a new platform using automated tooling.	Preserves existing logic & process , results in new code.	<ul style="list-style-type: none"> • Reduced infra costs • Gets to the cloud 	Results in new machine-generated code , not optimized for the cloud – not always maintainable.
 Rebuild	Completely rewrite the application from scratch retaining only the core business logic.	Start from scratch when existing app is flawed & dated	<ul style="list-style-type: none"> • Inject new capabilities, efficiencies • Optimize cloud performance 	Long timelines with high costs
 Retire	With this strategy, you decommission an application that is no longer needed, consolidating its functionality into other systems or eliminating it entirely.	When functionality is redundant or no longer needed	<ul style="list-style-type: none"> • Reduced complexity • Eliminates operations & maintenance costs 	Risks losing data, logic, & processes if not sufficiently replaced
 Repurchase	Onboard a COTS solution to replace the functionality being driven through the mainframe.	When off-the-shelf solutions 100% meet business needs	<ul style="list-style-type: none"> • Reduce internal development costs • Vendor-supported operations & features 	Forced into vendor processes & structured which don't always match business needs

EMERGING APPROACH UNLOCKED BY AI:

Reimagine.

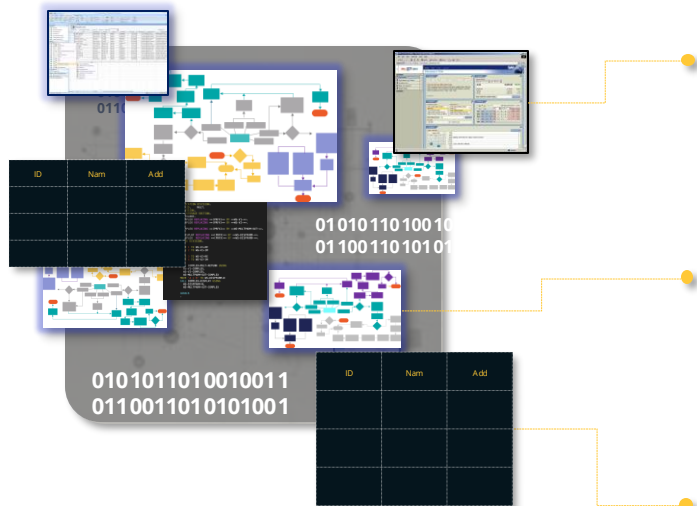
Analyze the application using **AI** and **unlock core processes to cloud-native platforms** to unlock automation, new experiences, and data through modernization.

- **Understand** your core logic & workflows with AI.
- **Rethink & optimize** processes & customer journeys, injecting new automations.
- **Retain** logic & core requirements where you need to.
- **Get to cloud platforms fast** decreasing operations **cost** and **increase agility**.



The Transformation *Status Quo*

Why 75%+ of legacy modernizations projects fail.¹



No documentation

Millions of COBOL lines with minimal comments.

No componentization

Tight coupling between logic, UI, and data.

No rationalization

Complex encoded data schema – often with data quality issues.

MOST MODERNIZATION APPROACHES?

Take years & millions of \$\$\$.

Requiring teams of consultants just to document your codebase and drive alignment on the path forward.

Leave you with new code to maintain.

Most approaches call for rewriting applications 1-for-1 from COBOL to Java in the cloud, leaving you with indiscernible, unmaintainable, AI-generated JOBOL.

Don't unlock AI or automation.

With a lift-and-shift approach, enterprises leave value on the table from taking the opportunity to reimagine their processes as they transform.

Transformation *reimagined*



Rapid
analysis

PEGA GenAI Blueprint™ My Blueprint Dashboard

RETAIL BANKING • BP-1004

Tech Entrepreneur Loan

Context Case Types **Case Lifecycle** Case Data Live Data Personas Summary

Let's define the Lifecycle for each Case Type

Select a Case Type: Business Plan Review Edit Lifecycle

Business Plan Review CASE TYPE

This case type represents the business plan review process for a small business loan application. It includes assessing the viability and potential of the tech entrepreneur's business plan, analyzing market conditions, competition, and growth projections. They must also qualify as either - An existing business started within the past year, or - An busi...

Capture Information	Documentation Validation	Loan Application Review	Loan Application Resolution	Loan Disbursement
<input checked="" type="checkbox"/> Collect Applicant Information	<input checked="" type="checkbox"/> Validate Business Plan	<input checked="" type="checkbox"/> Operational Area Check	<input checked="" type="checkbox"/> Risk Acceptability Check	<input checked="" type="checkbox"/> Initiate Funds Transfer
<input checked="" type="checkbox"/> Collect Business Plan	<input checked="" type="checkbox"/> Validate Financial Statements	<input checked="" type="checkbox"/> Loan Amount Limit Check	<input checked="" type="checkbox"/> Assign Loan Manager	<input checked="" type="checkbox"/> Notify Applicant
<input checked="" type="checkbox"/> Collect Financial Statements	<input checked="" type="checkbox"/> Plan Feasibility Score	<input checked="" type="checkbox"/> Assign Underwriter	<input checked="" type="checkbox"/> Loan Approval	
<input checked="" type="checkbox"/> Application Routing	<input checked="" type="checkbox"/> Underwriter Approval			

Back Preview my app Save and Close Next

Intuitive
Blueprint

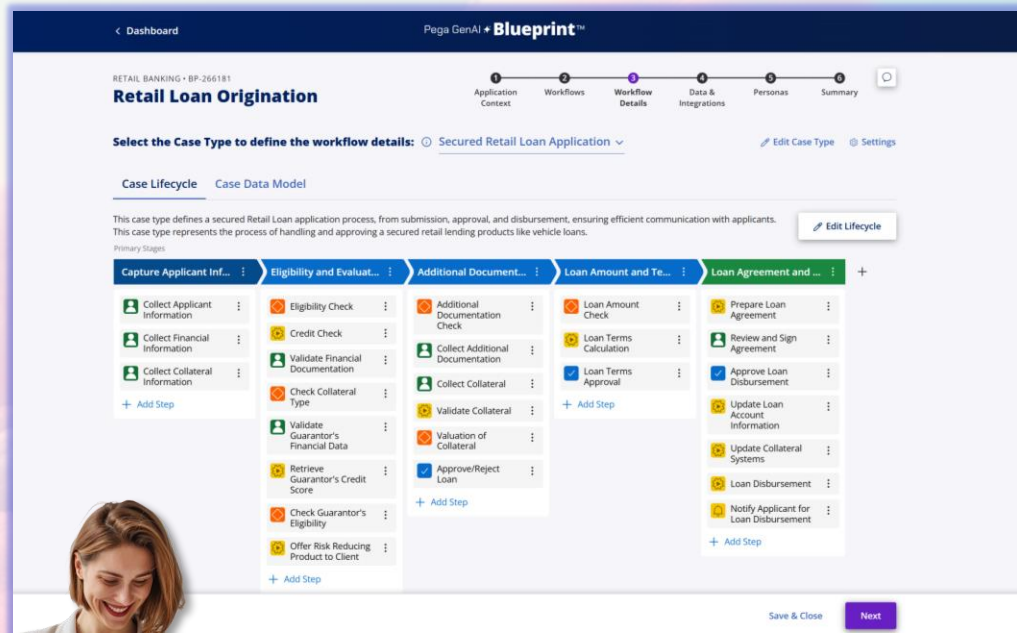
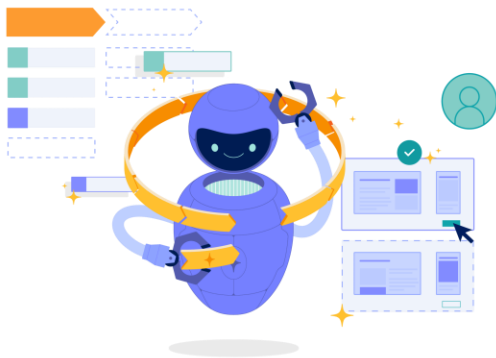
Future-proof
architecture



PEGA BLUEPRINT

Transformation rocket fuel

Pega Blueprint is enterprise workflow development powered by AI. Focused on bringing people & AI together to accelerate automation & jumpstart transformation.



How does it work?



#1

Accelerate legacy analysis.

Rather than manually analyzing legacy systems, **extract insights automatically** by uploading:

- **Documentation** (e.g. SOP)
- **Source code** analysis
- **Videos** & screens

#2

Collaborate seamlessly.

Blueprint is 100% collaborative add all **business & IT collaborators** to:

- **Rapidly adapt** AI suggestions
- Capture requirements in **common language**
- **Preview app** throughout

#2

Build on best practices.

Based on requirements, AI Agents behind Blueprint **compose a starting point application** informed by:

- **Industry** best practices
- Pega & partner **expertise**
- Organizational **knowledge**

#4

Jumpstart development.

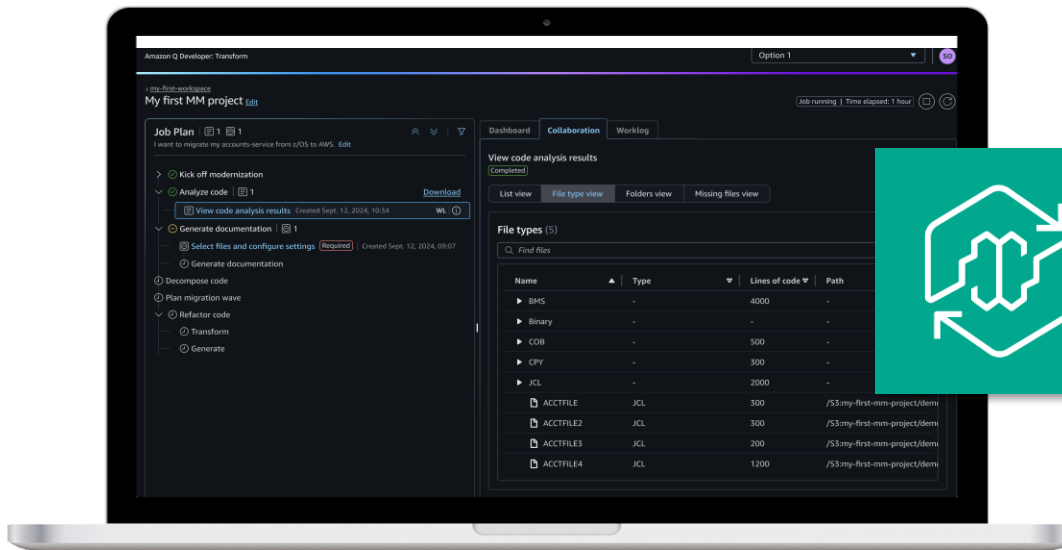
Eliminate lengthy requirements gathering processes and set devs up for **rapid go-lives**:

- Import Blueprint to **generate app**, in seconds
- Auto-generate **user story backlog**
- Leverage AI across Pega App Studio to **quickly finalize & deploy new app**

Instantly understand your mainframe applications.

AWS TRANSFORM

- **Analyze your code:** securely import millions of lines of COBOL and supporting files for AI Agents to analyze.
- **Document your application:** automatically, AWS Transform produces comprehensive, natural language insights into your application and how it works.
- **Understand your logic:** leverage AWS Transform's auto-generated business rule library to get a complete view into the decisions, validations, and logic previously scattered across your application.



PEGA BLUEPRINT™

- **Accelerate legacy analysis:** Bring AWS Transform output along with legacy system videos, data structures, process diagrams and more to instantly understand processes.
- **Build on best practices:** AI Agents behind Blueprint compose a starting point application informed by industry best practices, Pega & partner expertise, and organizational knowledge.
- **Reimagine collaboratively:** Blueprint is 100% collaborative add all business & IT collaborators to rapidly adapt AI suggestions, capture requirements in common language, preview app throughout.
- **Jumpstart development:** Eliminate lengthy requirements gathering processes and set devs up for rapid go-lives.

This application needs to streamline our end-to-end card management process from application through account creation & management.

Business goals

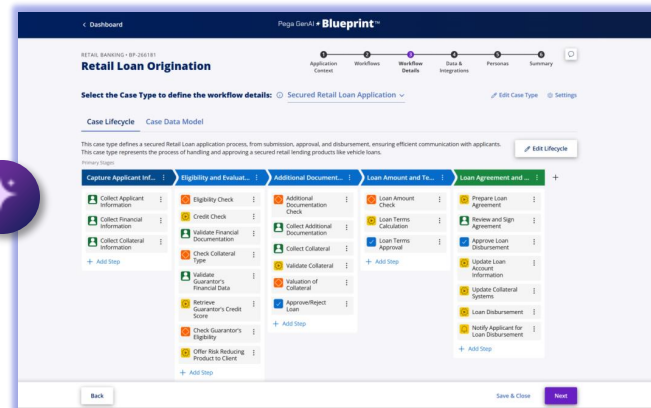
The image shows a stack of five books from the 'The Elements of Mathematics' series by David Hilbert. The books are arranged in a slightly overlapping manner, showing their spines and front covers. The covers are white with black text. The titles visible on the covers are:

- Top cover:** THE FOUNDATIONS OF GEOMETRY
- Second cover:** THE FOUNDATIONS OF ARITHMETIC
- Third cover:** THE FOUNDATIONS OF ALGEBRA
- Fourth cover:** THE FOUNDATIONS OF ANALYSIS
- Bottom cover:** THE FOUNDATIONS OF SET THEORY

Each cover also features the author's name, DAVID HILBERT, and the publisher's name, BIRCHBEACH PUBLISHERS.

[illegible]

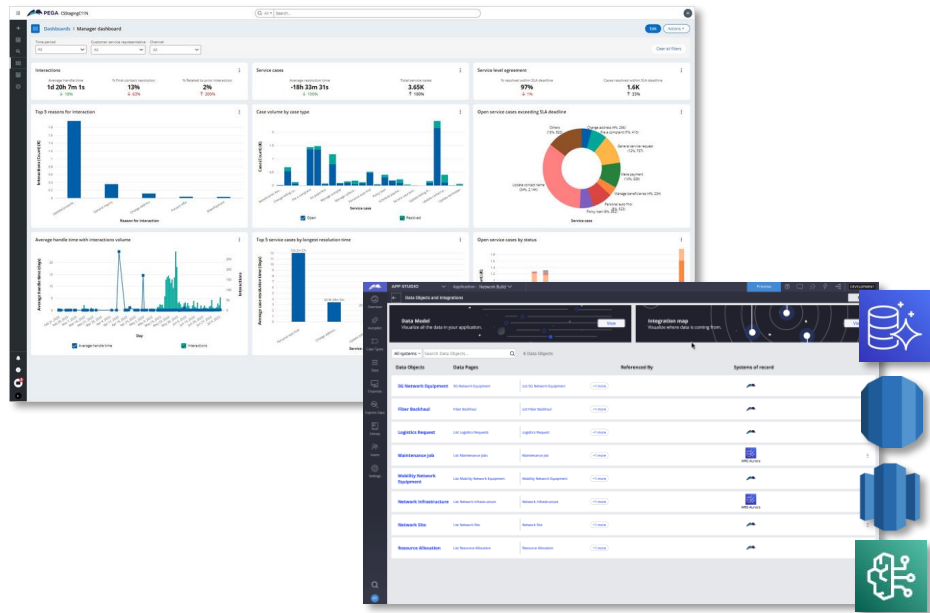
Legacy app videos, screens, & technical outputs



Get to the cloud, faster than ever.

PEGA PLATFORM™

- **Go-live with cloud workflows, fast:** Generate new cloud-native application in Pega Cloud® leveraging Blueprint-to-live's AI-powered SDLC.
- **Free data from legacy, to fuel AI & automation:** Migrate legacy data to new cloud-native data stores on AWS – RDS, Aurora, and Redshift.
- **Quickly integrate workflows with enterprise data store:** Leverage native connectors to plug workflows into new data storage services.
- **Automate manual work with AI you can trust:** Embed Pega Predictable AI™ agents into your workflows and experiences to unlock an agentic operation at scale.



The Result?

Agentic applications *in the cloud*

TRANSFORM OPERATIONS WITH AI YOU CAN TRUST

With Pega Predictable AI™ agents, enable self-service and automation with AI which takes cues from governed workflows, not from their own ideas. So you can...

Automate everything: drive processes which orchestrate dozens of low-code AI & automation capabilities.

Connect front- & back-office: embed workflows into any channel – arming customers and employees with the outcomes they need across web, mobile, chat, email, voice, and more.

Unlock efficiency at scale: maximize resource utilization and solve issues before they occur with intelligent work prioritization, routing, SLA management, reporting and more.



AI Agents



Predictive AI



Integrations



Decisioning



RPA



Business rules



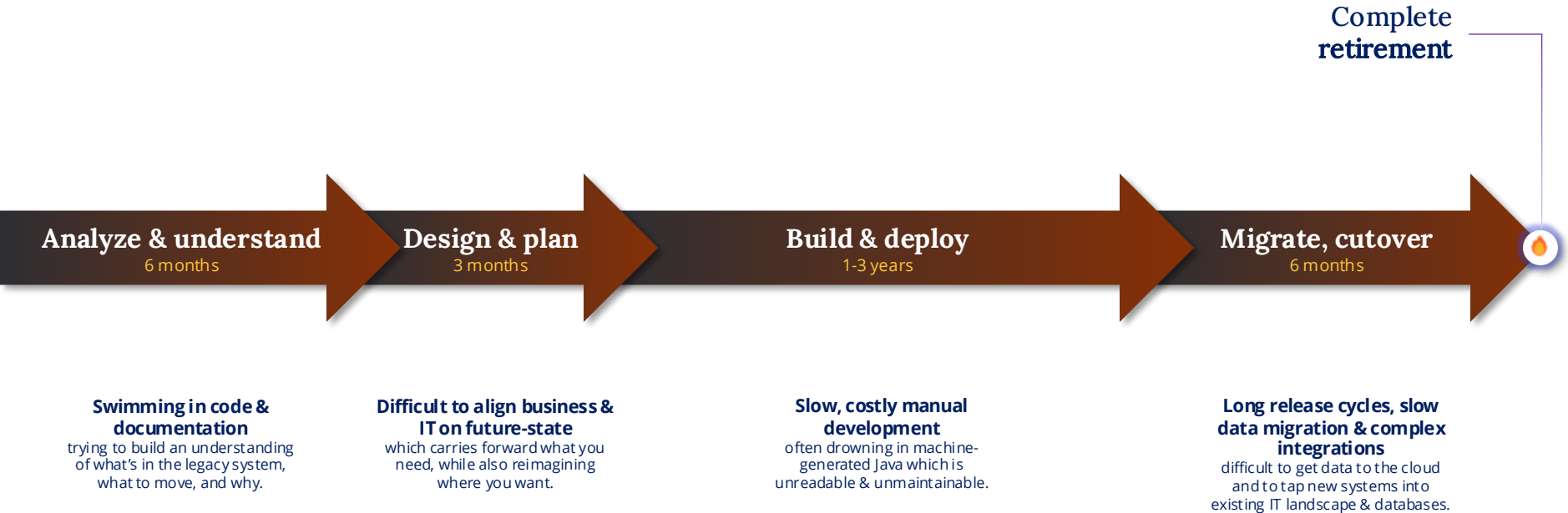
Calculations



Correspondence

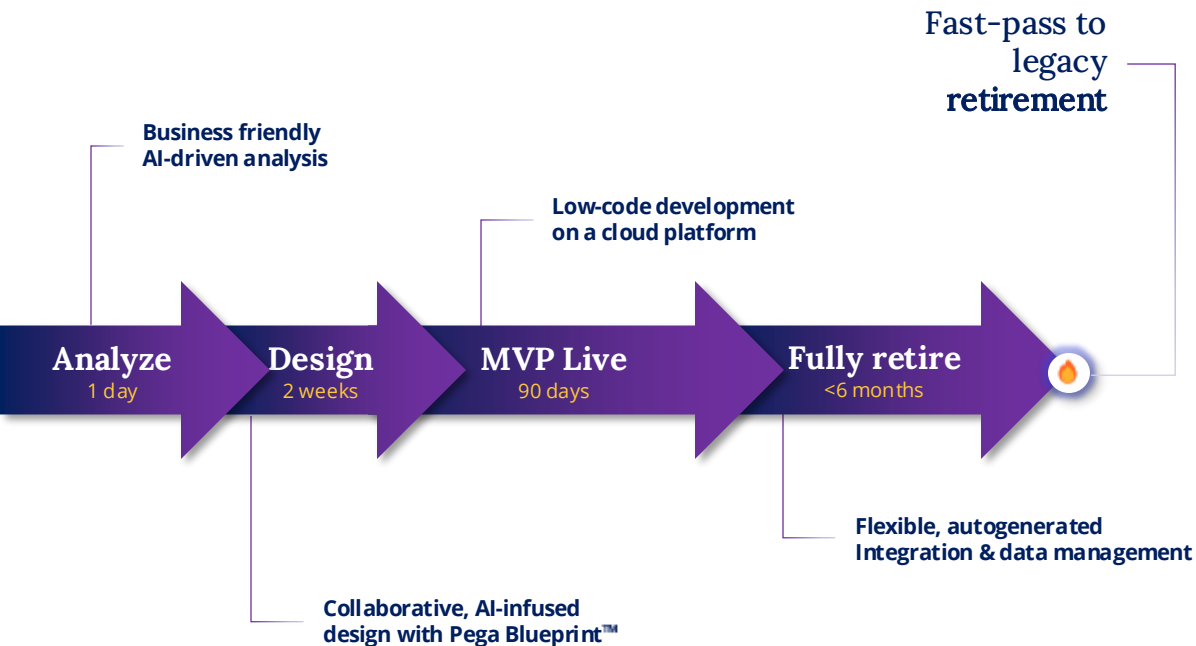
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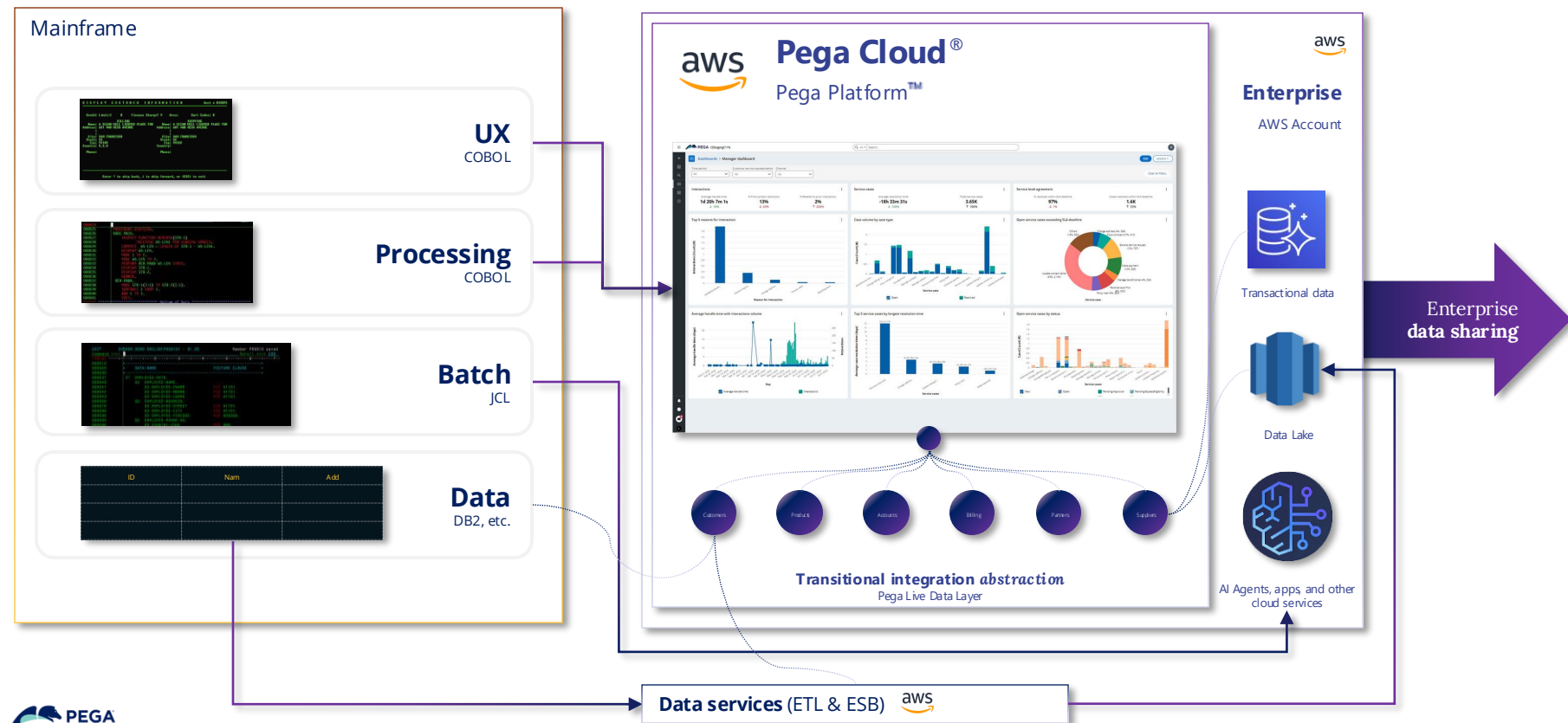
Transformation *Reimagined*

AI-led Transformation with Pega 🤖



Transformation Architecture

Transitional state architecture





Pegasystems is “compressing this multi-year mainframe modernization project to **deliver value in under 90 days.**”

- Swami Sivasubramanian, Vice President, Agentic AI, Amazon Web Services



Rapid AI-led *Legacy Transformation*

Client successes

US State Agency

From 1M+ lines of COBOL
to cloud prototype in

2 weeks

Mainframe replacement POC
with AWS & Pega



Allianz 

Moving underwriting off
of homegrown apps and
into the cloud

**Faster time
to market**

Java replacement POC with
Accenture & Pega Blueprint

 **accenture**



From legacy workflows to
new cloud apps:

**Go-live in
40 hours**

Network Operations
Transformation



Rapid migration off of
legacy BPM:

**800+
workflows**

Shared Services
Transformation

PARTNERS

Driving AI-led
transformation at the
world's largest
enterprises.

accenture

Infosys

EY

Capgemini

HCL

cognizant

Coforge

