Pega Modernisation and Why it Matters Now

DCS explains why investing in the Pega Modernisation path is the right choice for optimising joint AI and human control of your enterprise-wide business processes.

AN OPINIONATED PERSPECTIVE BORN FROM REAL WORLD EXPERIENCES

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LLMs are forcing a Stack re-think

The age-old dilemma of finding the right moment to upgrade existing applications, or consolidate old technologies, has just got a little harder – for now. The pace of LLM adoption is forcing decision makers to know what good looks like, and how vendor solutions meet those visions, putting all upgrades under further scrutiny.

Typical Upgrade Considerations

"*You'll Need to Upgrade*" are the words we don't like hearing. Why fork out more dough for a set of new features promising even more return-on-investment when we're not even half-way achieving what was promised for the current version?

That's a cynical viewpoint, but not an uncommon one, as internal plans don't always bear fruit, and hyper-keen Vendor Sales teams over-promise on returns.

But the reality of ever-changing landscapes does lead to ever-changing goalposts, so it's almost a necessary evil to upgrade, take it on the chin, and make sure the business case going forward is that much better at predicting reality.

However, in an ever-changing landscape, there's a new capability that has entered our working and personal lives, an enabler that is accelerating 'change' even faster, whilst letting each one of us take control and steer change. That enabler is in the AI sphere and it's the Large Language Model (or LLM), the driving force behind Generative AI.

All who use LLMs for personal use, whether it be via vendors or open standards, will wax lyrical about accelerated time-to-knowledge for passive learning or for physical assets creation, be they essays, journals, or even application development.

We're quick to sell the virtues of this 'game-changer' technology and the adoption has spread like wildfire.

When turning to LLM value-adds in Business, every Vendor will be incorporating LLM-driven efficiency and productivity value-adds into their tools. Every business and technology decision maker will be thinking about the impacts on their Staff, their Customers, and the underlying business processes that support their Brands and IP. Most will even be asking LLMs how LLMs will impact the business landscape, such is its impact.

So LLM contributions will be a consideration for any key Application or wider Tech Stack upgrade.

The LLM impact on Upgrades

LLMs part of the wider Generative AI sphere – the creative ability to take small prompts and expand to new ideas, direction through spoken and coded language, and visuals.

The ability to create content based on human briefs, or even LLM's own briefs, has far reaching uses that we've all benefited from already in our lives. But the ability to write computer code and in turn automate and influence the at-scale processes that underpin large enterprises is another thing. The possibilities for, and of, change are incredible, as well as daunting. But these possibilities are a reality, and they should be front-of-mind for those making the big decisions on the technological and operational roadmaps in the coming year or so.

No LLM value-add discussion is complete without mentioning "low code". This has been a capability that has been utilised by a number of organisations over the last decade. The maturity journey has been borne out of configurable data and platform integrations to configurable User Interfaces, each helping build localised customisations through configurable components, in effect building out transparency with agility, and in turn providing a platform for growth and adaptability.

With the explosion of LLM usage and the knowledge and agility on offer, it's bringing 'low code' enablers into focus too, given that their 'change' enablers are intertwined.

GenAI is part of a larger AI and general Data Science footprint. It's important to appreciate how AI and low code can be intertwined into business processes so that Change is controlled from within, as part of Business-As-Usual, with major upgrades and technical debt headaches then diminishing.

Embedding AI & low code in Business Processes

AI and low code adoption can and will be far reaching across business lines within an organisation. It's important to have an adoption strategy, that nurtures local specialties yet provides wider enterprise commonality and re-use. A great way to shape this strategy is to first consider the types of process that exist in an enterprise and understand how low code and AI contribute.

Types of Business Process

For simplicity, consider 2 types of process:

1) **Well-defined, structured, linear processes**
2) **Unclear, unstructured, complex non-linear, dynamic processes**

For Type 1, any desired incremental improvements would be in the form of **efficiencies**, i.e. being able to speed up these processes via simplification or execution speed or re-use, and to free up resource to help with **resource utilisation** and **productivity**. Linear processes are likely to be rules-driven, so any low code would be in making rules definitions easy to understand and to change. Once coded up, we'd expect to press the 'repeat' button and reap the benefits of automation.

For Type 2, we're talking about handling uncertainty, and this brings into play several methods of facing up to the unknown. Although the above efficiencies still hold true for these scenarios, more important are the mechanisms to tackle and take control of uncertainty, whether it's to handle adversity or to optimise opportunity. Here, we need to consider Risk Management and Value Optimisation. Although automation of these is desirable, the intrinsic complexity will mean that the human control and contribution will be higher, with various hand-offs, collaborations, approvals, and strategizing, including scenario planning and simulations.

So, for 2, we'd be wanting to seek incremental improvements in the :

- ability to **predict** (e.g. accuracy, **confidence**) and simulate (considering multiple angles)
- ability to **innovate**, **hypothesise, test and learn**, be **creative**, especially in given contexts
- **agility** to **listen** to new forces, to **collaborate** and to ultimately **deliver changes** small and large within the **configurations** of the existing toolsets, with more focus on operational expenditure as part of **business-as-usual**

AI and Low Code Contributions

For each of the improvements mentioned, AI and low code can contribute effectively. Utilising the processing power and repeatability of computing is nothing new. More traditional AI contributions around Machine Learning (ML), such as prediction models and clustering techniques are also well documented. Robot Process Automation (RPA) too is a well-established discipline to speed up otherwise laborious manual tasks.

But as we enter the realms of not just self-learning, but self-optimising, processes, especially when it comes to value optimisation or risk management, then we need to be clear about what success looks like, with the KPIs to support and monitor. We don't just throw as many cooks as we can into a kitchen when it comes to making fine cuisine, so when we enter the more responsible, powerful and potentially risky areas of business process optimisation, we need to be introducing a more sophisticated level of KPI. Perhaps even the presence of some KPIs with a rudimentary form of measurement are enough to get started. But with AI, and especially LLMs now acting more independently (in learning, in conversation, in suggestion and in doing), we need to treat AI roles as per any other roles – with responsibility scopes, targets, regular appraisals and discipline..

Upgrade Considerations

Circling back to what this means about upgrades, the era of LLMs and of wider genAI should leave you questioning how the investment and commitment to 'new features' will also be optmising these 'richer KPIs', such that tools are more agile, offering more efficiency, intelligence, transparency, responsibility and autonomy. And perhaps the ability to reduce the need for future upgrades is a simpler reflection of success.

Pega's Approach to Building for Change

At DCS, we're Decisioning experts first and foremost. That is, we work in the realms of those more complex, non-linear, dynamic processes, optimising value to Customers. As a specialist partner of Pega, and we'll now explore how their core offerings are built for change, and how they can help with Clients' modernisation journeys.

Pega's legacy of Business Process

Pegasystems was founded in the 1980s, specialising in Business Process Management and later incorporating decisioning capabilities in the early 2000s. The ability to offer these capabilities under the umbrella of low code development (covering data, process and user experience for internal users and customers alike) has meant that use cases are covered for most major business lines in large enterprises across most industry verticals.

The Contexts exist for AI Contributions

With regard to AI advances, perhaps the most significant value-add of Pega's approach to building for change, is that there is clear context for embedding different aspects of AI (think more along the lines of Assisted Intelligence). This is courtesy of the extensive knowledge and shaping of business processes and objectives, covering data management and integration, ticketing, queuing, routing, simulating, experiencing, learning, customer engagement and optimising). This means AI can assist in Predictive and Adaptive Analytics, in speeding up data profiling, in self-learning for Customer agents, for routing calls, for finding more optimal routes through business process paths, to clustering Customer audiences and recommending new creative engagement angles.

What's so important about this, is that there are defined responsibilities for AI as per any key role in organisations, with boundaries and transparency. Success and failure is easier to gauge, and to shape. This is all-the-more important as AI responsibility increases and risks of uncertainty have to be regulated to ensure optimal maturity.

Internal and External Coverage

Processes involve actors, both human and AI machine, and interaction is with internal and external agents, There are parallels with how businesses make decisions for, and have interactions with, their external Customers, and how they do it internally. The process of change, collaboration, interaction, persuasion and reflection underpin these activities, and that is the essence of what Pega offers.

Pega's latest Version

As of November 2024, Pega has released **Pega Infinity™ 24.2**. The incorporation of genAI into multiple facets of business process makes for a compelling holistic AI value-add story. Low code advances, including a more templated UX framework, allow for contextual agility in the greater realms of good business process practice.

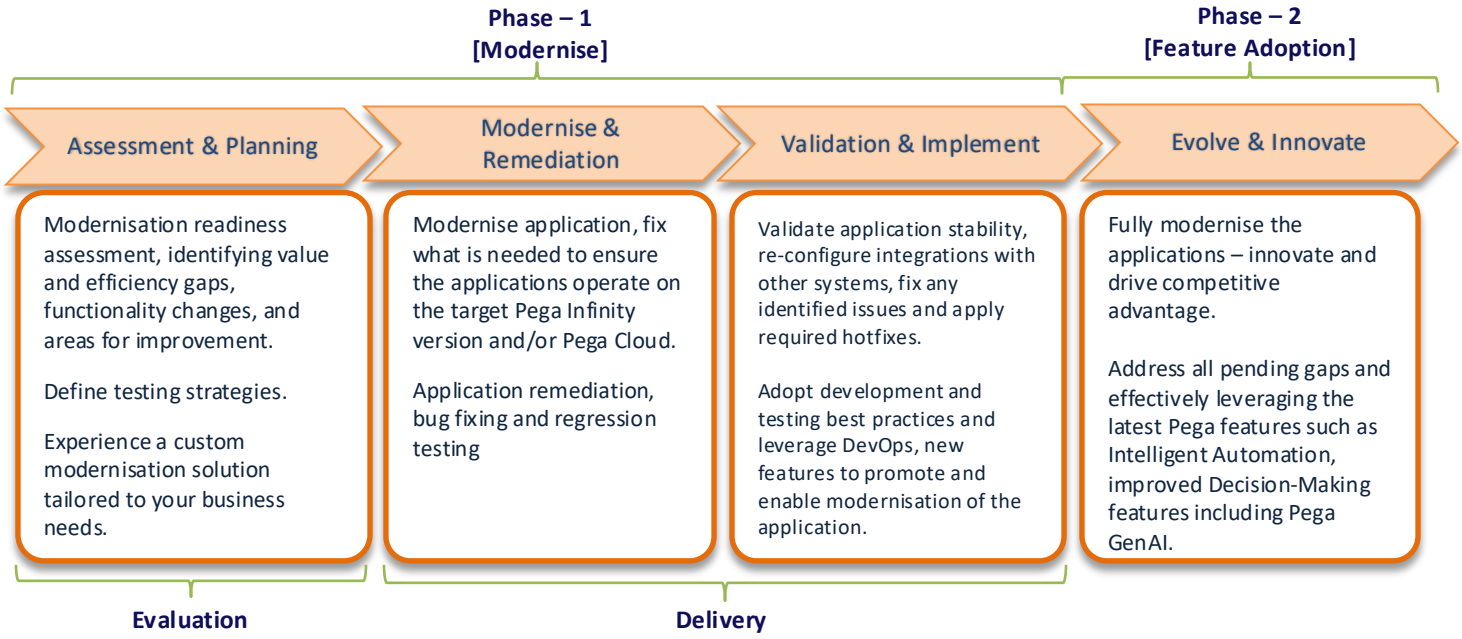
Moving to Pega Cloud means you are always supported on your way to full digital transformation. Pega Cloud offers fully managed environments that are patched and upgraded to keep you current. It provides increased security, improved reliability, enhanced scalability, and extensive support.

Pega's Modernisation Journey

Embarking on a Pega modernisation journey is more than just upgrading software—it's about future-proofing your business for sustained growth and success. While the benefits of modernising your Pega applications are clear, the journey itself can be unclear and requires strategic expertise. That's why partnering with a trusted advisor like DCS is essential.

Making it happen

By following a clear, proven set of steps in the modernisation process, clients can feel confident and at ease throughout their Pega transformation. With a structured approach that addresses every aspect—from planning and execution to cloud migration and optimisation—your business can smoothly transition to the latest version of Pega without disruption.



A typical Pega modernisation journey is categorised into 2 primary phases. Phase 1 is to modernise your existing applications to the latest Pega Infinity versions, and Phase 2 is to enhance your applications to adopt the latest and greatest features from Pega Infinity. Phase 1 is sub-divided into 2 secondary phases namely, Evaluation and Delivery.

During the evaluation phase, we complete the assessment of all your existing Pega applications including application stacks, integrations with upstream and downstream systems, infrastructure changes, database architecture and technical debt. There are a few assessment tools that will ease the assessment process by assessing the Pega application readiness for upgrade and the outcome of this phase will be a report including recommendations on path-to-live and testing strategies.

During the Delivery phase, the applications are modernised, one instance at a time, including regression, integration, end-to-end and performance testing, fixing issues identified, remediate any gaps identified and apply all recommended hotfixes, by following all best practices.

For Customer Decision Hub customers, there will be additional steps that are required to modernise the decisioning application including adaption of latest version of Next-Best-Action Designer framework, 1:1 Operations Manager including Business Change and Data migration pipelines required for optimal development and performance of the Customer Decision Hub application.

Evolve and Innovate is a key step in this modernisations journey which is about adopting the modern features, which helps deliver increased ROI and solve advanced business problems to make you stand-out amongst the competition and be the industry leader in innovation.

Why DCS is the right partner

DCS is a 1:1 Customer Engagement specialist that partners with some of the world's leading brands. We help businesses leverage the power of AI, Generative AI and Decisioning to deliver compelling customer experiences, at scale.

Our solutions transcend data, technology and people meaning that we go further than traditional systems integrators and provide support across the end-to-end decisioning value chain. In doing so we understand the importance of implementing and supporting the adoption of operational transformation and enabling business users to take advantage of their modernised technology capabilities.

Why work with DCS to modernise your technology stack?

- Deep expertise in Pega CDH™ and Pega Platform means we're ideally placed to help leverage new features to their full potential – including NBA-Designer, 1:1 Operations Manager & Automated Insights as well as core AI and Gen AI capabilities.
- We extend beyond Pega's core capabilities to work across the end-to-end decisioning value chain recognising that alignment in Data, Business Operations, DevOps and Project Governance is key to overall success.
- We are uniquely positioned to combine Predictive and Adaptive AI with marketing creativity, allowing us to leverage the full use of Pega's capabilities to realise the maximum potential of your brand and communication strategies.
- We provide complimentary services that extend beyond Pega's core services to support operational transformation including adoption by end users.
- We offer a collaborative approach to delivery utilising a "co-production" model that facilitates client business user adoption as they gain hands-on-experience.
- Our client services teams work with senior stakeholders to establish early success metrics and place significant emphases on measuring success.
- We have unparalleled client-learnt best practice, meaning we've got real world experience of what good (*and bad*) looks like.
- We promote the use of Pega's Delivery Assurance services to ensure customer, partner and technology vendor work together effectively.

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