AI-driven development using
Pega Infinity '24

How the advanced Pega GenAI™ features
optimize productivity

Capgemini

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Foreword

I am delighted to present the updates from our latest impact study on AI-Driven Development using Pega Infinity '24. This document builds on the foundational productivity study we conducted with Pega Infinity '23 and marks a significant milestone in our continuous journey toward innovation and operational excellence.

Reflecting on the impact study we released on the productivity comparison between Pega Infinity '23 and custom development using JEE with microservices. The study concluded that Pega Infinity '23 is 7.8 times faster than custom builds, resulting in a 40% reduction in total cost of ownership over five years. This update delves into the innovative advancements in Pega Infinity '24. Equipped with advanced AI-driven development tools, enhanced predictive analytics, and sophisticated intelligent automation features, this new version promises to significantly elevate development productivity and streamline workflows across the industry.

This comprehensive update not only revisits our previous findings but also provides a detailed comparison of the enhanced capabilities and their potential impact on development processes. Our goal is to equip you with a clear understanding of these new features and illustrate how they can be leveraged to achieve superior outcomes in your projects. As you integrate these capabilities into your workflows and strategize for future implementations, these insights and expertise will be crucial in making the right decisions. This study is not just a testament to the evolving landscape of process automation but a guide to navigating and capitalizing on these changes.

Consider this updated study as a resource for your organization and a tool to shape the future of your process automation strategies. Your engagement and feedback are crucial as we strive to harness these advancements to propel industries and businesses forward.

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About the study

Background and context

In the earlier productivity study comparing Pega Infinity '23 with Java Enterprise Edition (JEE) and microservices, it was evident that Pega Infinity '23 delivered a substantial improvement in development speed and ease of use. Pega Infinity '24 introduces further enhancements and new features building upon the success of the previous version. Key advancements include:

This remarkable productivity gain stemmed from several key differentiators:

AI-driven features

Pega Infinity '23 incorporated a suite of AI-enhanced tools, allowing developers to automate routine tasks, anticipate user needs, and proactively recommend optimal solutions throughout the application development lifecycle. These intelligent features significantly reduced time spent on repetitive coding tasks and minimized errors.

Advanced development capabilities

Pega Infinity platform provided an extensive collection of pre-built templates and components, significantly streamlining multiple stages of application development. From the initial design phase through to implementation and deployment, these resources enabled a more efficient development process. This allowed both experienced developers and non-technical users to rapidly build, customize, and deploy business applications without the need for extensive custom coding.

Streamlined lifecycle management

Pega Infinity '23 facilitated seamless end-to-end application lifecycle management through its visual modeling tools and comprehensive workflow automation. This integration allowed for rapid iterations, effective collaboration across teams, and an overall reduction in complexity.

These features combined to create a holistic platform where organizations could rapidly deliver scalable applications aligned with their specific business needs while maintaining flexibility for future growth and updates. This solid foundation provided by Pega Infinity '23 became the launching pad for further innovation, paving the way for the new features and enhancements in Pega Infinity '24 that we will explore in the subsequent sections. These advancements aim to redefine productivity in application development by building on the strengths of its predecessor while incorporating innovative, cutting-edge tools.

The objective of this update to the previous study is to highlight the productivity enhancements introduced with Pega Infinity '24 and to provide a clear comparison of how these new features can further accelerate application development cycles compared to Pega Infinity '23. This document aims to serve as a comprehensive resource for organizations considering upgrading to the latest version or adopting Pega Infinity for the first time. By documenting the specific improvements and the potential impact on development processes, we intend to assist stakeholders in making informed decisions about their process automation strategies and investments.

Pega Infinity '24 GenAI features

Pega Infinity '24 is a powerful platform that blends AI-driven development with intuitive and advanced automation. Its features are designed to lower barriers to AI adoption, providing businesses with an agile and compliant solution for rapid digital transformation. By offering intelligence at every step, from automated workflows to enhanced customer engagement, it ensures that businesses are equipped to respond to the changing demands of the digital era while delivering exceptional customer outcomes. Pega Infinity '24 marks a significant advancement in business process management, integrating artificial intelligence to transform how organizations approach automation, customer engagement, and data-driven decision-making. It delivers a suite of features designed to enable seamless AI integration into process automation, empowering teams of all technical backgrounds to harness these tools effectively.

Central to Pega Infinity '24 is its model-driven architecture, which enables faster and simpler application development. This architecture now integrates advanced AI models that can learn from historical data to predict user needs and offer insights that drive customer engagement and business process optimization. By analyzing past interactions and existing data streams, the AI engine anticipates trends, identifies emerging risks or opportunities, and offers recommendations tailored to each unique customer journey. This ensures a smarter, more proactive approach to decision-making.

One of the key pillars of Pega Infinity '24 is the "AI Everywhere" philosophy, which democratizes AI use across an organization. Guided workflows and conversational interfaces enable non-technical business users to develop and deploy predictive models without needing specialized data science expertise. Shared and reusable AI models foster collaboration between data scientists and business stakeholders, allowing them to co-create and refine models iteratively. This feature also accelerates deployment, providing faster time to value for organizations.

Natural Language Processing (NLP) capabilities have been significantly enhanced in this release. By accurately interpreting customer inquiries, emails, and service requests, Pega Infinity '24 can analyze text and context in real time. This allows the system to automatically route tasks to the right departments, suggest appropriate responses, and prioritize actions based on urgency and business value. The outcome is faster resolution times with a heightened level of customer personalization.

Robotic Process Automation (RPA) bots within the platform have been infused with built-in machine learning algorithms, allowing them to handle repetitive tasks with increasing efficiency. These bots not only perform mundane tasks with precision but also learn from their workflows over time, adapting their processes and continuously refining their performance. This liberates human employees to focus on more creative, strategic endeavors while ensuring repetitive tasks are managed accurately.

Monitoring and transparency are fundamental components of Pega Infinity '24, which includes comprehensive monitoring tools that provide visibility into how AI models arrive at their decisions. This level of transparency ensures that AI-driven processes align with regulatory frameworks, fostering trust and confidence in the AI's recommendations. Organizations can clearly understand the decision logic and demonstrate compliance, which is crucial as businesses increasingly rely on AI for strategic decision-making. Now, let's explore the key features that exemplify AI-driven development in Pega Infinity '24:

• Pega GenAI Blueprint
• Pega GenAI Autopilot
• Pega GenAI Coach
• Pega GenAI Analyze
• Pega GenAI Automate
• Enhancements to Constellation

Each of these features integrates seamlessly into the core functionality of Pega Infinity '24, enhancing every aspect of the application development lifecycle and offering a comprehensive toolkit for businesses to leverage AI in their daily operations.

Pega GenAI Blueprint

Aligning business strategy with intelligent application development

It is a cornerstone feature of the Pega Infinity '24 platform, designed to accelerate and refine the application development process. It streamlines strategic planning and execution with a set of sophisticated tools that enhance clarity, alignment, and efficiency.

Business vision

Today's rapidly evolving digital landscape, aligning business strategy with application development is crucial for organizations aiming to leverage technology for competitive advantage. Pega Infinity '24 introduces an enhanced suite of tools within the GenAI Blueprint module, specifically designed to integrate strategic business vision into the fabric of application development. This alignment ensures that every phase of development not only meets but exceeds the strategic objectives set by stakeholders. Here's how the GenAI Blueprint fosters a symbiotic relationship between business goals and technical execution:

Strategic alignment

The GenAI Blueprint uses advanced Natural Language Processing (NLP) to help development teams capture and align application design with high-level business strategies. Stakeholders can clearly articulate their vision, and the Blueprint breaks down these goals into actionable project objectives.

Intelligent communication

The platform translates business goals into structured language that ensures all stakeholders—technical and non-technical—share a unified understanding of project deliverables. This eliminates ambiguity and streamlines communication, enabling smoother collaboration.

Contextual road mapping

By embedding business strategies directly into project planning, it provides teams with a clear roadmap that aligns objectives, timelines, and key milestones, ensuring strategic vision guides every phase of development.

Integration capabilities

Pega Infinity'23 often comes equipped with built-in integration capabilities, simplifying connections to various systems and services. This is essential for comprehensive workflow automation involving multiple applications.

Case design

In business process management, case management is pivotal in structuring workflows that align with strategic goals while maintaining the flexibility required for dynamic business needs. Pega Infinity '24 enhances this vital process with its GenAI Case Design, enabling organizations to efficiently translate their strategic vision into adaptable, intelligent workflows. This ensures consistency and alignment across varying projects while providing room for guided customization. By leveraging AI-driven insights and predefined templates, the Case Design tool empowers developers to create comprehensive workflows that enhance productivity and operational efficiency.

Workflow translation

Case Design leverages AI to translate business requirements into logical workflows. These workflows are adaptable, allowing developers to configure them to meet specific needs while maintaining a strategic framework.

Intelligent templates

A variety of smart templates and predefined cases enable rapid prototyping. They automatically incorporate best practices for common processes, ensuring development speed without sacrificing compliance or business alignment.

Guided customization

The system provides intelligent suggestions for workflow configurations based on business context and historical data. This ensures that workflows not only align with strategic goals but are also optimized for performance and efficiency.

Uplift across the lifecycle

The ability to maintain strategic alignment throughout the application lifecycle is essential for organizations to stay competitive. With rapid changes in business requirements, organizations must ensure that their applications can adapt and evolve without compromising strategic objectives. Pega Infinity '24's GenAI Blueprint provides a seamless integration across the entire application lifecycle, enabling developers to align business goals with technical execution. By incorporating real-time insights and fostering a culture of continuous improvement, the Blueprint ensures that applications evolve in tandem with business needs.

Lifecycle integration

The GenAI Blueprint integrates seamlessly across the entire application lifecycle, from initial brainstorming through production deployment. It ensures that business goals remain central by providing contextual recommendations throughout the development process.

Real-time insights

Leveraging AI and machine learning, the Blueprint continuously analyzes progress, identifying areas that require attention or improvement. These insights are relayed in real time to developers, allowing them to make data-driven adjustments and maintain alignment.

Continuous improvement

Automated feedback loops provide developers with improvement suggestions to optimize existing workflows. The Blueprint encourages a culture of continuous enhancement, ensuring applications evolve with changing business needs.

By integrating these capabilities, Pega Infinity '24's GenAI Blueprint empowers organizations to seamlessly translate their strategic visions into actionable development plans, ensuring that the resulting applications are not only technically proficient but also strategically impactful. This alignment is essential for businesses looking to maintain competitive advantage and achieve sustainable growth in the digital age. The Pega GenAI Blueprint is a transformative tool that provides a structured approach to aligning development with strategic business goals. It simplifies planning and execution through intelligent communication, workflow translation, and lifecycle uplift, making the application development process faster, clearer, and more strategically aligned.

Pega GenAI Autopilot

Boosting productivity with intelligent task automation and optimization

A core feature of the Pega Infinity '24 platform, serves as a developer's co-pilot throughout the application development journey. By leveraging artificial intelligence and machine learning, Autopilot assists developers by automating repetitive tasks, identifying potential improvements, and ensuring applications meet quality and compliance standards.

Autonomous task management

With the volume of repetitive tasks inherent in application development, maintaining developer productivity and morale becomes crucial. The Autonomous Task Automation feature of Autopilot seeks to alleviate these challenges by intelligently automating routine tasks that otherwise consume valuable development time. This frees developers to focus on higher-level strategic work, reducing overall development timelines while improving efficiency.

Repetitive task management

Autopilot is designed to handle tedious, repetitive tasks such as data entry, configuration of standard workflows, and routine code reviews. By automating these tasks, developers can focus on more creative and strategic aspects of development.

Code generation and refactoring

The feature auto-generates standard code snippets based on best practices, reducing the need for manual coding. It also identifies areas where existing code can be refactored for improved efficiency and compliance.
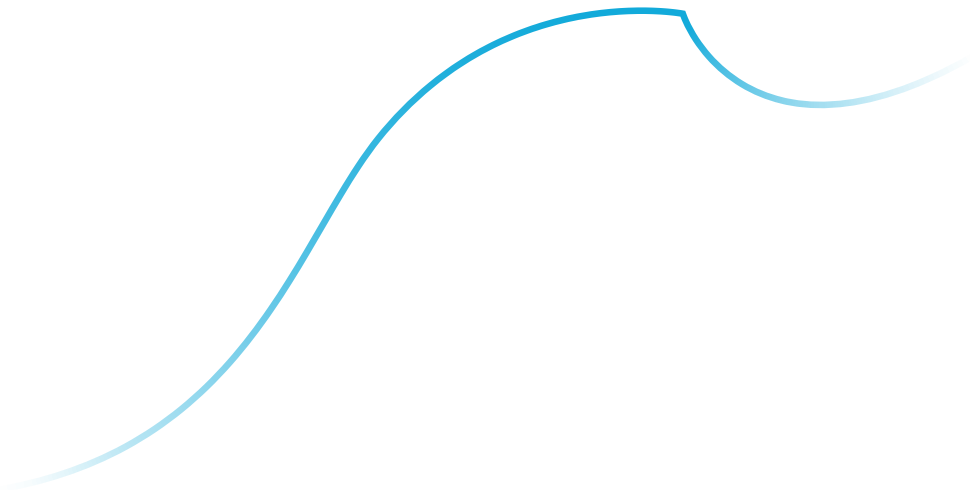
Compliance and optimization assessment

Ensuring adherence to compliance standards and maintaining high application performance are vital for any development project. Autopilot provides intelligent analysis and assessment to ensure applications meet industry standards while optimizing performance.

Standards validation

Autopilot autonomously assesses application components against industry-standard compliance frameworks. It flags inconsistencies or deviations from coding standards, providing real-time alerts to developers.

Optimization recommendations

The system analyzes application performance and provides recommendations for improving efficiency, such as refactoring code, optimizing database queries, and reconfiguring workflows. These suggestions ensure that applications not only comply with industry standards but also deliver optimal performance.

Productivity enhancement suggestions

With development teams constantly striving to improve their workflows, Autopilot functions as a continuous improvement engine, providing proactive recommendations to speed up development cycles and enhance productivity.

Continuous improvement

Autopilot learns from past projects to identify potential enhancements in future development processes. It monitors user behavior and suggests shortcuts, tools, or configurations that can speed up the workflow.

Developer coaching

By acting as a co-pilot, Autopilot guides developers through the application lifecycle with proactive advice and coaching. For instance, it may suggest optimal branching strategies, modular design patterns, or new approaches based on emerging industry trends.

Intelligent anomaly detection

Detecting anomalies in application behavior is critical for identifying potential issues before they escalate into severe problems. Autopilot leverages AI to offer intelligent anomaly detection, ensuring application integrity.

Inconsistency alerts

The system uses AI to detect unusual patterns in application behavior that might indicate bugs or design flaws. It alerts developers to potential issues and provides suggestions on resolving them before they become critical problems.

Root cause analysis

In addition to identifying issues, Autopilot performs root cause analysis, offering insights into the underlying factors that may be contributing to anomalies, thereby helping teams address systemic issues.

Pega GenAI Autopilot is an intelligent development assistant that significantly enhances productivity and quality. It automates routine tasks, ensures compliance, provides optimization insights, and continuously coaches developers for more effective application development. By acting as a vigilant co-pilot, it enables development teams to build high-performing, compliant applications swiftly and with greater confidence.

Pega GenAI Coach

Guiding developers with intelligent mentorship and best practices

Pega GenAI Coach is a dynamic mentoring tool embedded in the Pega Infinity '24 platform, designed to guide developers toward better practices. It bridges knowledge gaps by analyzing past development patterns, leveraging industry benchmarks, and providing actionable recommendations on code quality, architecture, and design choices.

Code quality and best practices

Maintaining high-quality code and following best practices are essential for creating reliable, scalable applications. The GenAI Coach assists developers by proactively identifying areas that require attention and suggesting optimizations to improve compliance, security, and readability. This guidance ensures that code not only meets industry standards but is also easier to maintain and collaborate on.

Code review assistance

By recommending consistent coding styles aligned with industry standards, GenAI Coach helps maintain readability and consistency across the codebase, making collaboration among developers easier.

Code style consistency

By recommending consistent coding styles aligned with industry standards, GenAI Coach helps maintain readability and consistency across the codebase, making collaboration among developers easier.

Architectural guidance

Robust software architecture is crucial for building applications that are scalable and easy to maintain. GenAI Coach provides targeted architectural guidance to ensure that applications are designed with modularity and efficiency in mind.

Modular design patterns

The system identifies when modular design patterns, like microservices or reusable components, could benefit the project. It recommends suitable architectures that align with the application's business requirements while ensuring scalability and maintainability.

Dependency management

GenAI Coach ensures optimal dependency management by identifying redundant libraries or obsolete dependencies that may affect performance or security. It suggests the use of updated or more efficient libraries.

Design recommendations

Robust software architecture is crucial for building effective application design drives user engagement and aligns workflows with business objectives. GenAI Coach provides intelligent recommendations to enhance user experience and optimize application workflows.

User-centric design

It encourages user-centric design by suggesting UI/UX patterns that optimize user engagement and accessibility. It analyzes historical data and usage trends to provide insights into creating intuitive, efficient interfaces.

Workflow optimization

The tool recommends workflow optimizations based on best practices and historical usage patterns. These insights ensure that application flows are efficient and aligned with strategic objectives.

Bridging knowledge gaps

Addressing knowledge gaps within a development team ensures continuous improvement and productivity uplift. GenAI Coach acts as a digital mentor, providing personalized learning recommendations that help developers refine their skills.

Developer skill uplift

GenAI Coach continuously analyzes developer work patterns, identifying areas where additional knowledge or training may be required. It provides contextual tutorials or resources that help developers deepen their expertise and improve productivity.

Adaptive learning

By learning from the team's historical development data, the Coach adapts its suggestions to match the specific strengths and weaknesses of the development team. This personalized approach helps developers apply best practices more effectively.

Industry benchmarking

Keeping up with industry standards and emerging trends is crucial for developing applications that remain competitive and innovative. GenAI Coach helps teams benchmark their progress against industry standards and adopt new trends.

Real-world comparisons

GenAI Coach compares the team's work against industry benchmarks and similar projects to identify areas for improvement. This ensures that the team remains aligned with the latest industry standards.

Emerging trends

It continuously monitors emerging trends and technologies, providing insights into innovative approaches that could be beneficial. These recommendations help teams stay ahead of technological changes.

Pega GenAI Coach is a comprehensive mentoring tool that empowers developers with intelligent recommendations and contextual insights. By providing real-time advice on coding standards, architecture, and design choices, it helps development teams maintain high-quality outputs while adapting to evolving industry trends. This results in better-quality applications built efficiently and with strategic alignment.

Pega GenAI Analyze

Transforming data into actionable insights for optimal performance

Pega GenAI Analyze is an advanced analytics tool within the Pega Infinity '24 platform, focused on providing comprehensive insights that reveal inefficiencies and areas for improvement. By using sophisticated data visualization and analysis techniques, it equips teams with an in-depth understanding of application performance and user behavior, helping them make data-driven decisions swiftly and confidently.

Advanced data visualization

Understanding data is essential for informed decision-making, and visualizing data effectively can unveil critical insights that might otherwise go unnoticed. GenAI Analyze provides developers and stakeholders with the tools to build custom dashboards and interactive visuals that clarify key metrics, identify trends, and highlight areas requiring attention.

Custom dashboards

GenAI Analyze allows teams to create custom dashboards tailored to their unique data requirements. These dashboards provide a centralized view of key performance metrics, trends, and critical insights, enabling quick identification of problem areas and opportunities.

Interactive visuals

The tool offers interactive data visualizations, such as heat maps, time series graphs, and distribution charts. Users can drill down into specific metrics to uncover hidden correlations and trends that could influence strategic planning.

User behavior analysis

Understanding user behavior is essential for optimizing the user experience and guiding feature development. GenAI Analyze helps teams uncover how different segments interact with the application, revealing usage patterns that can guide future development efforts.

Usage patterns

By analyzing usage patterns across various user segments, GenAI Analyze identifies which features are most and least used, how users navigate the application, and where they encounter challenges. This helps teams prioritize development efforts to improve user experience.

Behavioral segmentation

The tool segments users based on their behaviors, preferences, and demographics, providing a clear picture of how different user groups interact with the application. This allows for targeted improvements that resonate with specific audiences.

Application performance insights

Maintaining optimal application performance is crucial for ensuring user satisfaction and supporting business goals. GenAI Analyze provides a comprehensive view of application health through continuous monitoring and helps developers pinpoint bottlenecks that impact responsiveness.

Real-time monitoring

GenAI Analyze continuously monitors application performance in real time, capturing data on response times, load speeds, error rates, and resource utilization. This provides an immediate view of application health and responsiveness.

Bottleneck identification

The tool identifies performance bottlenecks and latency issues that may affect user experience. It correlates these findings with application workflows and architecture, helping teams optimize critical paths and reduce downtime.

Optimization recommendations

Data insights are only valuable if they can be translated into actionable steps. GenAI Analyze provides teams with specific recommendations to address inefficiencies and anticipate future challenges.

Actionable insights

The tool automatically generates actionable recommendations based on identified trends and inefficiencies. For example, it may suggest re-architecting a workflow that's causing delays or improving the interface to guide users through a complex process.

Predictive analytics

GenAI Analyze uses predictive analytics to forecast future trends in usage, performance, and potential issues. It helps teams proactively address challenges and optimize the application before they escalate.

Data-driven decision-making approach

Aligning technical decisions with business goals requires a solid understanding of the relationship between application performance and business outcomes. GenAI Analyze supports continuous improvement through a structured feedback loop.

Business impact evaluation

The tool correlates application performance with key business metrics to assess the overall impact of improvements or issues. This empowers teams to align their technical decisions with business goals.

Continuous improvement

GenAI Analyze facilitates a continuous improvement cycle by providing regular feedback loops. It allows teams to iteratively test changes, measure their impact, and refine strategies for ongoing optimization.

Pega GenAI Analyze is a powerful analytics tool that provides comprehensive insights into application performance and user behavior. By offering interactive data visualizations, real-time monitoring, and predictive analytics, it empowers teams to make data-driven decisions that enhance user experience and ensure strategic alignment.

Pega GenAI Automate

Accelerating workflow automation with AI-powered solutions

Pega GenAI Automate is a sophisticated feature of the Pega Infinity '24 platform designed to streamline workflow automation. By using AI to analyze processes and suggest pre-built automation solutions, it simplifies the creation and deployment of automation rules and Robotic Process Automation (RPA), helping teams reduce the effort needed for repetitive tasks.

Intelligent process analysis

Effective automation begins with a thorough understanding of existing workflows to identify where automation can yield the greatest benefits. GenAI Automate brings intelligence to this analysis by meticulously mapping processes and prioritizing automation opportunities for maximum impact.

Process mapping and analysis

GenAI Automate meticulously maps out existing workflows, identifying inefficiencies and repetitive tasks suitable for automation. This mapping offers a comprehensive overview of where automation can have the most impact.

Prioritization of tasks

It ranks automation opportunities based on their potential impact on business operations, enabling teams to focus on automating tasks that will yield the greatest efficiency gains.

Pre-built automation recommendations

To accelerate the automation process, GenAI Automate offers pre-built templates and recommendations that simplify configuration while maintaining flexibility.

Pre-built templates

The system offers a range of pre-built automation templates and rules tailored to common business processes. They are easily configurable to fit specific business needs, reducing the time needed for custom development.

RPA bot suggestions

GenAI Automate recommends suitable RPA bots based on its analysis, ensuring the right bots are deployed for tasks like data extraction and form filling.

Streamlined implementation of automation rules

Implementing automation rules should be simple and intuitive. GenAI Automate's drag-and-drop interface makes configuring workflows easy and provides contextual guidance to streamline the process.

Drag-and-drop configuration

With a drag-and-drop interface, developers can visually design workflows and set up automation rules quickly and without complex coding.

Contextual guidance

The system provides real-time guidance to help users select and configure the best automation tools for their needs, reducing implementation errors and speeding up deployment.

Enhanced Robotic Process Automation (RPA)

Managing RPA bots efficiently is crucial for maximizing their benefits. GenAI Automate provides centralized management and optimization tools that keep bots in tune with evolving business processes.

Centralized management

A unified console helps teams centrally monitor and control all RPA bots, offering real-time updates and performance metrics for efficient management.

Bot optimization

The system continuously assesses bot performance and suggests improvements for speed and accuracy, ensuring the bots remain efficient and in tune with evolving business processes.

Compliance and governance

Ensuring automated processes comply with standards is essential for maintaining consistency and reducing errors. GenAI Automate automates governance rules and provides transparency through detailed logs.

Automated governance

Automated rules ensure that workflows and bots comply with organizational standards, reducing errors and ensuring consistency.

Audit trail

GenAI Automate maintains detailed logs of all automation activities, providing transparency and accountability for audits.

Continuous improvement

Automation is most effective when it evolves over time. GenAI Automate leverages feedback loops and adaptive learning to refine automations continuously.
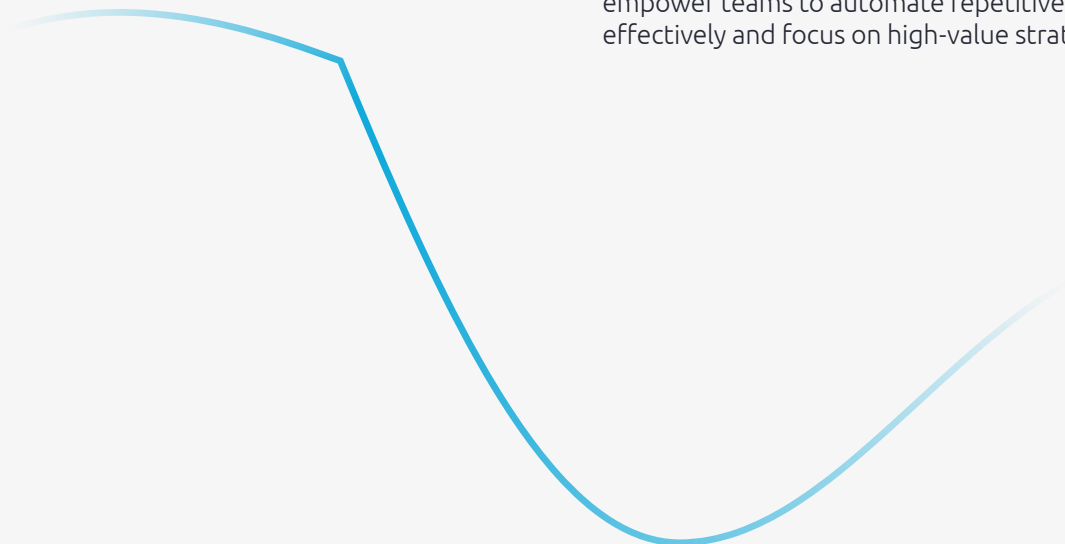
Feedback loops

The platform provides data on bot performance and workflow efficiency, allowing teams to refine their automations based on actionable insights.

Adaptive learning

The system learns from past automation deployments, using those insights to refine future recommendations and make the automation process progressively smarter.

Pega GenAI Automate is a feature-rich solution that accelerates workflow automation through smart process analysis and pre-built automation recommendations. Its user-friendly interface, centralized management, and compliance controls empower teams to automate repetitive tasks effectively and focus on high-value strategic work.

Enhancements to Constellation

Streamlining UI development with an improved design system

Pega's modern UI architecture, Constellation, has been enhanced to significantly improve developer productivity and application quality. These enhancements empower teams to rapidly deliver feature-rich, user-friendly applications while ensuring consistent branding and maintaining best practices. Here's a deeper dive into each enhancement:

Improved design system

A strong design system enhances productivity and ensures a seamless user experience. The enhancements to Constellation in Pega Infinity '24 focus on improving design efficiency and consistency.

Refined design system

The enhanced design system provides a comprehensive set of reusable templates, components, and styles that streamline UI development. These standardized elements ensure visual consistency across applications while reducing the need for repetitive coding.

Consistent branding

By using a unified design system, developers can ensure that branding remains consistent throughout the application. The templates are flexible and customizable, allowing teams to maintain corporate identity without compromising on creativity.

Component enhancements

A strong design system enhances productivity and ensures a The updated component library within Constellation brings new features and advanced customization options, helping developers rapidly deliver feature-rich, responsive applications.

Advanced component library

The expanded library of UI components includes sophisticated elements such as interactive charts, data grids, and dynamic forms. These components are optimized for responsiveness and accessibility, helping developers build feature-rich applications with minimal coding.

Configurable widgets

Widgets are pre-configured to address common business requirements, such as data filtering, reporting, and task management. They can be easily integrated into applications, offering extensive functionality out of the box.

Cross-device compatibility

All components are designed to be responsive and work seamlessly across different devices and screen sizes, ensuring a consistent user experience.

AI-powered suggestions

AI integration helps developers work smarter, providing proactive suggestions and smart code snippets that align with best practices.

Smart code snippets

The AI analyzes the development process and suggests ready-to-use code snippets, reducing the time required for writing and testing new features. These suggestions align with best practices and coding standards, ensuring high-quality implementation.
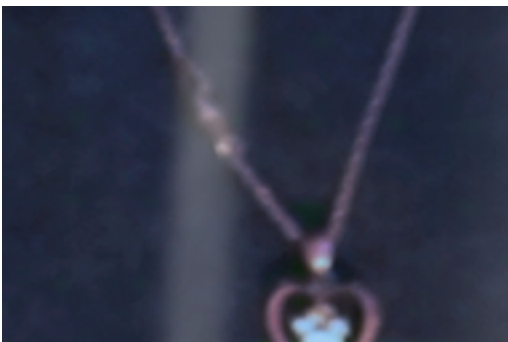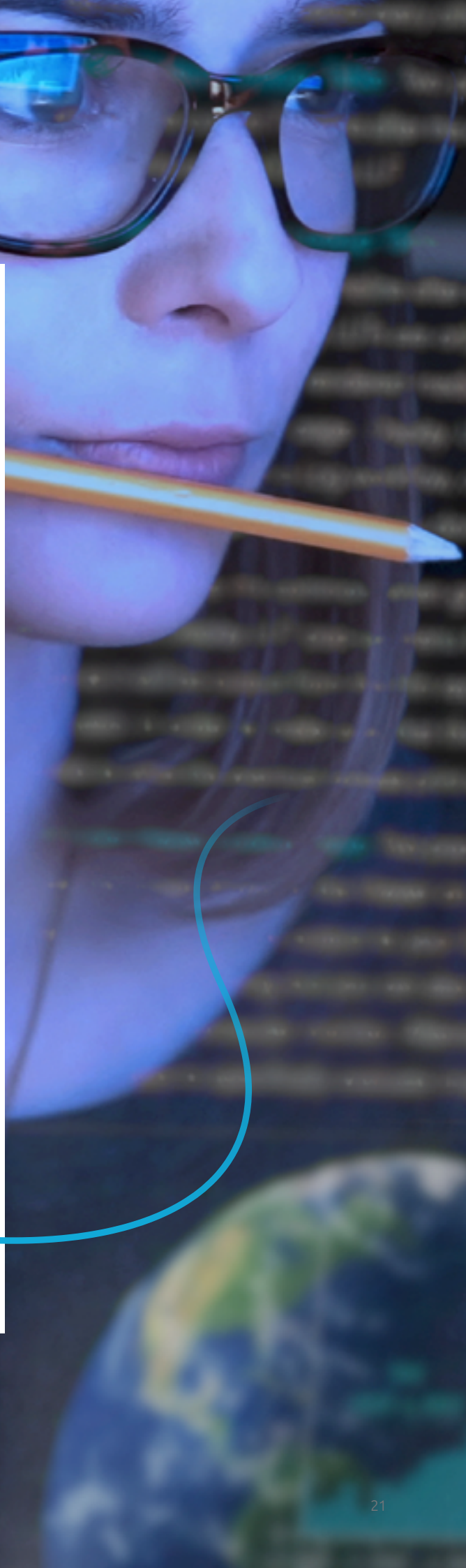
Contextual development guidance

The AI monitors developer activities in real time, providing proactive recommendations on how to structure workflows, choose design patterns, and optimize user interfaces. This helps teams maintain optimal productivity while adhering to industry standards.

Pattern recognition

By analyzing historical data and current design trends, the AI can detect commonly used patterns and suggest their use for new features. This accelerates development while ensuring consistency across the application.

The enhancements to Constellation provide an improved design system, advanced UI components, and AI-powered suggestions that elevate developer productivity and ensure consistent branding. These features enable teams to rapidly develop user-centric applications that deliver engaging experiences across all devices, maintaining best practices and reducing time to market.

Key differentiators

The Pega Infinity '24 platform redefines application development with a comprehensive suite of AI-driven tools that empower organizations to deliver high-quality, compliant applications swiftly and efficiently. This transformative release significantly accelerates the development lifecycle while leveraging artificial intelligence (AI) and machine learning (ML) for intelligent automation and analytics. **Here's a detailed breakdown of what makes Pega Infinity '24 a game-changer:**

Accelerated development lifecycle

Pega Infinity '24 offers tools and features that significantly expedite the application development process. Its pre-built templates and intuitive drag-and-drop interface enable rapid prototyping, reducing the time needed for manual coding.

Pre-built templates

Developers can choose from a library of pre-built templates to kickstart their projects with standardized patterns, reducing the need to build from scratch.

Drag-and-drop functionality

This user-friendly interface allows developers to visually design workflows and interfaces, saving time on manual coding while maintaining flexibility.

Automated workflows

Routine tasks, such as process orchestration and data integration, are automated, helping teams prototype and implement solutions swiftly.

Intelligent automation

Automation capabilities in Pega Infinity '24 reduce the manual workload for developers by automating repetitive tasks. This intelligent process mapping ensures workflows are optimized and strategically aligned.

Repetitive task management

Repetitive tasks, like data entry and workflow configuration, are automated, freeing developers to focus on high-value activities and strategic innovation.

Process mapping

Intelligent process mapping identifies and organizes tasks efficiently, reducing redundant steps and streamlining workflows.

Enhanced quality and compliance

The platform helps maintain high standards of quality and compliance throughout the application lifecycle. AI-driven automated validation and error reduction mechanisms ensure applications meet regulatory requirements consistently.

Automated validation

The platform's AI algorithms ensure applications consistently meet compliance standards by automatically validating configurations against predefined rules.

Error reduction

Automated quality checks throughout development catch errors early, helping teams maintain rigorous standards and reducing rework.

In-depth analytics and insights

Pega Infinity '24 provides comprehensive analytics that empower teams to make data-driven decisions. Predictive analytics and real-time dashboards enable early identification of performance issues and emerging trends.

Predictive analytics

Machine learning models analyze application data, identifying patterns and predicting future trends that guide strategic business decisions.

Real-time insights

Dashboards provide real-time visibility into key metrics, allowing organizations to identify performance issues and optimize application functionality promptly.

Guided development

Guided development ensures that projects align with strategic goals and best practices. The platform provides contextual recommendations and assistance based on historical data and emerging industry trends.

Contextual recommendations

The platform offers intelligent recommendations based on historical data and best practices, assisting developers in selecting optimal design patterns and configurations.

Design assistance

Developers receive design guidance that aligns with business requirements, ensuring applications meet both functional and user experience standards.

Scalable collaboration

Collaboration tools in Pega Infinity '24 streamline communication across multidisciplinary teams. Project status visibility and cross-functional integration ensure transparency, enabling smooth feedback loops and alignment with business objectives.

Cross-functional integration

Tools facilitate collaboration among teams from different disciplines, offering seamless data sharing and feedback mechanisms to reduce bottlenecks.

Project status visibility

All stakeholders have clear visibility into project statuses, ensuring transparency and alignment throughout the development cycle.

Conclusion

Achieving seamless integration of strategy and development through Pega GenAI

Pega Infinity '24 stands as a pivotal advancement in business process management, driven by its powerful suite of GenAI tools that enable organizations to achieve unprecedented productivity. The GenAI Blueprint acts as a strategic planning tool, translating organizational goals into detailed development roadmaps that align with business objectives. It provides a clear path for aligning projects across the entire development lifecycle. GenAI Autopilot then acts as a trusted assistant to developers, automating routine coding tasks and offering proactive recommendations to streamline workflows. The GenAI Coach provides mentoring and real-time guidance to ensure adherence to industry best practices and architectural standards. Together, these tools deliver a comprehensive development experience that enables teams to build compliant, optimized applications while freeing up valuable time for high-impact tasks.

In addition to these intelligent development tools, the platform's predictive analytics and insights capabilities turn business data into actionable strategies. Real-time dashboards and analytics provide decision-makers with immediate visibility into performance metrics, helping them identify areas for improvement and align cross-functional teams with strategic objectives. Quality assurance and compliance are prioritized through automated validation features that catch potential issues early in the development lifecycle. By minimizing rework and ensuring applications meet rigorous internal and external standards, businesses can rely on Pega Infinity '24 to deliver robust, error-free solutions.

Furthermore, Pega Infinity '24 accelerates prototyping and deployment through its user-friendly drag-and-drop interface, pre-built templates, and automated workflows. These features allow teams to quickly configure applications, reducing the amount of custom coding required and shortening development time. By leveraging this intuitive development environment in conjunction with the platform's suite of GenAI tools, organizations can achieve greater agility and scalability, staying ahead in an evolving digital landscape. Overall, businesses adopting Pega Infinity '24 will gain a significant edge in strategic automation and productivity, benefiting from an innovative approach that optimizes business processes and ensures alignment with their long-term goals.

Partner with Capgemini

The time to transform your business is now.

We recognize the complexities and challenges associated with implementing digital transformation programs at an enterprise scale, aimed at fostering positive developments across people, processes, and technology. We acknowledge the importance of having a seasoned partner with a proven track record in leading similar successful initiatives, who is dedicated to your business and ready to support your success throughout every phase of the implementation.

In our Digital Customer Experience practice, we collaborate closely with our clients to forge essential connections throughout the entire organization, crafting experiences that yield quick and lasting benefits for both customers and companies. Capgemini leverages our comprehensive digital expertise in a versatile manner to augment and transform your current operational/delivery frameworks.

Our Digital Transformation strategy sets us apart by prioritizing people and businesses, with technology serving as a crucial facilitator. Our holistic approach begins with the "invent" and "shape" phases, which are pivotal in establishing innovative strategies, digital services, and target operating models, as well as adopting a customer-focused mindset through design thinking.

Capgemini's expertise in digital transformation, coupled with its application of Pega technologies, highlights the strengths of the Pega Infinity platform. This includes its capabilities in elevating development productivity, improving integration options, and leveraging generative AI via Pega GenAI™ to optimize the development process. Through the adoption of enterprise AI decisioning and workflow automation platforms like Pega Infinity, Capgemini facilitates swift prototyping and enhances efficiency, striving for an ideal balance between standardization and customization. This expertise reflects Capgemini's deep insight into Pega technologies and its dedication to advancing business agility and innovation through the deployment of advanced solutions and strategic digital initiatives.

Capgemini's learnings and expertise from our Generative AI Center of Excellence (GenAI COE) can help clients transform their processes. Our GenAI COE focuses on harnessing the power of generative AI to create intelligent and adaptive systems that enhance business processes and customer interactions. Our GenAI COE can help you uncover hidden patterns, predict future trends, and make informed strategic decisions that propel your business forward.

We are confident that Capgemini stands out as the ideal partner for your journey, offering our leading practices and aligning our capabilities to ensure the success of your program.

Let's discuss how Capgemini's blend of innovation and expertise can drive your digital transformation journey to new heights of success.

Ask the experts

Dinesh Karanam

Senior Director; Business Processes and Augmented Services Leader for North America, Financial Services

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Dinesh leads business and technology transformations for global organizations, using his 25 years of expertise in diverse industries to drive strategic innovation and impactful changes. He enhances operational efficiency and spearheads global teams to deliver significant business achievements, including profit growth and digital advancements.

Arnaud Polet

Senior Director; Customer Business Process Practice Leader for France, Financial Services

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Arnaud steers the strategy and portfolio for the Customer Business Process practice in France, with a strong background in driving client expansion and delivery frameworks. His enthusiasm is in fostering innovation and expanding the ecosystem for CBP solution offerings, driving digital IT overhauls, establishing fresh capabilities, and crafting IT strategic outlooks.

Rakesh Roshan

Senior Director; Pega COE Leader, Financial Services

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Rakesh is focused on driving digital transformation initiatives through digital technologies in the financial services and insurance sectors for clients in the UK, Ireland, and Continental Europe.

Srimayee Majumdar

Portfolio Manager; Pega COE Leader for APAC

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Srimayee, an expert in Business Process Management, leverages her vast experience to deliver creative solutions that help clients revolutionize their operations, ensuring a perfect match of technology and implementation for their specific needs.

Piyali Bhattacharjee

Senior Manager; Pega LSA, Financial Services

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Piyali specializes in streamlining business processes and optimizing systems with a strategic mindset and technical expertise. She delivers tailored solutions that drive operational excellence and address complex business challenges.

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About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2023 global revenues of €22.5 billion.

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