



# OUTCOMES

48 stories of success

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# COMMUNICATIONS & MEDIA: EXECUTIVE FOREWORD



Communications Service Providers (CSP) are at a unique moment in history. These organizations have a once-in-a-management-lifetime opportunity to deliver a superior customer experience and create massive shareholder value. Customers want better self-service and streamlined live experiences across the physical and virtual worlds. Both initiatives promise significant cost savings and revenues.

We've seen this work before. Google and Amazon customers happily click on ads and buy suggested products because the offers and recommendations are relevant to the context of their current search or shopping journey. Uber delivers a superior customer experience by integrating the online and offline worlds, passing customer context from a mobile app to a live driver. The result for all of these companies? Lower costs, higher revenues, happier customers.

Clearly, it is not as simple for CSPs to revolutionize the customer experience as it is for Google, Amazon, and Uber. CSPs must contend with complex products and price plans supported by legacy IT, siloed channels, and highly variable human decisions made throughout the customer lifecycle. Some industry leaders, however, are succeeding with this endeavor. These winners are taking a business-backed and technology-enabled approach to turning information into personalized insight and action.

Pegasystems is partnering with leading CSPs to significantly improve the customer experience while driving superior revenue growth and cost savings. Typical results: 40% growth in net promoter score, 300% increase in sales conversion, 10% to 20% churn reduction, and 15% to 20% reduction in AHT.

I invite you to read about how Pega is partnering with world-class CSPs to seize this inflection point and revolutionize the customer experience. You can contact me at [steve.rudolph@pega.com](mailto:steve.rudolph@pega.com) with any questions.

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**Steve Rudolph**

Vice-President and Business Line Leader, Communications & Media, Pegasystems



# DRIVING INCREMENTAL REVENUE THROUGH 1:1 CUSTOMER ENGAGEMENT

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## Business Goals

- Increase conversion rates by better matching offers to customer needs
- Maximize revenue per sale by understanding customer behavior
- Improve customer experience by making meaningful offers
- Reduce operational costs by minimizing poor sales offers

## Results

- Tripled the number of offers presented
- Quadrupled the number of offers accepted
- 62% increase in revenue from cross-sell / upsell
- 5% increase in net promoter score
- New offers can be made available in two days instead of weeks

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31 million customers ▪ 11,000 agents, store employees, and customer care representatives

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“ We can make our analytics operational and actionable. We can bring them to life for the agent. We can overlay customer value and overlay our strategic priorities. We tripled our next best action presentations and quadrupled our successfully accepted offers. ”

**Suzanne Woolley**  
Head of Customer Base Management, EE



#### CHALLENGE AND VISION:

## Create Personalized Offers to Drive Profit

EE senior marketing leadership wanted to drive incremental profit from its existing customer base by improving cross-sell/upsell sales performance.

The communications service provider was operating in a saturated market with declining revenues, and traditional campaigns were unable to drive the sales required to counteract this trend.

The company had a tool to enable agents to sell additional products and services to its existing customer base, but the cross-sell/upsell recommendations were generic, conversion rates were low, and EE's agents had lost confidence in the recommendations. As a result, offers were targeted based on agent experience and knowledge, and while a few star agents were able to successfully sell, most were not.

EE aimed to dramatically increase its incremental cross-sell/upsell revenue by providing recommendations to its agents that were based on an understanding of the customer's behavior, the propensity of the customer to take offers, and the profitability of the offers. EE also wanted to align its chosen solution to its strategic and commercial priorities for the company.

#### HOW PEGA HELPED:

## Designed an Optimal Offer Strategy for Each Customer

The EE team chose Pega's Marketing and the Customer Decision Hub solution to easily determine the best offers for each customer in real-time and make them actionable for agents.

With the Pega tool, EE could use real-time customer context with big data and analytics to determine the optimal offer strategy for each customer. The cross-sell/upsell capability built into the standard conversations across agent-assisted channels "fed" agents the top three offers per customer. The accuracy of the recommendations ensured that all agents were set up to successfully sell without more training.

Pega's solution also had the agility to respond to the rapidly changing and competitive market. EE could now get new offers active in a couple of days rather than weeks. Pega also offered true omni-channel support, serving as a "Decision Hub" connecting multiple channels and providing real-time visibility recommendations regardless of channel or whether offers had been accepted by the customer.

#### OUTCOME:

## EE Quadrupled Successful Offers to Customers

Pega was first launched in the agent-assisted loyalty channels. Business benefits were rapidly confirmed, and it was soon rolled out across all agent-assisted channels. EE has quadrupled the number of successfully accepted offers, generating an extra £4 in value per cross-sell/upsell transaction. Of the offers sold, 90% are from the top three recommendations. Agents now feel empowered to sell the right offers and easily see the impact on the business KPIs.

Customers are also more satisfied. EE has seen net promoter score (NPS) increase by 5% for any customers receiving a next best action recommendation. Rather than feeling "sold" to, customers engage in a constructive conversation with agents.

Today EE is more responsive to market needs; for example, the business can introduce new offers and change strategies within two days based on customer needs. EE is now looking to apply decisions to additional customer service use cases, such as IVR interactions.



EE, part of BT Group, is the largest mobile communications company in the UK, delivering mobile and fixed communications services to consumers. EE serves more than 31 million customers and has more than 550 stores across the UK.



# REALIZING FAST ROI WITH AUTOMATION

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## Business Goals

- Reduce average handle time (AHT)
- Streamline critical CSR tasks
- Realize annual cost savings

## Results

- Minimized need for CSR re-training
  - Reduced average handle time by nine seconds per call
  - Created \$2 million in value
  - Avoided \$18 million in costs
- 

*“ With robotic automation, we realized significant annual savings, reduced average handle time, and minimized training requirements for our CSRs. ”*

Manager, Development and Information Technology, U.S. telecom provider





**CHALLENGE AND VISION:**

## Improve Service Efficiency with Automation

The telecom company's desktop environment was complex, consisting of both legacy desktop and server-side applications. The company needed to increase the efficiency of its customer service representatives (CSR) by merging the disparate areas of the customer care environment, which included a mix of Windows and Web applications, some hosted applications on users' desktops, and others streamed to desktops via Citrix. CSRs operated under time and task pressures, as they needed to toggle between multiple application screens to do their work, manually entering, copying, and pasting among numerous fields. There was no automation for compliance issues, such as mandated procedures or communication of regulatory information.

**HOW PEGA HELPED:**

## Quickly Boosted Process Speed with Little Re-Training

The telecom initially rolled out the system to 1,500 desktops, then expanded the implementation to 5,000 desktops and, ultimately, to 14,000. Pega Robotic Automation delivered numerous process efficiencies in a short time, which translated into faster call handling times and better compliance, with minimal

re-training needed. As is common in many enterprise environments, the company's desktop application portfolio included a number of legacy applications with no APIs. Using Pega Robotic Automation, the organization was able to integrate a wide range of disparate systems, including Windows, Web and PowerBuilder applications, without the need to access or modify the underlying applications.

**OUTCOME:**

## Realized Fast ROI, with Millions in Savings

With Pega Robotic Automation, average handle times decreased by nine seconds per call, which amounts to \$18 million per year. Implementation was completed in four months, and ROI was realized immediately. The aggregation of every second saved across agents - based on CSR salaries, benefits, and call center G&A costs- saved the company \$2 million annually. CSRs quickly understood how to use the tool bar, functions, and automations, with no new procedures, work-arounds, or disruptions required. Automatic check-box lists, copy-forward features, and other prompts ensured that CSRs receive relevant and timely information that customers may request or agents might need at the appropriate stage of the desired call flow.

## LARGE NATIONAL TELECOMMUNICATIONS PROVIDER

The telecom company is a national U.S. provider of wireless voice, messaging, and data services, with more than 30,000 employees.



# DRIVING INNOVATION AND AGILITY AT OBS

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## Business Goals

- Deliver tailored B2B solutions
- Easily adapt to complex customer projects
- Drive IT simplification and personalized relationships
- Improve visibility and control of fulfillment
- Reduce time to market for B2B services

## Results

- 30% improvement in delivery efficiency
- 50% reduction in stopped work
- 50% reduction in rework
- 10% improvement in time to market

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“ With [the Pega solution] we are proving we can go very fast -- too fast even for marketing. IT too fast for marketing? That's quite rare, but we're proud of that. ”

**Jean-Jacques Gaouyer**

Director of IT, Orange Business Services

**CHALLENGE AND VISION:**

## Personalize Interactions, Deliver Tailored B2B Solutions

The process of delivering enterprise services at OBS was inherently dynamic and complex, requiring many workgroups, partners, and skills. OBS wanted to streamline the order-to-implementation process, but it faced three business challenges: obsolete IT tools, poor business processes, and the inability to quickly adapt to change.

IT systems were unable to manage workloads or provide timely information, resulting in long delays in service and product delivery. If an engineer received a job the day before going on vacation, then the entire delivery was delayed for weeks without any visibility, reassignment, or escalation. The IT systems also could not easily adapt to changing business and customer demands. The result: unhappy customers and slow time to market.

OBS's vision was to digitally transform its operations, starting with order management and telecommunications service provisioning, to enable business agility and improve the customer experience for its largest clients.

Through the program, called SALTO, the company sought to offer tailored solutions to a wide range of customers, from small businesses, to multinational organizations.

**HOW PEGA HELPED:**

## Transformed Operations to Improve Business Agility

OBS chose Pega because of its ability to address complex ordering of tailored services in a large organization. The SALTO program was aimed at improving customer engagement by ensuring all work is intelligently balanced among workgroups, depending on availability and skillsets.

The program was also intended to ensure guided delivery processes and real-time information sharing among the delivery team. If errors occur, OBS wanted stakeholders to be alerted immediately to mitigate risks proactively.

Because unexpected changes are normal in B2B deliveries, SALTO was also designed to adapt to change. SALTO ensures the optimal process is followed for each customer situation through its use of modular, reusable "process blocks" that dynamically orchestrate the best provisioning process. This also reduces time to market for new services and moving into new markets.

**OUTCOME:**

## 30% Improvement in Delivery Times

With Pega's case management capability, OBS improved customer communication by 30%. With SALTO, there is now perfect clarity of notifications and requests for information, resulting in clear communications.

Working with Pega, OBS has improved order-to-activate times by 30%, and has reduced fallout tasks by 50%, using SALTO's absence management functionality. Leveraging Pega's intelligent routing and work automation, work is now routed to the most appropriate worker 100% of the time, and rework has dropped by half. Time to market for new services has improved by 10%.

With Pega, OBS has consolidated six systems to one, drastically reducing total cost of ownership.



Orange Business Services (OBS) is a service provider of communications products and services for multinational corporations. It offers products and services to global enterprises in cloud computing, unified communications, and collaboration. OBS operates in more than 220 countries and territories, and employs over 30,000 employees in 166 countries.



# ACHIEVING WORLD-CLASS RETENTION IN RECORD TIME

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## Business Goals

- Acquire and retain more customers
- Improve agent efficiency and effectiveness
- Create one-to-one personalized experiences for customers
- Radically transform the customer care experience

## Results

- 10% decrease in customer churn
- 40% increase in transactional net promoter score (NPS)
- 40% increase in customers adding a line
- 800% increase in customer upgrades

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7,500 agents ▪ Four call centers ▪ 5,000 retail stores (direct and indirect) ▪ Supporting regional marketing campaigns

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“ Pega has the brains to help deliver the right treatment to the right customer at the right time. That is very different from traditional telecommunications care. We’re seeing more than double the acceptance of retention offers. That is a big deal. ”

**Marcelo Claure**  
CEO, Sprint



#### CHALLENGE AND VISION:

## Radically Transform the Customer Care Experience

Sprint's new CEO, Marcelo Claure, was on a mission to radically transform Sprint and gain greater share in the U.S. wireless market. He saw attacking churn as the best opportunity to improve Sprint's position.

At the end of 2014, the company's churn rate was 2.3% - double that of its main competitors. In customer care - where most retention efforts occurred - agents used their own judgment and experience to pick the best approach. In practice, this meant the agent manually pored over 20+ offers, searching for the "right" one, while still talking on the phone. The retention results were poor, and the customer experience was inconsistent.

Sprint needed to overhaul its approach to customer care, moving away from an ineffective and manual "one size fits all" approach, to creating 1-to-1 personalized experiences for its customers.

#### HOW PEGA HELPED:

## Implemented a Retention Solution in 90 Days

The Sprint team deployed Pega's Marketing solution to 1,000 agents at four sites in the first 90 days, then rapidly expanded to all of its call center teams.

With Pega, Sprint was able to proactively identify post-paid customers at risk of churn and deliver relevant retention

recommendations using real-time contextual information. Pega's next best action analytics provided the care and retail agents with the three most suitable retention recommendations to offer to each customer, prioritized to maximize retention rate and profitability. Each time an agent interacted with a customer, adaptive learning enabled the system to become more intelligent based on whether the recommendations were successful.

Pega's Customer Decision Hub (CDH) powers the next best action recommendations, acting as a centralized "brain" that can drive real-time, contextual decisions across all channels.

Sprint has rolled out this technology to its outbound channels, customer care, and retail stores; it is in the process of expanding the capability to additional product lines.

#### OUTCOME:

## Achieved a 10% Decrease in Churn and 40% Increase in NPS

Sprint has achieved outstanding results using Pega's next best action recommendations. It has decreased churn by 10% and increased transactional NPS by 40%. The bottom-line impact is a 40% increase in customers adding a line, and an 800% increase in upgrades. In Sprint's July 2016 earnings call, the company reported its lowest postpaid phone churn in company history at 1.39%. Pega has

been an important contributor to this improvement.

Pega Marketing for Communications has been deployed to all of Sprint's call centers. More than 7,500 agents are using the tool, with close to 90% agent utilization.

Pega is also driving recommendations in Sprint retail stores. Regional outbound marketing campaigns will soon be deployed in numerous other channels (corporate marketing, digital, IVR) and prepaid product lines.

*“ The agents are more contextually aligned with what the customer is calling about - they're more informed and providing the right solution - so that the customer is having a better experience with us. ”*

**Jim Curran**

Vice-President of Marketing, Sprint



Sprint is a Tier 1 U.S. wireless carrier, generating \$35 billion in revenue per year. It supports close to 60 million customers overall, 30 million post-paid wireless subscribers, 35,000 call-center agents, and 5000 retail stores (direct and indirect).



# LEADING A CONSUMER REVOLUTION

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## Business Goals

- Improve the customer experience
- Reduce cost-to-serve by simplifying processes
- Maximize the usage of self-serve channels
- Simplify interactions along the entire customer lifecycle, and make them transparent and personalized

## Results

- Reduced early life complaints by 40%
- Reduced early life calls by 15%
- £21m in incremental savings from fewer complaints, shorter calls, lower churn

- 
- Solution used by over half of TalkTalk's 3,000 contact center agents
  - Next best action technology makes recommendations to all customers online
- 

“ We've seen a 40% reduction in [new customer] complaints and a 15% reduction in [new customer] calls. We just reported our lowest ever churn, which is a testament to how this is really starting to land and improve our customer experience. ”

**Alex Birtles**

Head of Customer Loyalty Strategy, TalkTalk

**CHALLENGE AND VISION:**

## Rapid Growth + Big Ambition = A Consumer Revolution

Since its 2006 launch, TalkTalk's mission was to be Britain's best-value-for-money provider. This ambition led to rapid growth through acquisition, which introduced legacy complexity and hampered innovations in customer service. With its inconsistent customer experience, the company gained a reputation for very poor customer service.

To improve customer engagement, TalkTalk had to reduce complexity and deliver consistent customer service across channels, while dramatically reducing costs.

The telco attempted to deploy another solution, but the system failed to address TalkTalk's complex processes. When customers experienced a service fault or a problem with a new order or upgrade, they were forced to make multiple calls. Further, the customer experience differed across channels; for instance, the "earliest available install dates" were different online vs. calling in.

TalkTalk's vision was to deploy one consistent, best practice-based process, across channels, especially self-service.

**HOW PEGA HELPED:**

## Rationalize Service Across Channels

TalkTalk recognized the shortcomings of its current customer service solution

and the system's inability to manage the complexity and sophistication of its online transformation strategy. The company turned to Pega because it particularly valued Pega's ability to create a best practice-based process that could be used consistently across all channels, including self-service, for a true omni-channel customer experience.

The company deployed Pega Customer Service for Communications, introducing case management, industry service cases and next best action for customer service.

To encourage customers to use self-service channels, TalkTalk needed to add visibility, personalization, and intelligence to its processes. Pega provides intelligence by replicating the decisions made by TalkTalk's best agents during customer interactions. The system adds visibility by extending the same customer service processes via digital into self-service channels.

**OUTCOME:**

## A New Agile Way of Working

With Pega, TalkTalk now provides a consistent customer experience across all channels. By deploying Pega case management, TalkTalk took ownership of fixing customer service faults and failed orders, tracking such issues to a fast and satisfactory resolution, and keeping customers informed each step of the way. By effectively tackling its biggest customer satisfaction pain points, TalkTalk has seen a 40% reduction in early life complaints and a 15% reduction in calls.

TalkTalk's Pega solution delivers strong case management capabilities to its agent desktops and omni-channel platforms, and Pega's decisioning capabilities help drive next best actions for customers. The next phase is to extend Pega to the remainder of TalkTalk's customer-facing processes and agents.

"We're using Pega not because it's a new shiny thing that technology people like," says Andrew Storer, system architect at TalkTalk. "We're using it because it's the right thing for our customers."

## TalkTalk

TalkTalk is a quad-play provider and the fourth largest operator in the UK. The company aims to be the best value-for-money provider, by being highly disruptive, quick to market, and often cheaper than the competition. TalkTalk has close to four million customers, across the consumer and business-to-business markets.



# UNIFYING THE B2B CUSTOMER EXPERIENCE

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## Business Goals

- Improve the customer experience for its largest customers
- Provide convergent information and communication technology services (mobile, fixed, cloud, digital life)
- Gain better visibility and control of the end-to-end sales process
- Reduce time to market for new B2B services

## Results

- Decreased time to market from one year to one month
- Enabled bundling of enterprise products across “siloed” CRM stacks
- Improved customer experience of converged solutions
- Enabled a unified view of the customer

- 
- Serves 20,000 enterprises
  - Supports 1,200 system users
  - Handles 440,000 contracts annually
- 

“ We had systems based on silos dedicated to services, not to customers. With Pega, we are able to reduce contract lifecycle and build a dynamic platform that adapts to the changes of the customer. ”

**Goffredo Sdrubolini**

Head of Customer Care, Telecom Italia



#### CHALLENGE AND VISION:

## Provide a Differentiated B2B Customer Experience

Telecom Italia wanted to provide a seamless digital customer experience for its sales, configuration, quoting, and ordering processes across multiple lines of business. It wanted to give sales agents full visibility into leads, contracts, and service requests.

These goals were hampered by a complex IT environment, with siloed legacy systems supporting the enterprise business and customer base. With neither a unified view of customer information nor end-to-end visibility, the sales and contracting process was manual and error-prone, resulting in lost sales opportunities, slow response times for custom requests, and unhappy customers.

Telecom Italia's vision was to provide a differentiated B2B customer experience by responding to custom requests quickly and fulfilling orders accurately and on-time. To do this, the company needed to unify sales, contracting, fulfillment, and billing processes by integrating systems and providing a seamless customer experience.

#### HOW PEGA HELPED:

## Built a Modern Implementation On A Legacy Infrastructure

Telecom Italia chose Pega because it could manage complexity and work with its existing IT ecosystem. The company had already tried to consolidate two existing CRM software implementations but failed.

Unlike most companies that want to replace legacy systems, Telecom Italia needed to leverage the existing servicing, ordering, and product catalogs due to risk and the replacement costs for integrating with back-office systems.

Telecom Italia's initial focus was on streamlining the contracting and ordering process. The Pega solution wrapped around its legacy environments, integrating product and customer data from three CRM systems to support complex enterprise solutions. Pega's solution includes a unified product catalog that enables sales teams to bundle products and services from legacy CRM systems, as well as new service-based products.

The solution also uses case management to enable orchestration, ensuring seamless handoffs, follow-through, and end-to-end visibility.

#### OUTCOME:

## Improved Customer Experience, Responsiveness

With the Pega solution, Telecom Italia can now go to market more aggressively with dozens of new integrated offers. Because the business, rather than IT, can now make changes itself, offers can be launched in weeks rather than months. New indirect sales channels enable sales to reach new customers, and a new program was initiated to drive customer loyalty. This has resulted in increased revenue, expanded market share, and brand loyalty.

Telecom Italia operationalized the solution by scaling it to its top 30,000 enterprise clients, and plans to incrementally scale to another 200,000. This phased rollout reduced risk and allowed the solution and processes to be refined iteratively.

The company was able to take advantage of Pega's "Build for Change" technology, which allows the business to make changes to products, business rules, and processes without the help of IT, improving time to market, reducing errors, and accelerating sales-cycle times.



Telecom Italia operates a mobile, data, and voice network in Italy. Together with its subsidiaries, it focuses on various areas of digital services, including enriched communication, trusted digital life, business life, and digital entertainment. Telecom Italia's segments include consumer, business, and national wholesale.





# STREAMLINING SERVICE RELOCATIONS AT TELSTRA

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## Business Goals

- Improve customer satisfaction as measured by customer advocacy
- Increase operational efficiency in managing customer moves
- Gain real-time visibility into service relocation pipeline

## Results

- Implementation completed in 90 days
  - 38% reduction in courtesy credits
  - 30% reduction in customer complaints
  - 180% improvement in customer advocacy
- 

“ Previously, the complexity of processes involved in customer moves required a lot of manual work to coordinate all the elements. This impacted our customer advocacy ratings. Now, we can see everything in real-time, and customer advocacy has improved by 180%. ”

**Frank Ferguson**

Senior Business Analyst, Telstra



**CHALLENGE AND VISION:**

## Increase Efficiency and Transparency of Customer Moves

Each year, close to 300,000 residential customers request to have their fixed-line services moved from one address to another on a specific date. For Telstra, this was proving to be difficult.

Telstra had legacy systems that manage, on average, four orders per move. The complexity of the processes and systems was impeding its ability to see the full customer episode from end-to-end without substantial manual work. Most move requests involved multiple internal orders, resulting in error conditions and delaying the move.

What's worse, Telstra agents wouldn't even know about the issue – from their perspective the job was done. Although Telstra's systems reported that orders were completed successfully 97% of the time, its customers were telling the company differently through poor customer advocacy. The manual work, multiple orders, and sometimes unnecessary truck rolls were negatively impacting costs and profitability.

Telstra's vision was to take control of the end-to-end move journey and drive significant improvement in customer advocacy.

**HOW PEGA HELPED:**

## Enabled Telstra to Track the Journey, Not the Data

Telstra chose Pega's Customer Service solution for its ability to provide a view of each move episode from start to finish. With Pega's case management capability, Telstra could track each episode and automate multiple steps that previously required a manual handoff between people and departments. If a problem with the move occurred at any point in the process, any agent would have visibility into the issue in real-time and could proactively take action. With Pega, Telstra now had real-time reporting that would allow them to optimize inefficient processes.

Additionally, Pega's initial solution was up and running in just 90 days because Pega's case management capability "wrapped" the existing order management and service automation systems, without the need for a costly IT replacement exercise.

**OUTCOME:**

## Improved Customer Experience, Responsiveness, and Efficiency

Telstra initially launched Pega customer service with case management in 90 days, with a follow-on phase 90 days later that incorporated deeper integration with legacy systems and greater automation that freed up case managers to work on issues rather than every case.

Today close to 90% of customer moves go through this solution, allowing the company to increase the number of moves per year. Telstra's customer service advocacy has improved by 180%; issues are identified and managed before they affect the customer. Courtesy credits have been reduced by 38% because move orders are processed with fewer errors, and agents can provide customers with superior visibility into the move process at any point in time.

Furthermore, Telstra has increased operational efficiency significantly, because manual intervention only happens when exception issues occur. This enables Telstra to drive operational process optimization based on real-time visibility of performance issues and the pipeline of move cases to be completed.



Telstra Corporation Limited is Australia's largest telecommunications and media company. The company has 16 million mobile customers, 7.5 million fixed voice customers and three million fixed broadband consumer customers.

The company employs nearly 32,000 people, and its services are offered through 362 branded retail stores, 90 business centers, 127 business and enterprise partners, and are distributed by more than 15,000 retail points of presence.



# EXCELLING IN ORDER MANAGEMENT

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## Business Goals

- Address complexity and reduce cost of B2B order capture and fulfillment
- Increase order quality and customer satisfaction
- Achieve faster time to market to respond to market needs
- Improve resource planning

## Results

- Reduced order fulfillment effort 51%
- Improved time to market 40%-70%
- Reduced costs 30% in third-party orders
- 2014 Gartner BPM Excellence Award Winner

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Four different solutions based on Pega technology and applications    ▪    3,500 employees using Pega

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“ *The transformation [was] an end-to-end overlay for the enterprise customer business ... that gave us the benefit to act on urgent [customer] needs.* ”

**Jens Fudickar**

Head of Enterprise BPM Competence, Vodafone Germany

#### CHALLENGE AND VISION:

## Streamline the B2B Order Process to Meet Customer Expectations

With its rapidly growing enterprise business – and fragmented IT systems – Vodafone Germany was finding it increasingly complex to meet customer needs.

The company captured customer orders in a variety of formats, including spreadsheets, email, and customer portals. The process was error-prone, as orders differed in consistency and completeness, and were manually entered into multiple order management systems. Thousands of customized sub-orders had to be processed in eight different departments and locations. Additionally, some orders were outsourced, increasing the risk for fulfillment errors. Because project managers could not properly track them, orders were often lost and not redelivered until the customer complained.

Vodafone Germany wanted to transform the customer experience by delivering on initial sales promises. The company aimed to create a digital order capture process for every sales channel that would contribute to a streamlined and automated order fulfillment process.

#### HOW PEGA HELPED:

## Enabled Digital Order Management, Using an Agile Approach

Vodafone Germany chose Pega because of its phased approach to transformation and use of Agile methodologies. The business and IT functions collaborated on building the solution, which sped time to market.

With Pega, Vodafone now enables digital order capture, technical order fulfillment, and business process automation. The system supports a multichannel, guided process to creating clean orders, and the order fulfillment process ensures work is assigned to the right resource, with all the information needed to fulfill the task.

Rather than replacing its legacy systems, Vodafone wrapped its legacy IT assets with the Pega solution, renewing functionality by incorporating the assets into new business processes. Pega enabled an end-to-end overlay and orchestration to navigate among different legacy systems and allowed incremental deliveries in three- to six-month phases.

Vodafone can now proactively respond to business disruptions based on end-to-end process management and status views.

#### OUTCOME:

## Achieved B2B Operational Excellence

Using Pega, Vodafone has reduced its order fulfillment effort by 51%, and sped time to market for process improvements by more than 40% to 70% through Agile methodologies. The company also achieved a 30% cost reduction in order processing through optimized interactions with third-party providers. Customer satisfaction has also improved because of better visibility into the end-to-end ordering processes.

Vodafone's sales team and its clients now have more confidence, control, and visibility into the delivery of their services, leading to a superior customer experience. Vodafone is planning to expand the Pega solution by adding more selling channels using the system's digital order capture capabilities and improved process automation.

Additionally, the company is looking to improve customer service by providing more visibility into order status during the sell, build, and run processes.



Vodafone Germany, a subsidiary of Vodafone Group, is one of the world's largest communications companies. It has more than 400 million customers and 90,000 employees in more than 30 countries.





## ENERGY & UTILITIES:

# EXECUTIVE FOREWORD



The global demands for water and energy are increasing as the world's population continues its migration to an increasingly urban and developed environment. Amid fluctuating energy prices, changing regulations, geopolitical upheaval, and new forms of energy production and delivery, the energy industry is dedicated to optimizing its performance.

But while energy providers have always been committed to fine-tuning their energy management and production processes, the old approaches aren't enough. With turbulent markets, more demanding customers, regulatory pressures, and increasingly urgent environmental considerations, the energy industry is in the midst of an end-to-end process overhaul.

The technologies are here to make this possible, including automated and intelligent workflows, predictive analytics, and connected devices that extend visibility all the way out to the most remote energy-producing asset. The biggest challenge the energy industry is facing is to overcome its existing culture and resistance to new approaches, processes, and workstyles that could help it capture the full value from these digital technology investments.

Pega is working with the world's energy providers to prepare for the new era of energy. From new approaches to customer engagement, to enterprise asset management, and predictive maintenance, we are helping energy giants gain better visibility into their production, distribution, sales, and customer service functions, and achieve end-to-end digitization of their value streams. By doing so, these energy leaders are well on their way to gathering the real-time knowledge and insights they need to capture strategic opportunities and maximize efficiencies, from run-the-business applications and logistics, to field equipment and customer support. The following case studies offer more insights into how Pega can help businesses like yours discover cost-efficient ways to refresh and become a more digital business. Please contact me with any questions at [bruce.williams@pega.com](mailto:bruce.williams@pega.com).

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**Steve Rudolph**

Vice-President and Business Line Leader, Communications & Media, Pegasystems



# UNIFIED MARKETING UNLOCKS VALUE

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## Business Goals

- Create a single platform for cross-channel customer engagement
- Process high volume of billing name acquisitions in three hours
- Provide sophisticated, large-scale simulation capabilities

## Results

- Reduced data lag time 85%
- Enabled 20% more customer conversions in first three months
- Multimillion-pound savings from new technology

- 
- 20 million billing name acquisitions in three hours
  - 20 million SLA simulations in three hours
  - One billion simulated offers in three hours
- 

“ We are looking at a multi-million-pound saving with this move to Pega. Bonus: We have seen an uplift of 20% in conversion rate, just in Phase 1. ”

Business Lead, Next-Generation Decisioning, British Utility



**CHALLENGE AND VISION:**

## Move from Push Marketing to Customer Conversations

This utility giant had historically used a product ladder marketing strategy, executed through push communications. While channels and technologies operated in silos, the utility envisioned engaging customers in relevant, timely conversations and building lasting relationships.

The utility realized that reengineering its customer decisioning platform would unlock key improvements for customers and create more value from the company's significant data assets.

The envisioned real-time customer decision environment would host inbound and outbound channels on a single platform. "Product push" would be replaced by customer conversations, supporting customer experience, levels of recognition, and personalization. With daily data updates, the company believed, latency for outbound campaigns would be reduced by 95%.

**HOW PEGA HELPED:**

## Built a Unified Platform for Omni-Channel Messaging

Using Pega Marketing, the utility mapped out the following phased approach to transform its siloed customer decisioning

environment to a unified platform for contextual, multi-channel messaging:

- Phase 1: Re-platform inbound channels.
- Phase 2: Integrate inbound and outbound channels.
- Phase 3: Migrate digital channels to real-time.
- Phase 4: Migrate remaining channels to real-time.

Within five months of initiating the project, the company had deployed the cloud-based messaging solution and the cloud infrastructure for Phases 2 and 3. It used Pega's Visual Business Director to create a customized training module capable of multiple simulations of its 10 million customers. Phase 1 reporting features now provide data on the outcomes of all sell, cross-sell, and upsell communications.

Phases 2 through 4 will introduce contextual digital messaging across key channels, providing 12,000 field engineers with real-time access to all that data.

**OUTCOME:**

## Robust Cross-Channel Communications for 20 Million Gas Customers

Taking a business-driven approach enabled the utility to initiate and scale up Phase 1 of the system quickly, with minimal IT involvement. This generated

significant cost savings, enabled business self-sufficiency, and reduced data latency 85%, from four days to one. Overall, the increasingly unified business processes, technology, and customer experience has created a powerful competitive tool.

The Phase 1 solution can generate up to 10 million billing names and service addresses (BNA) within a three-hour window. It delivers similar volume and throughput on service level agreements (SLA) in simulations.

In the Phase 1 outreach, approximately 20 million combined current and prospective customers received personalized contact. One unanticipated (but welcome) bonus: The company saw a 20% increase in its offer conversion rate.

The reengineered platform will offer the utility a strategic, two-way channel for intelligent customer conversations and engagement.

**BRITISH UTILITY**

This large utility provider in the UK market has over 10 million current residential customers and eight million prospective customers for its gas, electricity, and home services. One of Britain's "Big Six" energy firms, the company generates \$18.9 billion (£14.3 billion) in annual revenue and employs a workforce of almost 30,000.

A large offshore oil rig is shown in the background, featuring a tall derrick, various pipes, and yellow storage tanks. The rig is situated on a blue sea under a clear sky.

# REDUCING CONTRACT CYCLE TIME WHILE IMPROVING PRODUCTIVITY AND REDUCING COSTS

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## Business Goals

- Reduce reliance on manual updates to address changes required by policy changes
- Reduce contract cycle time
- Increase user productivity, refocusing on high value, revenue-producing activities
- Cost reduction and cost avoidance

## Results

- Initial solution delivered in 14 weeks
  - Automated process expected to save 12,000 hours annually
  - \$2 million value creation
  - \$750,000 cost reduction
  - \$500,000 cost avoidance
- 

“Reduction of manual processes and duplicate entry has allowed procurement resources to redirect their time to higher value activities.”

Chief Procurement Officer, Oil & Gas Supermajor



## **CHALLENGE AND VISION:** Reduce Contract Cycle Time

This oil & gas supermajor was committed to reducing contract cycle time, which is a measurement of the time required to establish or change a contract. To reduce contract cycle time, the company needed full visibility into contracting processes and cycle time components. However, that wasn't possible with its poorly integrated point solution ERPs, contract content systems, and homegrown systems.

Additionally, to comply with continuously shifting global and local policies, the procurement organization was forced to manually update already complex business processes, which created new systems in the process. These repeated inefficiencies took a toll on productivity, increased costs, and had a negative effect on contract cycle time.

## **HOW PEGA HELPED:** Delivered Contract Cycle Management in 14 Weeks

Pega provided a Contract Lifecycle Management Solution to orchestrate the process of creating, reviewing, approving, and processing contract requests. Dashboards were configured to give users a high-level view of their organization's workload, pending deadlines, and user productivity. Within the company, IT created standard reports for the various roles in the organization. Users were given the ability to create their own reports on the fly.

The initial solution was delivered in 14 weeks. Pega's user interface capabilities delivered a consistent, intuitive look and feel, ensuring successful adoption of the solution. Approximately 3,500 procurement professionals globally now use the Pega platform to manage the contract lifecycle. Pega's business process management and case management capabilities allowed the procurement organization to easily define, configure, and maintain complex business processes and rules, which supports full compliance with both global and local policies.

Pega's reporting capabilities provided the procurement organization with a vital view into its own processes. Service level agreements were established, reported, and improved as a result of timely and reliable data reporting.

## **OUTCOME:** Time Savings of 12,000 Hours Annually

The leading oil & gas company now has full visibility into procurement processes and has begun identifying additional process improvements to reduce contract cycle times. Eliminating manual processes is expected to save 12,000 hours annually, time which can be redirected to higher value activities such as contract negotiations (potentially adding up to \$2 million annually). In addition, two major homegrown systems will be decommissioned and additional homegrown systems will be avoided, resulting in an additional annual savings of approximately \$1.25 million.

Future changes to processes and business rules can be made directly by the procurement organization, ensuring full compliance with global and local policies. The system leverages business process flows and rules to automate the programming, so many changes are now made rapidly and directly by procurement professionals, reducing the need for IT involvement.

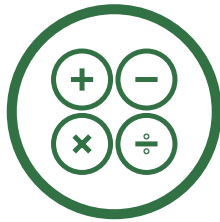
## **OIL & GAS SUPERMAJOR**

One of the world's largest integrated oil companies, this oil & gas supermajor is engaged in every aspect of the oil, natural gas, and geothermal energy industries. The company's expertise includes hydrocarbon exploration and production, refining, marketing and transport, chemicals manufacturing and sales, and power generation.



## FINANCIAL SERVICES:

# EXECUTIVE FOREWORD



From retail banks to large investment firms, every financial institution is struggling to simplify processes and become more innovative in order to forge lasting customer relationships. Many of these institutions are turning to digital transformation to tackle these daunting challenges.

But while digital transformation is at the top of banks' strategic agenda, two other mandates vie for attention: relentless cost-cutting in the face of economic uncertainty, and keeping pace with regulatory change. At the same time, there is immense pressure on banks to deliver a seamless customer experience across various channels, especially in an "always-on" world.

Banking leaders realize they cannot go it alone when it comes to digital transformation. The only way to meet all these initiatives is to find a partner that can help you digitally transform your business and revolutionize how you interact with and serve your customers.

Pega is helping the biggest names in banking meet today's needs for efficiency, agility, and innovation. Using Pega's deep industry expertise, as well as the latest in intelligent automation, forward-thinkers are achieving new levels of efficiency to restore or maintain profitability and compliance.

Crucially, these banks are leveraging Pega's strategic applications and cutting-edge capabilities to bring their customer data together and provide proactive, personalized advice, enabling customers to make sound financial decisions. By doing the same, financial services organizations can deliver a digital experience that will secure their place with customers — ensuring not just the relationship but also their own relevance and profitability far into the digital future.

Please take a moment to read how Pega has helped businesses like yours embrace the challenges and opportunities of digital. If you have any questions, please don't hesitate to contact me at [michael.haney@pega.com](mailto:michael.haney@pega.com).

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**Michael Haney**

Vice-President, Business Line Leader, Financial Services, Pegasystems



# CORPORATE CLIENT SERVICING: 4X REDUCTION IN SERVICING TIME

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## Business Goals

- Provide a unified desktop view of client holdings to best guide phone-based servicing agents
- Improve response time for client inquiries on account and transaction data
- Capture client setup requests for mobile banking and SMS alerting
- Capture additional product and service interest

## Results

- 4X reduction in servicing time for key inquiry types
- 1,500+ users across all segments
- 20% reuse of Pega components companywide

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“ *This project is a really good example of implementing quickly with Pega. By leveraging the out-of-the-box Avaya connection and Pega application for client service, we rapidly deployed and were able to reduce service times by 4x. ”*

**Martin Pilecky**

CIO, Alfa-Bank JSC, Pegaworld 2015

**CHALLENGE AND VISION:**

## Transform IT Across Business Lines

The Alfa-Bank vision was to unify similar business processes across different business lines. At the same time, it was looking to increase transparency of business processes to control current status of work, current assigned work, and work SLAs. Additionally, the bank wanted to speed development and reduce costs by reusing similar pieces of business processes. Alfa-Bank also aimed to decrease the collaboration gap between business and IT in business application development while increasing the quality of business processes; improving the client experience with decreased SLAs; and reducing misplaced documents and requests.

**HOW PEGA HELPED:**

## Reduced Time-to-Market with Renewed Infrastructure

Alfa-Bank built several applications using Pega 6 and Pega 7, including the Pega Client Service Application for corporate customers. These applications are for front-office (sales automation) and back-office operations spanning several segments such as retail, SMB, and corporate. During these initiatives, Pega was successfully able to wrap and renew existing infrastructure by integrating with different types of systems of record (Core Banking System, SAP HR). By using Pega's Direct Capture of

Objectives (DCO) tool and use of a more Agile methodology to take advantage of the ability to rapidly deploy new functionality, the bank was able to significantly increase speed to market.

**OUTCOME:**

## Improved Service Levels and Increased Loyalty

In addition to a 400% decrease in servicing time for key corporate call center processes, reduced inquiry errors, and improved client experience, the bank experienced other significant outcomes. Since Pega's architecture encourages the sharing of enterprise integrations and process functionality, the bank was able to achieve a 20% re-use of components (technical and business); create several applications without "paper" requirement documents; unify more than 100 sub-processes in regional offices; and certify more than 100 IT specialists with an internal Pega training program.



Alfa-Bank has more than 200 branches in Russia and the Commonwealth of Independent States (CIS). It also has subsidiaries in Kazakhstan, the Netherlands, and the U.S. The bank's CIS branch network offers a full range of commercial and investment banking services to corporate and retail clients.



# PROVIDING SUPERIOR GLOBAL SERVICE

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## Business Goals

- Be the world's most respected service brand
- Provide seamless service across all delivery channels
- Create a single global servicing portal
- Improve business agility
- Deepen customer relationships and increase engagement at every interaction

## Results

- 68 servicing sites in 12 countries using 6 languages
- 12,000 customer care professionals
- Over 200 million interactions annually
- New deployment costs reduced by 75%

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“ We're now launched in 12 markets, 12 countries across the globe, and servicing in six languages. We're dealing with more than 200 million interactions every year and still growing. ”

**Stuart Green**

Vice-President, Global Servicing Capabilities, American Express



**CHALLENGE AND VISION:**

## Delivering an Unsurpassed Customer Experience Within Margin

With 50 servicing sites around the globe, American Express is committed to being the world's most respected service brand. That means consistently exceeding customer expectations, even in an "always available world" with fast changing demands and constantly evolving delivery channels.

But as service channels became more complex, the company's operations came under pressure. The challenge: Consolidate 22 U.S. and international service organizations into a single, worldwide service organization; and deliver disparate systems across multiple countries and lines of business to the customer. Keeping the ecosystem running, updated, and interconnected was anything but cost efficient.

The company realized it needed to standardize business processes and create a single customer care portal for all relationship care professionals at every location. That meant a state-of-the-art user experience on a technology platform that provided 99.99% availability, with robust recovery and class-leading response times.

**HOW PEGA HELPED:**

## Produced Customer Service Value from Day One and Beyond

Amex designed and optimized the future state experiences for both customers and employees in collaboration with solution users. The company even brought its Customer Care Professionals (CCP) into the development and design teams.

Amex set up an enterprise center of expertise (COE), in which applications are developed and delivered for multiple lines of business, using Pega technology to deliver common components that can be reused across the enterprise. This means governance, collaboration, and re-usability across the enterprise.

*“When the corporate client line of business came to us and said we need to build the portal for corporate line of business, they were able to reuse 70% of what we had already built on the original portal architecture.”*

**Ileana Figueroa**  
Vice-President, Global Servicing Network Technology, American Express

Amex, in its journey, adopted a highly engaged development model that used an Agile scrum methodology combined with user led collaboration and open governance.

**OUTCOME:**

## Delivering Efficiency as the World's Best Service Brand

The Pega based platform has been launched in 12 countries and six languages, including Japanese and German. More than 200 million interactions are handled in the new application through 180 processes, which is roughly 90% of the work handled by the CCPs.

Furthermore, by incorporating the actual users into the development and design teams, Amex realized that it was not producing an MVP – a minimal viable product – but a minimal lovable product.

In addition to remaining a top pick by JD Edwards for Credit Card Customer Satisfaction, Amex has seen improvements in customer spend, average handling time, customer attrition, expense margins, and customer satisfaction. New areas have re-used 70% of previously developed foundations, which has led to new deployment costs being reduced by 75%.



The American Express Company, also known as Amex, is best known for its credit card, charge card, and traveler's cheque businesses. Amex cards account for approximately 24% of the total dollar volume of U.S. credit-card transactions. Founded in 1850, Amex is ranked as #88 on the Fortune 500. In 2015, Amex had total assets of \$161 billion, billed business of \$1 trillion, and annual revenues of \$32.8 billion.



# EMPOWERING BUSINESSES WITH STANDARDIZED GLOBAL SERVICE

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## Business Goals

- Improve service quality and consistency for corporate clients
- Provide detailed account and transaction data globally
- Standardize while accounting for local and regional requirements
- Empower service representatives in local offices

## Results

- Cut basic service inquiries from 24 hours to two hours
  - Lowered costs and risks with greater regional and global compliance
  - Enabled a global, multiproduct, cross-channel view of each client
  - Used automated workflows to increase back-office efficiency
- 

“ We set out to provide customers with consistent best-in-class customer service, and I believe the Pegasystems' solution has helped to secure our position as the premier customer service organization. ”

Transaction Services Unit Executive, Global Corporate Bank



**CHALLENGE AND VISION:**

## Transform Service Delivery Around the World

This global corporate bank sought to provide its largest clients with consistent service, as well as detailed account and transaction data across multiple continents and time zones. To achieve this goal, the bank's transaction services unit wanted to integrate multiple service and support systems into automated, standardized tools and processes for managing 750 million transactions annually. Serving approximately 65,000 clients in more than 100 countries across six continents, the transaction services unit accommodates 2,200 business applications and empowers regions to modify tools and functionality to fulfill local, regional, and national requirements needed for corporate service.

**HOW PEGA HELPED:**

## Delivered a Strategic Global Service Platform

The bank leveraged Pega's unique ability to define common, reusable processes combined with dynamic rules to accommodate local regulations, products, channels, and standards. A unified, single-screen interface powered by Pega provides a complete, real-time view of each client, including transaction and account data, reporting/account rollup, and customer scorecards. With

insights and guidance from Pega, the bank's service representatives can provide consistent service globally while accounting for specialized requirements. The customer scorecards provide a valuable snapshot into key account metrics, while simultaneously enabling the transaction services unit to demonstrate its ability to deliver against key service metrics.

The bank also took advantage of Pega's ability to quickly integrate with existing tools to capitalize on its existing infrastructure and avoid service interruption.

The transaction services unit developed a phased, two-year roadmap, which ensured seamless service delivery and business continuity, minimized customization, streamlined processes, and simplified systems. The Pega solution is now used by the bank's 3,500 service representatives around the world.

**OUTCOME:**

## Higher Quality Service in One-Tenth the Time

Standardizing data into a consistent front-end has freed up local service representatives from needing to contact service centers in other regions to assist in resolving client inquiries. Resolution time has dropped from 24 to two hours for some basic service inquiries. In addition, workflow automation has cut the amount of work required for basic transactions, improving back-office efficiency and allowing service staff to spend more time delivering strategic consultative services to clients.

The Pega solution has also provided clients with self-service. Because more customer inquiries are now managed quickly and effectively via self-service, service representatives are able to focus on more complex inquiries. With client self-service, the bank has increased the volume of transactions processed and overall productivity, which has reduced capital costs and operational risk.

### GLOBAL CORPORATE BANK

Serving the needs of treasurers, CFOs, asset managers, and financial managers who represent 95% of the Fortune 500, this well-known global bank with several trillion dollars in assets under custody and trust offers integrated cash management, fund, securities, and trade services to multinational corporations, financial institutions, and public-sector entities.



# DIGITAL TRANSFORMATION AT İŞBANK

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## Business Goals

- Reduce complexity
- Standardize architecture
- Establish a robust and sustainable framework for processes
- Change the culture to do things faster, easier, and simpler

## Results

- Increased process efficiency 30% to 80% for over 500 processes
- Increased development productivity by 60%
- Consolidated over 40 legacy systems

- 
- Daily unique users: 15,000
  - Peak concurrent sessions: 5,000
  - Peak daily case instances: 80,000
  - 13 million to 14 million cases year
  - Over 30 projects
- 

“ To be a digital bank, it is not enough to digitalize the interaction points with your customers. It is also important to digitalize all your processes. ”

**Hakan Aran**  
CIO, İşbank



### CHALLENGE AND VISION:

## Appeal to Younger Customers through Digital Banking

About 17% of Turkey's population is between the ages of 15 and 24 – which represents over 13.5 million potential banking customers who are technologically savvy and digitally empowered.

As the oldest bank in the country, İşbank realized that in order to meet the demands of this young and growing population, it needed to embark on a digital transformation journey. First, however, it would need to undergo an operational transformation to gain efficiencies and rid itself of its manual, paper-based processes.

The goals of İşbank's initiative, called Opera, included the following:

- **Simplicity:** Add 500 new processes, increase efficiency by 30%, and simplify its technology platform.
- **Standardization:** Create a standard approach to case management, reporting, and COE.
- **Sustainability:** Develop a robust architecture based on digital and Agile methodologies.

### HOW PEGA HELPED:

## Provided Platform for Program of Transformation

İşbank realized its existing platforms were insufficient for meeting its goals of remaining competitive and addressing customer needs. After rigorous vendor evaluation, the bank chose Pega's Case Management solution because, "We liked the vision and the power that the tool gives you, in terms of applying your vision to real life," says Ali Yalçın, unit manager, business process management and digital banking channels development at İşbank.

İşbank was able to quickly shorten its delivery times, implement a unified environment, consolidate and sunset legacy systems, roll out new applications to the branches and operation centers, implement over 30 projects, and embrace its digital transformation journey.

### OUTCOME:

## Digital Capabilities Lead to Millions in Savings

İşbank focused on changing its operational foundation in order to achieve its digital transformation vision. Its collaboration with Pega on its Opera initiative delivered simplicity, standardization, and sustainability to over 500 processes, and paved the way for İşbank to become the digital bank of Turkey.

With efficiencies ranging from 30% to 80% for most processes, and the retirement of 40 legacy systems, the bank is looking at total savings of \$50 million to \$60 million.



Founded in 1924, Türkiye İş Bankası, or simply İşbank, is Turkey's largest bank and one of the world's top financial institutions. It has a branch network of 1,354 domestic and 55 foreign branches, and serves more than 14 million customers. Its 2015 gross profit totaled USD\$6.8 billion in Tier I capital, as defined by Basel's Bank for International Settlements.



# PEGA HELPS BANK HIT KEY METRICS

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## Business Goals

- Reduce average handle time
- Increase sales opportunities
- Reduce error rates
- Reduce training time for agents
- Increase ease of use for agent applications

## Results

- Cut average handle time 66% for payment process
- Increased upsell and cross-sell
- Improved agent compliance
- Reduced agent training time and churn

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*“ We’re creating an environment where we know our customers individually, and with Pega Robotic Automation, we reduced average handle time and minimized training time while at the same time increasing sales opportunities and improving compliance for our CSRs. ”*

Vice-President, Operations Manager and Management Services, Large U.S. Retail Bank



**CHALLENGE AND VISION:**

## Accelerate Service and Increase Agent Sales

This large U.S. retail bank needed to improve customer service and the sales returns of its sales and service center agents. The organization uses a mix of legacy systems, including Siebel CRM, Visual Basic, and both mainframe and browser-based applications. The use of these disparate applications resulted in a complex environment, in which agents regularly needed to switch back and forth among application screens, impacting their performance in several key areas. The bank envisioned creating greater efficiencies, simpler compliance processes, and faster training. It wanted agents to more quickly reach basic proficiency levels and advance more quickly to “experienced” status so they could begin creating more sales opportunities in a shorter timeframe.

**HOW PEGA HELPED:**

## Enabled Immediate ROI Upon Implementation

After implementing Pega Robotic Desktop Automation in just 90 days, the bank realized immediate ROI. With the Agile methodology approach, bank analysts can now react to performance feedback and deploy solution improvements to every desktop in record time. The organization was able to integrate several disparate legacy applications without changing any of the underlying applications, including

a Windows-based and a VB legacy CRM system; emulators running multiple 3270 mainframe sessions and applications; and several browser-based Web applications. Composite interfaces were built by merging commonly accessed fields and controls, which unified views of customer information and enabled immediate workflow improvements. The bank was able to automate repetitive tasks, including customer verification, payment transfers, lien releases and mortgage discharge, address and phone number changes, and data transfers to outbound sales.

**OUTCOME:**

## Desktop Solutions Drive Agent Productivity

The bank significantly reduced average handle times for several key processes. In one payment process, 22 steps were automated, cutting average handle time 66%, from 360 seconds to 120. Decreased handle times have directly impacted employee engagement and has increased upsell and cross-sell success. With reduced application distractions, agents can provide better service with increased accuracy. Automatic copy capabilities between forms has significantly reduced data errors, and agent compliance has also improved with new user prompts, forms, and automated workflow steps that consistently reinforce proper procedures and correct task completion. Center managers can log individual users’ desktop metrics to analyze processes and refine workflows.

Agent training time has also decreased, with agents now considered tenured or experienced in much less time than the prior 60 days required.

### LARGE U.S. RETAIL BANK

One of the largest banks in the U.S., this organization has assets of about \$100 billion, and provides investment management, retail and commercial banking, consumer finance, and investment banking products and services around the world.



# TRANSFORMING ONBOARDING, COMPLIANCE

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## Business Goals

- Improve the internal and external client experience
- Reduce cost of service per client and compliance
- Move to end-to-end client lifecycle management
- Increase operational efficiency with a global transformation approach

## Results

- Reduced cost of service per client and compliance
- Increased transparency and customer centricity
- Solution live in nine countries with 200+ users

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“ Pega helps provide an organizational and working structure into a formerly manual-based practice, helping us get proper structure. ”

Executive Sponsor, Large Universal Bank





**CHALLENGE AND VISION:**

## Transform Client Onboarding and Customer Service

Internal customers at this Universal Bank were increasingly expressing concern about the global cost of existing platforms, the lack of personalization and local compliance adherence, and the lack of IT agility. When the global banking and investor solutions group recently announced a transformation program, it focused on two key topics: replacing the in-house client onboarding platform and implementing a new global customer services platform.

The bank wanted to move from a siloed onboarding approach to an end-to-end, global client lifecycle management solution. The project also needed to support IT's goals of developing strategic applications powered by a shared platform using an Agile, continuous delivery methodology.

Pega's strategic applications are strongly aligned with the bank's initiatives around client onboarding, servicing, client interfaces, and operational efficiency.

**HOW PEGA HELPED:**

## Use a Holistic Approach to Achieve Bank's Customer Endeavors

When the global banking and investor solutions group evaluated Pega for its client onboarding/KYC project, it measured

the company's solution against a potential in-house build. In parallel, the companies worked to identify other topics related to customer lifecycle management, such as customer service and operational efficiency. This resulted in a strong relationship with senior bank management.

Other key deciding factors included:

- Pega's ability to take a holistic approach to providing a global platform compliant with the bank's digital strategy (combining strategic applications and an Agile development platform).
- Pega's extensive global financial services references.
- Pega's portfolio capabilities and Agile delivery, which were tested on two large proofs of concept based on the bank's specific requirements, covering extended onboarding and customer service requirements.

**OUTCOME:**

## Customer Lifecycle Management Improves Customer Experience

Pega's strategic applications are strongly aligned with the global banking and investor solutions group's initiatives around client onboarding, client servicing, client interface simplification, and operational efficiency. Pega is both compliant with and an enabler for the bank's digital transformation program and fully supports its digital strategy.

Working with Pega, the bank implemented an end-to-end client lifecycle and work optimization platform in nine countries for over 200 production users in just three months. It now has the opportunity to deliver the desired benefits on:

- Reducing cost of service per client and compliance.
- Increasing transparency and customer centricity.

Based on the success it has already realized, the bank plans to extend Pega to the business and commercial sides of the business.

### LARGE UNIVERSAL BANK

This French multinational banking and financial services organization is one of the largest European financial services groups. The group is based on a diversified universal banking model, and combines financial solidity with a strategy of sustainable growth. It has more than 148,000 employees and an extensive presence in Europe and Africa.



# EASING KYC FOR THOUSANDS OF BANKS

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## Business Goals

- Create a centralized KYC/due diligence data source for banks and corporate clients
- Enable full collation and management of KYC profiles through streamlined, automated processes
- Speed time to market as rules evolve

## Results

- Live in six months – supporting 113,000 legal entities
- More than 2,200 buy-side and corporate clients with 350,000+ documents uploaded
- Full onboarding and maintenance of all investment products and clients; offboarding of dormant accounts

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“*Through Pega CLM ... account opening and compliance is achieved quickly so firms can capture liquidity and increase speed to market. We work with over 1,500 [clients] to reduce the burden of KYC and deal with multiple counterparties bilaterally.*”

**Jon May**  
CEO, kyc.com (Markit)

**CHALLENGE AND VISION:**

## Overcome KYC Complexities for Financial Institutions

Major financial services institutions spend a significant amount of time and money ensuring they comply with constantly changing regulations, particularly when it comes to ensuring Know Your Customer (KYC) compliance for their customers and affiliates. Because of the duplication of effort across the marketplace, Markit and Genpact recognized the opportunity to provide a centralized source for a “gold copy” of KYC due diligence data.

Collating and managing these profiles is not a simple exercise. The process of collecting required information is highly manual, potentially involving research into complex multinational corporate structures, company officers, business jurisdictions, etc., all of which will influence the information that needs collating. It’s vital that this is a controlled, tracked, and managed process. It also must be audited, as the KYC services assume the burden of responsibility for showing that profiles are correct, appropriately managed, and up to date.

**HOW PEGA HELPED:**

## Used Pega 7 as Engine for KYC Compliance

To power kyc.com, Markit and Genpact decided to use Pega 7 Case Management and CRM to manage the creation and maintenance of its KYC and FATCA profiles.

This has resulted in speed to market when incorporating new jurisdictions, financial institutions, and end customers. Cases are initiated by a variety of triggers: a new client signing up with as-yet unprofiled customer(s); existing profiles requiring a regular review and refresh; a corporate action (e.g., an acquisition); an external feed (e.g., adverse media against that organization); or a challenge by a bank-side customer who feels profile information provided by the KYC service is incorrect.

Pega 7’s case management capability allows kyc.com to be controlled, audited, and fast when responding to customer needs. Pega 7’s CRM functionality manages communications with banks and customers, and tracks contacts, organizations, and their structures, emails and calls, changes in structure, contacts, etc.

**OUTCOME:**

## Thousands of Customers Rely on kyc.com

Markit and Genpact selected Pega because most of their existing customers already use Pega for their onboarding and customer due diligence processes. Pega is broadly recognized as being the market leader in this field.

Because of the ease and speed with which changes can be made to keep pace with fluid regulatory and customer change, as well as Pega’s advanced and flexible integration capabilities, Markit and Genpact felt Pega was the only choice.

Today, 12 of the largest global banks are currently signed with kyc.com, and more than 2,200 buy-side and corporate clients are registered. Kyc.com supports more than 113,000 legal entities, with its 350,000-plus documents uploaded into its system.



Kyc.com is a joint venture between IHS Markit and Genpact, leading vendors in the financial services market. It offers a robust set of compliance, tax, data validation, and reference data services, and supports over 113,000 legal entities, with its 350,000-plus documents. Kyc.com is relied upon by 12 of the largest global banks and over 2,200 buy-side and corporate client firms, 6,000 corporations, and 80 banks.



# BANK UNLOCKS VALUE WITH AUTOMATION

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## Business Goals

- Integrate legacy applications, including mainframe, Windows and Web applications
- Streamline business processes for bank employees without modifying application code
- Reduce and simplify training for new account managers

## Results

- Reduced error rate 29.7% to 2%
- Cut processing time 78%
- Doubled accounts processed
- Cut average handle time 28% for policy verification

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*“ We quickly understood the fact that we had no access to our source systems, the large-scale banking applications needed to complete customer transactions in a seamless one-and-done process, but we had no direct control over how to enhance those systems. ”*

Senior Vice-President, Corporate Technology, Multinational Bank



**CHALLENGE AND VISION:**

## Automate Manual Tasks to Improve Customer Service

This banking service center faced the typical process bottlenecks that plague the retail banking industry. Cumbersome manual business processes required bank employees to toggle through multiple screens across a range of legacy applications. This inhibited the bank from delivering exceptional customer service. The organization realized that by integrating multiple legacy applications – including mainframe, Windows, and Web applications – it could improve efficiency and streamline business processes. It wanted to accomplish this without modifying existing application code so that it could reduce and simplify the training required for new account managers.

**HOW PEGA HELPED:**

## Quickly Achieved Cost and Time Savings Across Branch Processes

The bank used Pega Robotic Automation to build a prototype solution, which included six automations, in approximately three weeks. After a two-week training period, two of the bank's developers took over the project. The initial projects focused on loan credit verification processes, account signup, account maintenance, and upselling processes for checking, savings, and other

investment products. The new functionality spans three business areas: the back office, bank branch, and contact center. By streamlining legacy applications without modifying source code, the organization saved both time and money.

**OUTCOME:**

## Smoother Processes Frees Bank to Focus on Higher Value Projects

Branch operations have dramatically reduced sign-on time from 78 seconds to just 45 per person, and merged four legacy applications into a single view. In the contact center, Pega Robotic Automation was used to integrate legacy applications, automatically update account information between screens, and prompt for policy compliance. The result: Average handling time was reduced by 120 seconds (28%) per agent per call, and error rates fell from 29.7% to 2%.

In the back office, Pega Robotic Automation streamlined several key processes, cutting processing times by 78% and doubling the number of accounts processed. This reduced the amount of staff needed to complete credit verification and other manual processes, allowing the organization to re-focus staff on other projects. No new investment was needed for upgrading legacy applications, and the team is now exploring a number of new opportunities for productivity and savings using Pega Robotic Automation.

### MULTINATIONAL BANK

This service center of a global full-service bank processes checking accounts, loan applications, credit card accounts, and other financial investment offers. The bank has a presence in more than 100 countries, and the service center is considered an innovation leader in the nation's banking community.



# MAKING RBS THE MOST TRUSTED BANK

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## Business Goals

- Understand what's important to customers
- Serve customers in moments of need
- Provide a great experience across channels
- Earn lifetime value from each relationship

## Results

- 100+ Customer journeys supported
- 20% Increase in mortgage retention
- Web-to-branch transition increased from 0% to 40%
- 10-1 ROI from next best action in 2015

- 
- 17 million omni-channel enabled customers
  - 15,000 agents supported across channels
  - Two billion-plus personalized interactions / year
- 

“*We're creating an environment where we know our customers individually, and we want to use what we know about our customers to really understand what's important to them – so that we can be there in the moments that matter.*”

**Jessica Cuthbertson**

Head of Data Science & Customer Decisioning, RBS

**CHALLENGE AND VISION:**

## Personology: Make the Best Decisions By Truly Knowing Customers

Following the global financial crisis, the Royal Bank of Scotland (RBS) was in a hyper-competitive market; it needed to work harder to attract and retain profitable customers. To build a strong base of retail accounts, the bank had to implement a personalized marketing approach – enhancing customer relationships to become more effective.

RBS's goal of becoming the “most trusted bank” required a shift from pushing products, to enabling value-add customer conversations. In addition to building a new client base and enhancing cross-sell opportunities, the organization needed to secure customer loyalty, and ensure a sustainable, long-term stream of revenue.

Historically, RBS had relied on “boom and bust” campaigns, but its new charter focused on making banking easy, listening to the customer, and providing value in moments of need. To empower that experience, RBS needed to leverage advanced analytics and decision-management to make customer interactions more personal (and profitable) across channels.

**HOW PEGA HELPED:**

## Personalization Using An “Always-On” Customer Brain

RBS knew the value of data but needed to unify that data across channels, leveraging customer context to maximize impact. The Pega Marketing Application, powered by the omni-channel Customer Decision Hub, would enable RBS to interact with its 17 million customers using a personalized, one-to-one approach.

RBS integrated personalized next best action recommendations into its Web, branch, contact center, and outbound channels. Those recommendations weren't limited to sales – instead, they were designed to drive informed conversations to serve customers, rather than just sell. The organization designed more than 100 unique journeys to enhance the customer experience; these would present personalized offers and messaging during each of the bank's two billion-plus customer interactions each year.

Analytic horsepower was a must, so Pega Machine-Learning was integrated into the process. This capability provided a self-learning framework that would evolve with the customer, automatically adapting strategy and tactics as the situation changed.

**OUTCOME:**

## RBS Earns Customer Trust

Having re-built its customer approach around the concept of what it calls

“Personology,” RBS now presents relevant content to customers in real-time, across both inbound and outbound channels. The Agile capabilities built into the Pega platform allows the bank to review and approve programs rapidly – in days, rather than months.

The bank's investment in Pega had provided the intelligence and guidance required to power high-value conversations in its agent-facing channels. Branch staff have found that, in addition to highly relevant recommendations, even something as simple as a customer “Happy Birthday” message drives a deeper, more personalized conversation, and increases loyalty.

In addition, personalization on the bank's Web channels, which includes millions of customer interactions each day, has a direct revenue impact. Mortgage retention has improved 20%, and 40% of branch appointments are scheduled online - up from 0% a few years ago.

Having re-invested in its customers, RBS is earning its place as the “most trusted bank,” one relationship at a time.



Founded in 1727 and headquartered in Edinburgh, Scotland, the Royal Bank of Scotland (RBS) Group includes NatWest, Ulster Bank, and RBS brands with more than 92,000 employees, 2,200 branches, and 17 million customers. RBS has a simple purpose: to serve customers well. Its stated ambition is to become the leader in customer service, trust, and advocacy.





## **GOVERNMENT:**

# EXECUTIVE FOREWORD



Government leaders have some of the most important responsibilities in the world. Around the clock, they are charged with ensuring public safety, caring for Veterans and service members, and managing critical infrastructure. Government organizations preserve the air we breathe, the land we enjoy, and the water we drink. Their dedication and service means that employment benefits are delivered efficiently, people receive aid quickly in times of need, and nations are protected from threats.

To accomplish each unique mission, government leaders are taking a closer look at their technology and processes. IT is evolving at an incredible pace, and agencies face staggering challenges: budget pressure, legacy modernization, changing citizen expectations, shifting populations, and the need to achieve results faster. Leaders of these institutions are good stewards of taxpayer dollars, and they ensure every investment is scalable and flexible. Pega is incredibly proud to partner with our government customers addressing each of these common challenges, helping agencies deliver value quickly, and preparing for future change.

I urge you to read on to learn how governments around the world are leading the way to build for change. If you have any questions, please do not hesitate to reach me at [douglas.averill@pega.com](mailto:douglas.averill@pega.com).

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**Douglas Averill**

Global Government Business Line Leader, Pegasystems



# CALIFORNIA GENERATES \$2 BILLION FOR CITIZEN SERVICES

## Business Goals

- Improve the customer experience, reduce costs and close the tax gap
- Provide secure, self-service options for taxpayers
- Automate manual processes to reduce the number of exceptions and speed tax refunds
- Validate statewide tax returns against the complex and changing tax code
- Improve employee productivity

## Results

- \$2 billion generated in revenue for the state
  - 16 million tax returns processed in less than four months
  - 24x7 self-service for personal income tax correspondence
  - Reduced average cost to close a tax year
- 
- 960,000 tax returns processed per day at peak time
  - 24,000 tax returns processed in an hour
  - Four million tax returns in one week

“ 2016 was our best tax season. Our improvements, including using Pega, helped us process more than 16 million tax returns in less than four months. The last week alone accounted for four million records without a single issue or service request. ”

**Cathy Cleek**

CIO, California Franchise Tax Board



### CHALLENGE AND VISION:

## Closing the Taxpayer Payment Gap

With personal income tax supplying the majority of the state's revenue for citizen services, California Franchise Tax Board (CA FTB) needed to close a tax gap between what citizens owed and what they voluntarily paid in their returns. Approximately 20% of inaccurate tax returns are a result of taxpayers failing to pay taxes, using incorrect tax forms and other exceptions.

CA FTB also wanted to quickly and automatically validate statewide tax returns against the complex and changing tax code.

Prior to Pega, validation was a manual process. CA FTB's goal was to reduce the amount of exceptions, automatically validate rules, and educate taxpayers on how to process taxes more accurately and efficiently.

### HOW PEGA HELPED:

## Enhanced Employee Productivity and Customer Experience

To accomplish these goals, CA FTB chose Pega to accurately validate the state's tax returns. The Pega application is part of the Enterprise Data to Revenue (EDR) Project initiative, addressing enterprise operations and system modernization.

Pega was first used to automate paper correspondence processing, and then as the platform used to process all 16 million personal income tax returns for the 2016 tax season, handling as high as 960,000 returns per day.

Once documents are scanned, an application on the Pega platform identifies the type of correspondence and automatically routes it to the appropriate person or department. Previously, CA FTB manually sorted paper documents into various categories.

### OUTCOME:

## Improved Customer Service, Taxpayer Savings

With the new capabilities, tax returns are analyzed and validated automatically, reducing processing costs and improving employee productivity.

Nearly eliminating inefficient paper-based processes, EDR will automate the processing of approximately one million digital and paper-based tax returns.

Additionally, EDR provides secure, self-service options for taxpayers, validates returns and automates and standardizes manual processes. Taxpayers can even choose from correspondence delivery options, such as email, phone, or text messages, allowing them to receive faster responses to questions — and quicker tax refunds.

The application also enables CA FTB to intelligently automate the tax return process for any possible scenario, leading to faster resolutions on both tax refunds for citizens and payments to the state.

As a result of improved processes and automation, EDR has generated more than \$2 billion in additional state revenue.

## STATE OF CALIFORNIA FRANCHISE TAX BOARD

The State of California (CA) Franchise Tax Board (FTB) is the second largest tax agency in the U.S. and the sixth largest economy in the world, processing more than 16 million personal income tax returns and one million business tax returns annually. The agency provides services and information to help taxpayers file accurate and timely state tax returns.



# LEADING THE WAY IN CRIMINAL JUSTICE REFORM

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## Business Goals

- Create a fairer criminal justice process for its citizens
- Improve public safety
- Streamline processes and improve efficiency
- Change a 250-year-old bail process and level the playing field for those who cannot afford bail

## Results

- \$5 million+ in savings through reuse and silo elimination
- 96% reduction in costs through electronic defendant monitoring
- Created a Unified Complaint Entry system in less than nine months
- Consolidated 3 legacy applications and deployed in nine months
- 87% increase in efficiency to enter a complaint

- 
- 2,500 municipal court staff members
  - 40,000 law enforcement personnel and agencies
- 

“ In 2015, New Jersey passed historic legislation that will change a 250-year-old bail process. With pre-trial services, New Jersey will be able to provide the judge with more information than they've had before to make fair decisions regarding bail. ”

**Jack McCarthy**  
CIO, New Jersey Courts



**CHALLENGE AND VISION:**

## Improve Efficiency and Automation from Police to the Court

Roughly 2,500 municipal court staff members and up to 40,000 law enforcement personnel and agencies use New Jersey Courts (NJC) for criminal or traffic information. Having an automated case management system was critical for the efficient and accurate flow of information. To streamline the process for police officers and court administrators, NJC partnered with Pega to create a Unified Complaint Entry (UCE) system in less than nine months.

NJC also set out to reform the bail process and ensure low-risk defendants were able to continue earning income for their families before trial, while high-risk defendants remained in jail. This reform would also reduce jail overcrowding and associated taxpayer costs.

Additionally, NJC needed to streamline and automate the lifecycle management of each individual court case. NJC set out to do this by centralizing the entire court system, integrating multiple systems of record, and automating processes.

**HOW PEGA HELPED:**

## Streamlined Law Enforcement and Court Processes

To accomplish historic criminal justice reform, Pega worked with NJC to accomplish the following:

- Developed multiple applications using an Agile approach, beginning with the UCE project. With UCE, all New Jersey police officers enter complaints or tickets directly into a unified complaint entry system that manages the entire lifecycle of the case.
- Created a Public Safety Assessment (PSA) application to assess defendant risk to society based on proven statistical models. Based on business rules defined by a third party, a risk score is generated, enabling judges to make more informed, real-time decisions when determining the appropriate next best action for a defendant pre-trial.
- Designed an application to monitor defendants prior to their trial. Using electronic monitoring, pretrial services officers are able to efficiently monitor defendants released by the court and remind them of their upcoming court dates and other court orders.
- Enabled the defendant's right to a speedy trial, ensuring each case moves to trial within 180 days. NJC is able to remain compliant using automated business processes and built-in case lifecycle management.

**OUTCOME:**

## Improved Public Safety and a Fairer System

NJC is leading the way in criminal justice reform and meeting legislative mandates using the Unified Complaint Entry system, Public Safety Assessment, Pre-Trial Monitoring application and the Municipal Automated Court System (MACS) application.

With the MACS application, NJC now has an inventory of case management services and a framework to maximize application reuse with every new release. NJC saved \$5 million by identifying 18 common use cases and reusing the processes across all of its court systems with a unified platform, reducing development time by 6,000 hours. This means common processes such as scheduling and payment processing used by the municipal, criminal, probation, drug, tax, and family courts, could be reused rather than duplicating multiple applications. NJC also united more than 30 years of legacy and siloed applications, and eliminated redundancy.

### NEW JERSEY COURTS

Each year approximately seven million new cases are filed in New Jersey's courts. Judges decide disputes on diverse topics such as criminal law, motor vehicle violations, family matters, and basic American rights. Recently, New Jersey passed revolutionary criminal justice reform legislation to create a fairer criminal justice process for its citizens.



# IMPROVING TRAVEL EXPERIENCE AND REDUCING COSTS IN FOUR MONTHS

## Business Goals

- Minimize delays and provide timely, accurate information to travelers
- Operate a proactive incident management system
- Improve citizen service and communication
- Faster response to device faults

## Results

- Go-live results in just four months
- Smoother experience for travelers in New South Wales
- Reduced costs with more efficient operations
- Seamless, transparent fault management network

▪ 18,000 kilometers of roads    ▪ 5,000+ bridges and tunnels    ▪ Reports from 20,000+ remote devices

“ *In just four months, we have already seen significant benefits from Pega and our fault management solution, including improved utilization of engineering resources and prioritization of fault handling, leading to faster response times.* ”

### **Chris Ruwoldt**

Principal Manager Transport Operations Systems,  
New South Wales (Australia) Transport Management Centre



**CHALLENGE AND VISION:**

## Boost Citizen Service and Reduce Costs

New South Wales Transport Management Centre (NSW TMC) controls all vehicle, rail, ferry, and bus operations across 18,000 kilometers of roads and more than 5,000 bridges and tunnels.

The agency partnered with Pega to develop a proactive incident management system, incorporating its existing road sensor network, intelligent transportation systems, electronic message boards, and billboard signs for thousands of users.

To minimize delays and provide timely and accurate information to travelers, the NSW TMC wanted to enhance its transport coordination services, as well as its monitoring and management of the NSW road network.

**HOW PEGA HELPED:**

## Sped Management of Transport and Incident Activity

To ensure a positive experience for individuals traveling in New South Wales, the agency built the Fault Management Service (FMS), a seamless, decision-based incident management solution. FMS more efficiently tracks, manages, and responds to a myriad of transport-related events. As a result of Agile methodology and Pega capabilities, the agency was able to deliver results in just four months.

FMS enables the agency to dynamically route and resolve faults reported from more than 20,000 remote devices, including variable message and speed limit signs, traffic signals, and monitoring devices. The solution enables NSW TMC staff to more quickly resolve incidents, using Pega's business rules to automate prioritization and escalation, as well as facilitate dynamic process flows to technicians in the field.

**OUTCOME:**

## Preparing for Future Change

NSW TMC improved citizen service levels as a result of more accurate communication and smoother travel. It also reduced costs with more efficient operations. Through better utilization and prioritization of remediation activities, the organization evaluates and responds to events faster. As a result of the FMS program, the agency was awarded "Best Use of BPM Technology" at the annual Gartner BPM Summit 2013 in Sydney, Australia.

Now the agency has an agile incident and case management system that enables sophisticated, intelligent response. The agency chose Pega because it supports current requirements and provides an agile foundation for future changes within the agency and associated organizations. Over time, NSW TMC expects to continuously reduce response times as processes are further refined based on data. Specifically, the agency plans to incorporate

collaborative incident management, allowing even better collaboration among support and operations personnel.



The New South Wales Transport Management Centre (NSW TMC) in Australia is the government authority dedicated to improving the customer experience on the NSW transport network. It controls all vehicle, rail, ferry, and bus operations across 18,000 kilometers of roads and more than 5,000 bridges and tunnels. With Pega, NSW utilized its existing road sensor network to implement a proactive incident management system.



# IMPROVING CITIZEN SERVICE DURING TIMES OF NEED

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## Business Goals

- Provide a more efficient, user-friendly service to members entitled to unemployment benefits
- Unify all 28 insurance funds under a single, consistent IT platform to enable reuse, consistency and individual fund branding
- Move from paper processes to digital, web-based self-service
- Shorten case resolution time

## Results

- Improved scalability across 28 organizations
- Shortened case resolution times from weeks to minutes
- Increased online member usage from 65% to 79%
- Application process reduced from two weeks down to minutes

- 
- 28 organizations
  - 3.5 million members
  - 40,000 cases processed each Monday
  - 20,000 concurrent mobile users in two hours
- 

“ Using Pega, we have been able to shorten case resolution time for our members from weeks to minutes. This has enabled us to better serve our members who are in need of unemployment income quickly. We now respond to meet this need with no added cost. ”

**Joakim Kruse**

CIO, The Swedish Federation of Unemployment Insurance Funds



**CHALLENGE AND VISION:**

## Keeping Up With Citizen Demands

The Swedish Federation of Unemployment Insurance Funds (SO) needed to meet the rapidly changing needs of its members and support the broad use of technology. Members expect to interact with government through whichever channel they choose, including smartphones, tablets, and traditional personal computers. With Pega, SO provided the functionality for members to check eligibility and process claims through an omni-channel capability — without having to re-design an application for every channel. Each application is designed once, and reflected across any user interface.

**HOW PEGA HELPED:**

## Established a Complete View of the Citizen

SO now has a complete picture of the end-to-end member journey, providing insight and guidance based on the 360-degree view into the interactions of each member and case manager engagement. For example, SO can easily determine where an unemployed member has previously worked and securely view previous salaries earned. All employment history is securely digitized and in one place, which makes the unemployment benefit payment process quick and efficient, while protecting member privacy. What once took up to two weeks using paper

applications is now accomplished within minutes online. In addition, unemployed members can see the delivery date of their unemployment payment in advance by simply checking online.

**OUTCOME:**

## Ensured Quality and a Focus on Customer Service

Case managers are now available to spend more quality time with SO members, ensuring their needs are met. With 40,000 cases processed each Monday morning and as many as 20,000 concurrent mobile users in a two-hour time frame, SO must ensure there is no down time. By digitizing and using the unified platform, SO has significantly decreased processing time, freeing up the case managers to provide better, more efficient service to its members. Unemployed members can feel insecure and vulnerable, but with digitization, information is securely and efficiently processed, which in turn, reduces member stress.

In addition, SO members are more productive. They can expect to encounter consistent processes and interactions, as all systems and applications are the same. This reduces risk brought on by worker inexperience, eliminates the need for additional training, increases productivity, and enables better customer service.

## SWEDISH FEDERATION OF UNEMPLOYMENT INSURANCE FUNDS

The Swedish Federation of Unemployment Insurance Funds (SO) supports 3.5 million members with insurance benefits through 28 independent funds. SO is responsible for serving each fund with common IT and a unified Pega platform specialized for each fund via reuse. This enables secure payments for the unemployed and the agility to respond to changing government regulations.



# VA FSC SAVES MILLIONS OF TAXPAYER DOLLARS

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## Business Goals

- Improve accuracy and timeliness of vendor payments
- Replace legacy systems to improve efficiency and flexibility
- Eliminate overpayments and/or inaccuracies
- Improve employee efficiency resulting in cost savings

## Results

- Improved payment accuracy to nearly 100%
- Reduced processing costs by 33%
- Veteran-centric care
- Improved employee productivity

- 
- 1.2 million invoices
  - \$14 billion payments annually
- 

“ Our digital transformation needed to be able to handle the volume and complexity of our operations. With IPPS, we have been able to improve payment accuracy to nearly 100% and reduce invoice processing costs by 33% — savings that can be used toward Veteran care. ”

**Clint Loeser**

Director of Financial Operations Financial Services Center,  
U.S. Department of Veterans Affairs



**CHALLENGE AND VISION:**

## Support the VA Mission, Speed Delivery and Reduce Costs

The U.S. Department of Veterans Affairs (VA) Financial Services Center (FSC) needed a technology platform that would allow for continuous improvement and support ever changing policies. The FSC chose Pega because it needed solutions that were both highly reusable as well as quick to develop.

To ensure the most advanced medical equipment and services were available for Veteran care, VA FSC implemented the Invoice Payment and Processing System (IPPS). IPPS is a unified, online invoice certification system that VA FSC uses to process all payments on behalf of VA medical facilities nationwide, including the purchase of hospital equipment, from pace makers to hospital beds to facility maintenance services.

A large pool of high-quality vendors ensures enhanced care, as it allows access to better supplies and services. Payment accuracy is also critical, as the VA remains a good steward of government funding. IPPS has improved the accuracy and timeliness of vendor payments.

**HOW PEGA HELPED:**

## Use Digital Transformation to Improve Efficiency and Employee Productivity

Unifying all payment processing under IPPS, the VA was able to replace legacy applications and improve the system's efficiency and flexibility. Previously, multiple siloed systems were stitched together, making communication among systems slow and expensive to maintain. IPPS introduced automation, and sped the payment process by receiving invoices from all available formats, performing advanced business rule processing, automatically routing invoices for approval, and generating the appropriate payment transactions.

In addition to IPPS, VA FSC enlisted Pega for the Eligibility and Enrollment (EE) and Referral and Authorization System (RAS). These systems are used in support for the Choice Act, which affords Veterans more choices for receiving medical care, including services outside of the VA medical network. VA uses EE and RAS for medical claims processing and ensuring outside providers are paid for Veteran care.

**OUTCOME:**

## Better Customer Service, Lower Costs and Improved Compliance

As a result of implementing IPPS, VA FSC reduced its invoice processing costs by 33%. With more streamlined and efficient

operations, VA was also able to save taxpayer dollars.

VA FSC also uses the Customer Service application for a more complete view of each vendor, including customer history and context on how to best resolve a problem. VA has more real-time insights into customer service performance metrics, allowing for better prioritization and continuous service improvement.

Improving taxpayer visibility, IPPS provides VA with more accurate reporting and easier government compliance. Not only does IPPS ensure improper payments are avoided, but it also helps VA to comply with the Improper Payments Elimination and Recovery Improvement Act, allowing greater transparency.

### U.S. DEPARTMENT OF VETERANS AFFAIRS

The U.S. Department of Veterans Affairs (VA) is responsible for administering programs, medical equipment, and facility services in support of Veterans, survivors, and their families. The VA Financial Services Center (FSC) in Austin, Texas, ensures timely and accurate payment of \$14 billion worth of those goods and services annually on behalf of the VA.



## HEALTHCARE:

# EXECUTIVE FOREWORD



In the 21st century, it's become a global healthcare imperative to improve outcomes, lower costs, and increase quality. Meanwhile, today's consumers have grown up in an era of unprecedented adoption of innovative technologies supporting nearly every aspect of their lives. Customers now expect healthcare organizations to incorporate these technologies in delivering a customer experience that is efficient, personalized, and insightful.

The opportunity for healthcare organizations to combine pervasive technology literacy, emerging models of care, and organizational goals to drive health outcomes has never been greater.

Converting opportunity into reality requires a laser focus on creating customer experiences that are driven by personal data, based on clinical best practices, and informed by business models that deliver quality results. Every day, Pega healthcare customers are succeeding with this endeavor. These winners are taking a business-backed and technology-enabled approach to turning information into personalized insight and action.

Pega is partnering with leading healthcare organizations to significantly improve the customer experience while driving superior revenue growth and cost savings. Typical results include improved CMS quality ratings, up to the maximum 5 stars; a 78% decrease in renewal processing timelines; a 60% reduction in customer service agent training time; and a 67% reduction in claims rejection.

I invite you to read about how Pega is partnering with world-class healthcare organizations to drive better customer and health outcomes and revolutionize care and the customer journey. You can contact me at [susan.taylor@pega.com](mailto:susan.taylor@pega.com) with any questions.

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**Susan Taylor**

Vice-President and Global Manager, Healthcare, Pegasystems



# CAREFIRST SPEEDS PRODUCT BUILDS

## Business Goals

- Manage product builds and provide the ability to code product data only once
- Streamline product configuration processes and eliminate duplicate build efforts
- Provide effective auditing and reporting capabilities

## Results

- Configured 250 medical products in five weeks
  - Made source of record for claim engine and self-service portals
  - Cut update configuration time by 50%
- 
- Provides lifecycle management for product configuration for 800-plus medical products
  - Enables compliance across three jurisdictions and two legal entities

“ *I'm very excited at the progress we've made using PCS to assist in streamlining the processes associated with product build management.* ”

**Phaedra Swann, PMI-ACP**  
Program Manager, CareFirst

**CHALLENGE AND VISION:**

## Speed Delivery with One Flexible Source for Products and Benefits

CareFirst needed to speed its product delivery, while significantly reducing process redundancy. Siloed teams at the healthcare payer configured products and benefits in two different systems: the company's claims engine and its enterprise benefit system, creating a barrier to providing a consistent member and provider experience.

Any regulatory change or shift in business needs required a similar effort, often requiring hundreds of products to be manually updated or reconfigured one by one.

CareFirst's vision was to introduce a solution that would serve as a unified repository for its products and a standard set of benefits that could be exported to its claim engine and benefit quoting operation systems.

Such capabilities would not only streamline the product and benefit administration processes, but they would also provide CareFirst with a flexible solution that would enable a fast and accurate response while helping it remain a leader in the consumer-centric market.

**HOW PEGA HELPED:**

## Automated and Consolidated Product and Benefit Configuration

CareFirst selected Pega's Product Composer System (PCS) for Healthcare to

achieve its business goals: improve accuracy, reduce time to market, and decrease the complexity of benefit administration. PCS's healthcare-specific context and ability to support the complexities of healthcare products was a critical feature to ensuring CareFirst met its objectives.

PCS's inheritance and re-use of product building blocks enabled CareFirst to further reduce the time to implement changes. In addition, PCS provided world-class workflow and reporting capabilities to allow the organization to manage the product and benefit lifecycle as instantiated at CareFirst.

CareFirst was able to code its products and benefits in PCS and leverage the capabilities of the Pega 7 platform to create automated processes to extract configuration data in the format required by its enterprise systems, increasing speed and accuracy. What once was a manual process, was now automated, traceable, and reportable.

**OUTCOME:**

## Efficient Product Configuration, Faster Time to Market

Upon implementation, CareFirst was able to configure 250 medical products in five weeks that were compliant with the Affordable Care Act. The organization saw a 50% uplift in time to market and 50% reduction of work effort. As a result, CareFirst broadened its original scope of just utilizing PCS to manage its 2016 ACA medical product portfolio, and now plans

to include all of its products adjudicated in one of its legacy claim engines, including vision and pharmacy.

Recently, the CareFirst configuration team updated more than 450 medical plans to address an urgent compliance requirement. Rather than requiring two updates for each medical plan, the configuration team was able to submit mass update batches and publish simultaneously to both systems involved. CareFirst realized a 50% reduction in operation time for this effort.

To date, CareFirst manages more than 800 products in PCS and is expanding its configuration efforts to include its large group product markets, which are adjudicated by an alternative legacy claims engine.

### CAREFIRST

CareFirst is the largest healthcare payer in the Mid-Atlantic U.S., serving 3.4 million members and recognized as a "Best in Blue" insurer for providing stellar customer service for over 10 years for Federal Employee Program members. CareFirst has the largest provider network in the region, with more than 80% of the area's healthcare providers participating in its networks.



# HOW FALLON STREAMLINED QUOTE TO CARD

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## Business Goals

- Create online broker book of business
- Meet health reform deadlines
- Re-engineer sales process to enhance broker experience
- Consolidate lead management and quoting
- Automate quote and proposal generation across multiple plan designs

## Results

- 75% reduction in quote generation times
- Solution completed in four months
- Named “benchmark” by state of Massachusetts

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- Over 4,000 brokers
  - One-stop-shopping insurance sales
  - Quoting 1,600 products, spanning four programs for individuals and small groups, inclusive of Streamlined Quote to Card creation
- 

“ We’ve partnered with Pegasystems not only to work smarter, but to promptly respond to the needs of our external customers including brokers, employers and individual consumers. Through Pega technology, we’re able to enhance our customers’ experience and exceed their expectations for service. ”

**David Przesiek**

Senior Vice-President and Chief Sales Officer, Fallon





**CHALLENGE AND VISION:**

## Quickly Meet ACA Mandates, Grow Sales

In 2013, the year before the Affordable Care Act went into effect, Fallon Health was, like other insurers, scrambling to complete compliant implementations.

Payers needed to both comply with regulations to participate in the exchanges and arm their broker ecosystems with tools to effectively compete.

Fallon Health faced multiple challenges. Its fragmented IT systems were unable to support pressing compliance deliverables, including state insurance exchange participation, ACA member ratings, and merged market mandates. Further, existing broker portals did not provide a winning sales experience. Failure to act would result in loss of market share and broker mindshare.

In just four months, Fallon Health wanted to simplify and personalize brokers' sales and quoting interactions across a growing number of marketplaces, products, and sales channels to drive compliance; realize efficiencies; achieve competitive differentiation; and increase membership growth.

**HOW PEGA HELPED:**

## Enabled Rapid Returns with Agile Broker Portal

Fallon Health chose Pega's sales and enrollment system as a single platform to rapidly deliver compliance and improve retail sales. The insurer was impressed

with Pega's technical maturity and alignment with its business needs, sales-to-service capabilities, and overall healthcare sales vision. It also valued Pega's ability to accelerate time to value, particularly with a healthcare-focused sales and enrollment solution.

Pega and Fallon Health formed a highly integrated partnership of business, IT, and external partners that leveraged an Agile delivery approach. Within a short time, the team crafted a compelling broker experience leveraging Pega's out-of-the-box capabilities, and enabled frictionless, near-real-time self-service sales interactions for broker-customer engagements, including document generation. In addition to the compelling customer and broker experience, the team delivered operational and enterprise process analytics, as well as performance management capabilities.

**OUTCOME:**

## Quality Experiences Produce Quality Outcomes

In just four months, Fallon Health achieved compliance with state exchange participation mandates, using Pega's packaged HIPAA 270/271 EDI functionality to electronically manage eligibility and benefit inquiries with the Massachusetts health exchange.

Concurrently, Fallon Health deployed Pega's sales and enrollment to streamline and enhance direct sales and broker activity for 4,000 brokers. The launch of

QuoteNow, Fallon Health's Pega-powered broker portal, simplified navigation, enabled one-stop shopping (all plans for all employers in one visit), and delivered faster, more professional-looking, and detailed quotes. This improved the broker experience and provided Fallon with competitive differentiation.

With its "can-do" attitude and laser focus on the mission, the Fallon team earned the trust of the broker community and its business partners. Additionally, the state of Massachusetts described Fallon's operations as a "benchmark" to be followed.



Founded in 1977, Fallon Health is a not-for-profit organization providing healthcare services with group and non-group health plan options (commercial, Medicaid and Medicare) in Massachusetts. An innovator in wellness benefits and benefit design, Fallon has been consistently recognized by NCQA in the top 10% of health plans in all lines of business.



# HAP GIVES ITSELF A HEALTH BOOST

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## Business Goals

- Seamless, cross-channel document intake
- Smart routing and automated workflows
- Faster processing, with auto-prioritized escalations and real-time performance dashboards and reports
- Efficient communications
- Improved compliance

## Results

- 13% increase in timeliness
- 33% increase in accuracy
- 66% increase in productivity

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“ *In an era of consumer-driven healthcare, having an effective appeals and grievance management system and processes can provide any health plan a competitive edge. ”*

**Garima Aggarwal**

Director Customer Experience, Health Alliance Plan



**CHALLENGE AND VISION:**

## Improve the Appeals and Grievances Process to Keep Up with Growth

Like other health plans, Health Alliance Plan (HAP) faced the challenge of a highly manual appeals and grievances process that was extremely labor-intensive and time-consuming. With the pressure to meet state and federal regulations and ever-evolving mandates, it was essential for the plan provider to accurately track appeals and grievances and ensure a low error rate.

Most healthcare organizations struggle to improve compliance and increase productivity to enhance quality scores and minimize penalties. Plan providers also need to enhance visibility in reporting, and boost member and provider satisfaction. With the recent regulatory changes in healthcare, HAP has seen an increase in enrollment and has also enhanced member benefits, which has steeply increased the cost of the appeals and grievances process.

HAP decided it needed to implement a unified platform to streamline its appeals and grievance lifecycle.

**HOW PEGA HELPED:**

## Automated Processes to Drive a Superior Member Experience

Pega helped HAP streamline its entire appeals and grievance lifecycle –from origination to resolution. The solution

is based on a configurable process automation framework that streamlines the inflow of all appeals and grievances from multiple sources: Web, email, fax, walk-ins, etc. Pega's smart rules engine, which prioritizes transactions based on case urgency, enables skill-based routing, resulting in faster assignment of cases.

Working with Pega, HAP centralized all of its documents and case notes for future reference and enterprise audits. The organization also developed monitoring dashboards that allowed it to measure processes against extensive performance metrics to ensure consistency and accountability.

Further, at each stage of the appeals and grievances process, both the inward and outward communications streams were initiated and recorded automatically. Pega centralized the process, which provided greater control and transparency, driving a superior member experience.

**OUTCOME:**

## HAP Exceeds Productivity, Time, and Accuracy Expectations

"Our success was almost immediate," says Garima Aggarwal, director of customer experience at HAP. When the insurer tracked productivity, timeliness, and accuracy, it discovered it had exceeded all of its metrics.

Process automation and standardization helped reduce overall cycle times, which

substantially improved timeliness metrics. Pega enabled HAP to track all of its case updates and documentation, and provided compliance tracking, which improved quality and accuracy scores.

HAP doubled its productivity because of process standardization. Pega's insights and guidance, based on its 360-degree view and simple and clear process, enabled the plan provider to improve service for members and providers alike.



Health Alliance Plan (HAP) is a subsidiary of the Henry Ford Health System (HFHS) – one of the nation's leading healthcare systems – that provides coverage to individuals, companies, and organizations. HAP partners with doctors, employers, and community groups to improve and enhance the overall health and well-being of every community it serves.



# MGEN MAKES THE DIGITAL TRANSFORMATION

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## Business Goals

- Connect and simplify the end-to-end customer journey across all engagement channels
- Provide proactive and personalized marketing, sales, and service
- Shorten time to market for offers and boost acceptance rates

## Results

- Provided immediate access to comprehensive prospect and customer composites
- Decreased sales scheduling cycle time 70%
- Reduced average handle time

- 
- Three million inbound calls
  - Six million Web interactions
  - 380,000 emails
  - One million branch visits annually
- 

“ Pega brings us a tremendous value ... it is a unified and integrated sales solution that enables us not only to sell more efficiently, but also to make a link between our front office and our back office. ”

**Alain Le Garrec**  
Marketing Manager, MGen



### CHALLENGE AND VISION:

## Retain Customers, Grow the Business, Transform

With mounting market pressure – new competitors, frequent regulatory change, decreasing product margins, and accelerating customer attrition – MGen knew it needed a strategy for enterprise transformation. The goal: retain customers and grow the business.

The health insurer needed a sales model that was seamless and coordinated across all communication channels (contact center, SMS, the Internet, independent agents, and its network of branch offices), as well as better targeted marketing and service activities. In addition to digitalization and personalization, these functions required operational efficiency and automation to improve performance during MGen's concentrated annual sales season.

Saddled with numerous legacy systems requiring renewal or replacement, MGen developed a transformation plan that called for a new CRM solution to support marketing, sales, and customer service, and provide state-of-the-art capabilities to quickly improve and modernize the customer journey.

### HOW PEGA HELPED:

## Used Pega CRM to Unify the Customer Experience

After embarking on a rigorous CRM selection process, MGen chose Pega for its proven ability to deliver quick

results, its omni-channel support and integration capabilities, and its breadth of CRM functionality, particularly its comprehensive customer composites that provide sales and service agents with deep customer insight.

MGen started with Pega Customer Service for Healthcare. The solution went live in just five months, with the customer 360-degree composites providing real-time data from 15 of the insurer's back-end systems.

Through Outlook integration, customer service representatives can now schedule sales appointments for and share information with the branch offices.

Next, MGen released the prospect 360-degree composite and automated the sales process. Pega was then linked to MGen's campaign and quoting tools, delivering the first end-to-end CRM experience to employees and customers alike.

### OUTCOME:

## Real-Time Insights Make Sales and Marketing Productive, Proactive

MGen's solution -- named LINK because it establishes links among all the company's systems and communication channels, and brings MGen closer to its prospects and customers -- has made MGen's sales and customer service capabilities more efficient, proactive, and personalized.

With LINK's cross-channel activity monitoring, MGen has moved away from mass-marketing, to targeted campaigns. With

shorter sales appointment scheduling times, MGen can also handle more prospects during its limited annual sales season. On track with its digital transformation plan, MGen will continue replacing CRM components with Pega, creating more links between its front and back offices and across the customer journey.

"We have a view on what's happening in the everyday life of the contact, a view on the opportunity, on the marketing campaign we launched," says Alain Le Garrec, marketing manager at MGen. "We can sell more ... and it is very well received by the business users. It has already changed our lives."



Founded in 1947, MGen is a non-profit organization dedicated to providing mandatory health coverage and supplementary benefits, including life and disability insurance to professionals in the fields of education, research, and culture. MGen enrolls nearly four million French citizens for coverage annually.



# CARE MANAGEMENT – WITH EMPATHY

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## Business Goals

- Create centralized case management for global care response
- Streamline operational processes
- Standardize the communications and technology infrastructure
- Re-engineer care response case management
- Consumerize applications

## Results

- 43% reduction in training time for new staff
- Productivity gain of two hours per shift per day
- Integration of 100-plus business applications

- 
- Over four million members, worldwide
  - 125 different countries across four continents
  - One million care providers worldwide
  - Five separate business units
- 

“ We can utilize Pega dynamic case management, plus all the expertise from the case managers in our emergency response center, to combine the best of both worlds. ”

**Jeff Ganser**

Director, IT Project Management, UHC Global

**CHALLENGE AND VISION:**

## Provide Streamlined, Empathetic Care Response Case Management

When it came to case management, UnitedHealthcare Global used a wide variety of legacy systems: over 100 business applications and more than 150 workflows.

In order to streamline case management, and deliver this service with the right blend of efficiency and empathy, UHC Global realized it faced a paradigm shift. The business had to rethink case management from the ground up so it could build a flexible, scalable system.

UHC Global's initial vision was to rebuild all of its legacy applications. Yet that effort was not feasible, in terms of both time and money. Instead, UHC Global decided that Pega's robust dynamic case management, along with its industry-leading capabilities, would allow it to integrate its dozens of legacy applications.

*“We thought, we can utilize Pega dynamic case management, plus all the expertise from the case managers in our emergency response center, to combine the best of both worlds.”*

**Jeff Ganser**

Director, IT Project Management,  
UHC Global

**HOW PEGA HELPED:**

## Applied a Consumerized, Dynamic Approach to Case Management

While attending PegaWORLD 2014, the design team from UHC Global learned about the power of Pega's dynamic case management. It became clear it could create an application that would:

- Orchestrate all of its existing applications
- Provide intelligent workflow
- Deliver a seamless, centralized solution for every user
- Allow case managers to apply their expertise

The new solution, called Concourse, provides a centralized dashboard – across five business units – to easily manage each case, enable seamless work and care transitions, and automate functions such as dynamic case risk assessment. Flexible and scalable, the solution also was built with consumerization in mind.

“We wanted this tool to work like other tools they're familiar with,” Ganser says. “People are familiar with Google Search. We wanted to make that really easy.”

**OUTCOME:**

## World-Class Solution for Worldwide Care

From the time it learned about Pega's dynamic case management through design,

development, and deployment, the UHC Global team delivered a world-class, worldwide solution in approximately 15 months.

Concourse supports case management for a customer base of four million members in 125 countries across four continents. In addition, it enables collaboration with over one million care providers around the globe, and eliminates silos across five business units within UHC Global.

The goal of consumerization is evidenced by the dramatic improvement in new staff training. Previously, training required 3.5 months; now, new staff is ready in just two months – a 43% improvement.

Additionally, every change across every response center for UHC Global garnered a two-hour productivity improvement with the elimination of tedious case management transfers, re-assignments, and information briefings.

“Going forward, Pega is like our conductor,” Ganser says. “It's the orchestrator of our systems.”



UnitedHealthcare Global is a part of UnitedHealthcare Group. It serves people in over 125 countries, including 4.6 million people with medical benefits, providing a comprehensive range of in-house, health, and mobilization capabilities. Additionally, UnitedHealthcare Global supports the health systems of individual nations with healthcare technology, financing, and delivery.



# STREAMLINING THE WAY TO SUCCESS

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## Business Goals

- Improve system access
- Streamline business solutions
- Consolidate enterprise tools and create a consistent design
- Create a standardized, reusable components repository
- Improve usability with intuitive, engaging applications

## Results

- Improved physician contracting cycle time nine-fold
- Established BPM enterprise standard
- Enhanced relationship with members and providers

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▪ User base increased by 200,000 ▪ More than 39 programs delivered ▪ 700+ Pega employees trained

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“ *Pega has been a flashlight for us in the darkness.* ”

**Laura Ciavola**

Senior Vice-President, Medicare and Retirement, UnitedHealthcare





**CHALLENGE AND VISION:**

## Simplify Processes to Improve Efficiency, Customer Service

UHG was experiencing significant challenges with process complexity, including multiple systems of record, end-to-end visibility constraints, and a lack of reusable components. The multiple tools used across the enterprise were not intuitive, engaging, or user-friendly.

UHG's vision was to introduce a business transformation that would improve its operational capabilities. This included better alignment of its business functions, lower administrative costs, socialization capabilities, and improved training.

Such capabilities would not only streamline UHG's call center and operations processes, but they would also provide it with a center of excellence to allow the organization to respond quickly and improve accuracy while remaining a leader in the healthcare industry.

**HOW PEGA HELPED:**

## Streamlined Processes, Improved Customer Experience

UHG selected Pega to help it track member and provider appeals, grievances, and disputes across multiple business segments. UHG also increased auto-adjudication for complex claims, and improved the efficiency of its military and

veterans referral/utilization management through workflow automation and streamlined processes.

UHG transformed the provider self-service journey, and created a workflow tool to support physician contracting operations and provider demographic maintenance. The prior authorization system used by the pharmacist and technician help desk was also enhanced.

During the transformation, UHG modernized and simplified the Medicare and retirement electronic enrollment experience for consumers and sales agents by creating a uniform, product-agnostic solution.

Lastly, the team integrated a customer service application that provided access to relevant information from multiple sources through a single tool encompassing workflow and case management, enabling delivery of quality service.

**OUTCOME:**

## Workflows Standardized, ROI Achieved

Upon implementation, UHG created an end-to-end workflow ecosystem across four different business units, with the implementation of more than 30 programs with substantial ROI. During the journey, UHG increased its Pega user base to 50,000 over large multi-year programs initiated to improve the provider experience. The team also doubled the user base to 200,000 users over a few years.

To date, since its strategic partnership with Pega, UHG has established a business process management center of excellence (BPM CoE). The company created BPM-focused programs across over 39 groups, and continues to socialize and evangelize BPM as a discipline across the enterprise.

## UNITEDHEALTH GROUP®

United HealthGroup (UHG) serves more than 85 million individuals in the U.S. and 125 countries worldwide with health benefits and services. The organization's 2013 revenues were \$122.5 billion, and it ranks No. 14 in the Fortune 500. UHG was named by Fortune as the world's most admired company in the insurance and managed care sector in 2011, 2012, 2013, and 2014.



## INSURANCE:

# EXECUTIVE FOREWORD



The insurance industry faces unprecedented change and significant new opportunities. The opportunities arising from this “new normal” are myriad – new forms of risk such as cyber intrusion, emerging Insurtech competitors, and changing customer expectations. Successful companies will need to automate legacy processes and adapt to the evolving insurance marketplace. This will require insurance executives to meet the expectations of consumer and business customers by delivering highly personalized and efficient customer service. In addition, the growing ‘sharing’ economy will drive significant transformation in the personal and commercial risk markets. Managing this transformation process will be critical to the strategic success of insurance industry participants.

The insurance industry is confronting these challenges directly, by streamlining business processes to ensure that the right information is delivered to the right person at the right time – at the speed of digital – to improve efficiency and effectiveness. Increasingly, this information will be captured through the Internet of Things (IoT) including smart devices, autonomous vehicles, and wearable technologies. Leading insurers are planning from the “outside in” instead of the “inside out” adopting a customer-centric model with a rapid and cost-effective deployment capability

Pega continues a long history of delivering innovative solutions that enable insurers to address these market opportunities. With the critical importance of the customer connection, Pega’s clients are strengthening distribution channel productivity, and providing independent and captive agents with the solutions they need to meet client needs while using advanced capabilities to market, cross-sell, up-sell, and retain clients. The goal is to balance profitable growth, maintain superior distribution results and provide world-class customer service.

Please read the following customer case studies that illustrate how Pega has delivered measurable results. We look forward to sharing our experience and solutions to enable you to achieve your business objectives. If you have any questions, please contact me directly at [james.ryan@pega.com](mailto:james.ryan@pega.com).

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**Jim Ryan**

Vice-President, Global Insurance Business Line Leader, Pegasystems



# AEGON REDEFINES CUSTOMER SERVICE

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## Business Goals

- Create a customer-centric experience
- Improve contact center efficiency and effectiveness
- Provide service representatives with a simpler, intuitive dashboard that gives them a 360-degree customer view

## Results

- Increased Net Promoter Score from -28 in 2012 to 18 in 2015
- Improved first-call resolution 60% between 2012 and 2015

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“ *It wasn't just about reducing the cost of service; we also saw improved customer experience. Our net promoter scores absolutely shot up. First-call resolution, which was about 50% before we implemented Pega in the contact center, jumped to 80%. ”*

**Nick Hill**  
Pega Delivery Centre Manager, Aegon

**CHALLENGE AND VISION:**

## Become a Customer-Centric – and Efficient – Organization

Facing rising expectations for efficient, responsive, personal service, Aegon wanted to fundamentally improve the customer experience.

As an industry leader, Aegon has always been committed to delivering exceptional customer service. However, in assessing the “new normal” of customer service expectations – as well as its own desire to set the pace as a leader – Aegon realized it was time for a change.

Working with Pega, Aegon focused on the key to delivering superior customer service: its customer service team. This “front line” of engagement needed the right systems – the IT tools and equipment – to do their jobs in a better way.

Aegon embarked on an effort to automate processes and streamline and rationalize the information used by its customer service representatives, using Pega’s knowledge management solution to provide contextually relevant information.

**HOW PEGA HELPED:**

## Orchestrated, Streamlined the Customer Journey

Pega helped Aegon develop a core work management solution, from kicking off the claims process, to handling customer communications, to setting up new policies and digital accounts.

The system was designed to ensure the right work is sent to the right agent at the right time, based on the priorities of the work. It also reduces manual tasks through automated processes.

No longer do customer service representatives need to hunt through multiple policy databases to pull relevant customer information.

Working with Pega, Aegon now provides a 360-degree perspective of the customer, enabling service reps to not only respond more quickly to a customer request but to also gain perspective on customers via their past interaction with Aegon.

“*Pega is absolutely the glue that connects the customer engagement layers at the front end to the back-office systems.*”

**John Davidson**

Head of IT strategy & architecture, Aegon

**OUTCOME:**

## Empowered Agents; Double-Digit Increase in Customer Satisfaction

The Aegon/Pega collaboration significantly lowered costs and increased customer satisfaction. Empowered with streamlined information, and an intuitive, easy-to-use desktop interface, agents can now re-focus their efforts from manual data-gathering, to providing efficient, context-sensitive, personalized support.

First-call resolution has increased from 50% to 80%, and the net promoter score rocketed from -28 in 2012 to 18 in 2015. Employee engagement scores also rose from 33% to 60% in that timeframe.

“The fact that we’re able to do all our servicing in Pega – and all our CSRs can see everything about our customers in that system – enables us to bring all this together in a much more customer-centric way,” says Nick Hill, Pega Delivery Centre Manager at Aegon.

Instead of the old paradigm of customer service that is inherently transactional and reactive, Aegon has defined a new standard of service in the insurance industry that is thoughtful, responsive, and comprehensive.



Aegon is an international provider of life insurance, pensions, and asset management, with approximately £542 billion in assets under management. The insurer has businesses in over 25 countries around the world.



# CSAA INSURANCE GROUP: TRANSFORMING THE CUSTOMER EXPERIENCE

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## Business Goals

- Delight customers with exceptional service experience
- Improve agent satisfaction and decrease training time
- Improve agent efficiency, (e.g., improved first contact resolution, decrease average handle time)
- Increase customer engagement and enhance cross-sell/upsell opportunities

## Results

- Significantly improved net promoter score (NPS) and customer satisfaction
- Delivered a simplified, intuitive desktop, making it easier for agents and improving satisfaction
- Improved average handle time (AHT) and first call resolution
- Rapid implementation, just over six months exceeded goals

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“ *Our service center runs in the region of five million calls a year. A year ago ... we weren't able to acknowledge how long a customer had been an AAA member, and now we can. We are leveraging information more effectively so we can deliver that perfect customer experience.* ”

**Steve Rowbury**  
Business Owner, CSAA Insurance Group



**CHALLENGE AND VISION:**

## Increase Customer Centricity

As the insurance group for more than 2.7 million AAA members, and \$3.2 billion in net written premiums, CSAA needed to transform its customer experience to drive loyalty and growth. The goal: Provide a customer experience that was simple, proactive, and personal.

CSAA realized it was imperative to create a simpler, intuitive agent desktop. Like many leading insurers today, CSAA was faced with the challenge of legacy IT systems that hosted customer data in multiple systems. As a result, agents often had to spend critical seconds and minutes pulling customer data. An improved agent interface would provide faster access to critical customer data, enabling agents to focus on customer needs. Rather than agents needing to hunt through various policy administration systems to pull together disparate data, CSAA envisioned them refocusing their time on more value-added activities, such as listening to customers, addressing their needs and even providing cross-sell opportunities.

Together with Pega, CSAA set out to transform its customer experience with an integrated customer service and sales implementation powered by the Pega Platform.

**HOW PEGA HELPED:**

## Created a Streamlined, Holistic View of the Customer

To radically improve the customer experience, CSAA realized it had to shift its perspective from “inside-out” to the “outside in.”

To achieve this goal, CSAA worked with Pega to redefine its processes along the entire customer journey. CSAA ultimately determined that it needed to not only change its customer service processes, but also to use the Pega suite of applications all along the continuum of interaction with its customers: from sales to customer service.

Working with Pega, CSAA consolidated data from multiple policy administration systems, simplified complex internal processes, and created a “single view” of the customer. For the first time CSAA was able to track its customer interactions.

Focused on results, CSAA completed implementation of the comprehensive Pega solution that was successfully brought to market within a short six month timeframe.

The journey, according to CSAA, was as important as the outcome. “The Pega People were fantastic. And people and culture are critical in any engagement like this.” said CSAA’s Steve Rowbury.

**OUTCOME:**

## Improved Efficiency, Customer and Agent Experience

CSAA and Pega have transformed agent-customer interactions, from being a purely transactional experience to a more efficient, effective customer-centric engagement.

With a simplified, intuitive desktop, CSAA has empowered its agents and achieved a renewed focus on the customer. Armed with customer information on prior interactions, as well as relevant customer insights, agents now have the context to deliver great customer service. Agents can now spend time improving customer satisfaction and loyalty as well as boosting revenue through relevant cross-sell and upsell efforts.

The result for CSAA has been tremendous. Even in the context of multiple millions of calls per year, the organization has seen increased efficiency, lower average handle time (AHT), and improved customer satisfaction and higher net promoter scores.



With its more than 100 years of experience in the insurance industry, CSAA Insurance Group is one of the top 20 personal lines property and casualty insurance groups in the U.S.



# ENSURING A SUPERIOR AGENCY CHANNEL

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## Business Goals

- Delight customers and agents with a streamlined customer experience
- Anticipate customer needs and move from “reactive” to proactive”
- Improve agent loyalty
- Attract new agents
- Increase upsell and cross-sell

## Results

- Launched a new agent portal within 15 months
- Rolled out to 135,000 agents
- Enhanced experience for agents
- Improved quality of service for customers

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“ *We’re redefining how we interact with our agents and how agents interact with their customers, the insured.* ”

CEO, International Insurance Company





#### CHALLENGE AND VISION:

## Empower Agents, Drive New Business

In a competitive market that is highly focused on the independent agent, insurers compete not only for the client's business but also for the relationship and business of the agent. To remain at the competitive forefront, this international insurance carrier decided it needed to deploy a state-of-the-art agency portal that optimized both the agent and client experience.

This included giving the agents tools to help them sell effectively with next-best-action recommendations, insight into clients' accounts and requirements, and an effective toolset to help them be the most effective and business-friendly insurer in Japan. By helping the agent to be successful, the insurer will generate long-term, profitable relationships with its extensive agency base.

#### HOW PEGA HELPED:

## Redefined Processes and Revolutionized the Business

In order to deliver a truly exceptional customer experience, the insurer sought to fundamentally re-examine and revolutionize how it supports agents and enables their success.

Becoming a successful agent takes time to learn the profession. Sales processes

can be complex, and a significant amount of data is required to underwrite risk correctly and profitably. The insurer's agent solution was built to be intuitive and easy to use in order to reduce the agent's time and effort in working with clients and generating new sales.

This agent solution extends this level of support to managers, who have insight into agents' books of business, enabling them to point out opportunities to agents and help them develop into successful producers.

The insurer developed the solution on Pega's Sales Automation for Insurance application. The collaborative process engaged agents and business stakeholders to identify core requirements. The result was a solution that addressed all business needs and was completed in an accelerated timeline.

#### OUTCOME:

## Personalized Engagement, Satisfied Agents and Customers

Working with Pega, the insurer has transformed the interaction between a network of independent agents and end-customers from a transactional exchange to a personalized, responsive, customer-focused experience.

By simplifying the agent desktop, and providing easy access to critical customer sales information, the insurer has been

able to drive preference and strengthen the relationship with its distribution channel of independent agents.

Simultaneously, the insurer has empowered those agents to become more responsive to the end-customer through optimized sales processes that facilitate cross-sell and upsell based on the customer's unique situation. The result: Enhanced experience for agents, and improved quality of service for customers.

### GLOBAL INSURANCE COMPANY

Results achieved by a global insurance leader, with over 160 branches, 12,000 employees, and a network of over 135,000 professional independent insurance agents.



# DELIVERING EXCEPTIONAL CUSTOMER SERVICE

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## Business Goals

- Reduce handle time and call volume
- Improve employee and customer satisfaction
- Reduce cost and training time
- Increase cross-selling

## Results

- Multi-million dollar savings
  - Improved customer satisfaction
  - Lower average handle time and costs
  - Increased employee satisfaction
- 

*Working with a leading U.S. insurance carrier, Pega streamlined the customer service desktop, reducing over two dozen screens down to a handful, delivering improved efficiency, reduced training time, and greater business flexibility.*



#### CHALLENGE AND VISION:

## Redefine Agent Experience to Deliver a Better Customer Experience

To remain an industry leader, this leading insurer sought to improve its customer experience by fundamentally redefining the agent experience. It wanted to simplify information flow to guide agents so they could focus on customer needs and deliver fast, responsive customer service.

To accomplish this, the insurer faced a familiar challenge: the need for agents to sort through multiple databases and administrative systems to locate critical customer information. As a result, agents were spending significantly more time gathering information than listening and responding to the needs of their customers.

Another challenge common to insurers - the cost of training new customer service representatives. In order to scale its operation, this insurer needed to significantly streamline training processes to reduce ramp-up time and training costs.

Working with Pega, the insurer sought to empower customer service agents by bringing together customer data from multiple different sources including policy, customer, and claims. By simplifying this information flow, and providing guidance from this data, Pega enables representatives to respond more quickly and efficiently - delivering consistent, exceptional service.

#### HOW PEGA HELPED:

## Improved Agent Efficiency to Drive Customer Satisfaction

In selecting Pega, the insurer understood that Pega's scalable, efficient platform could deliver business results.

This confidence was based on a successful prior Pega implementation for business process optimization, which streamlined and automated multiple back-office processes resulting in improved efficiency and customer satisfaction.

In Pega, this insurer found a partner that let it break down silos between internal groups, move information more quickly, and create intuitive, easy-to-use applications that required little training while delivering superior business results.

By leveraging Pega, the insurer successfully advanced on the path of digitization to improve processes and increase customer satisfaction.

Using the Pega 7 Platform and Pega Customer Service for Insurance, the insurer streamlined and simplified the data flow to agents. It did this by automating its existing databases to provide a 360-degree view of customers, and utilize critical data to let agents address and anticipate customer needs.

#### OUTCOME:

## Cost Savings, Productive Agents, Happy Customers

Working with Pega, the insurer transformed the customer experience by creating an intuitive, easy-to-use agent desktop.

Service representatives now spend less time searching for information, empowering them to better respond to customer needs. The improved quality of engagement has resulted in greater opportunities for cross-sell and upsell.

Through this implementation, the insurer reduced over 30 screens to fewer than a dozen. The intuitive and simplified portal has reduced training time and enabled better manageability. Each agent can now handle an increased number of calls in one application - resulting in improved productivity, especially for new hires.

In all, the insurer realized the following benefits:

- Multi-million dollar efficiency savings over several years
- Reduced average handle time
- Lower back-office mail processing expenses
- Significantly improved the customer experience
- Increased employee satisfaction

### LEADING U.S. INSURANCE CARRIER

One of the largest life insurance carriers in the world.



# DRIVING GLOBAL INSURANCE INNOVATION

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## Business Goals

- Radically simplify the historically lengthy settlement process and improve efficiency
- Ensure regulatory compliance
- Enable tighter controls on capital for brokers and insurers
- Drive global innovation in insurance

## Results

- Improved client operations 50%
- Improved regulatory control
- Increased application security
- Reduced settlement time from months to seconds

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“*The power of Pega and Netsett is that for intra-group transactional processes, we can take millions of transactions and auto-match them together. This is a process that can take many weeks or even months, and we do it within seconds.*”

**Sean Norris**

Director of Netsett at Xchanging

**CHALLENGE AND VISION:**

## Speed Transaction Settlements for the Digital Age

Xchanging occupies a unique place as part of the clearinghouse system of Lloyd's of London, one of the oldest and most revered names in insurance.

With digital change roiling the insurance industry, and an increasingly digitized insurance marketplace, Xchanging faced growing expectations for more responsive, efficient service between brokers and insurers.

To better compete in this environment and retain its leadership status, the business solution service provider realized it needed to undertake a step-change to improve the speed at which transactions could be settled between parties.

Together with Pega, Xchanging set out to improve its operations and reduce the time required to achieve a "net settlement" of an insurance claim.

**HOW PEGA HELPED:**

## Transformed Operations, Improved Processes

Using Pega 7 to power its London market insurance platform, Netsett, Xchanging worked to reliably improve the speed of complex settlement transactions between brokers and carriers.

Working with Pega, Xchanging effectively transformed its operations to improve processes, streamline internal steps, and reduce settlement time.

**OUTCOME:**

## Dramatic Improvements in Settlement Speed, Customer Outcomes

Pega has helped Xchanging streamline and automate complex payment reconciliation for the world's largest insurance carriers.

The solution – which was delivered ahead of schedule – improved Xchanging's client operations 50%, boosted regulatory control, and increased application security. It also dramatically reduced transaction settlement times from months to seconds.

With Pega, Xchanging can now take millions of transactions and auto-match them together. The result: A process that used to take weeks or months can be done in a matter of seconds. For Xchanging customers, the business benefits include:

- Improved cash allocation
- Faster reconciliation
- Improved policy administration

In addition, the Pega 7 platform enables Xchanging to provide business flexibility and choice to customers, as Netsett runs either in the cloud, on-premise, or a combination of the two.



Xchanging is a global provider of technology-enabled business services, with expertise in insurance. The company manages the bureau service for Lloyd's of London, an insurance market that controls more than £30bn in annual premiums globally.





## LIFE SCIENCES:

# EXECUTIVE FOREWORD



Biopharma and medical device companies have always been focused on improving the health of their customers. With the dramatic changes in the healthcare landscape however, they must forge closer relationships with patients. Rather than just delivering a pill or device, life sciences leaders are reaching out directly to patients and engaging them with comprehensive customer journeys to improve individual health and outcomes.

With tech-savvy customers and digital technologies — from social platforms to connected devices — it's never been more possible to provide a more holistic and integrated approach to patient services, such as providing information, financial assistance, and treatment adherence. Making the shift to patient centricity, however, is not easy. Life sciences organizations need to deliver a new customer experience while also dealing with safety and regulatory requirements in a big data and social media-connected world, not to mention improving R&D throughout to speed time to market in an age of personalized medicine.

By harnessing technology in more powerful ways, life sciences businesses can seize the unprecedented opportunities of the digital age. Pega is partnering with life sciences leaders to orchestrate patient and provider journeys across functional areas, gaining a true understanding of customer needs and ultimately improving outcomes by delivering a better patient experience. And in R&D, Pega is helping our customers reduce the time and cost of bringing new products to market through automation in the lab, and through operationalized analytics in clinical trials.

I invite you to read about how Pega is partnering with world-class life sciences businesses to embrace the new age of healthcare and profitably deliver new value to customers. Please feel free to contact me at [ed.chase@pega.com](mailto:ed.chase@pega.com) with any questions you might have.

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**Ed Chase**

Director, Life Sciences Solutions, Pegasystems



# 75% FASTER TIME TO MARKET FOR PATIENT SUPPORT SERVICES

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## Business Goals

- Create a single, scalable clinical platform
- Ensure rapid development and deployment
- Provide holistic, patient-centric view
- Enable highly personalized views and workflows

## Results

- 5X faster enrollment
- 50% cost reduction
- 75% improvement in time to market

- 
- 25 million participants
  - Approximately 5,000 clinical users, including 2,000 nurses 50+ physicians
- 

“Pega allows us to respond to customers and medical innovations quickly, giving Alere a clear competitive advantage around speed and innovation.”

Chief Information Officer & President Technology Solutions, Alere





**CHALLENGE AND VISION:**

## Create a Single Patient Services Platform

As a global leader in point-of-care diagnostics and personal health support solutions, Alere helps individuals take charge of improving their own health and quality of life at home.

Alere adopted a strategic vision to create a single clinical platform, called Apollo, to leverage business process management (BPM) software combined with a patient-centric portal. The portal needed to be highly personalized, depending upon the patient's health status. It also needed to handle real-time data feeds from the consumer's biometric monitoring devices and medical/pharmacy claims to create a holistic view of the patient.

**HOW PEGA HELPED:**

## Accelerated Design to Production Time for Platform and Patient Portal

Initially, Alere considered an internal Java development effort to build Apollo, but the estimated time to market was unacceptable. Instead, Alere chose Pega for its rapid delivery, real-time rules processing, and customization capabilities, enabling business and IT to collaborate. Using Pega, a team of business users and subject matter experts were able to deliver Apollo – from design to production – in less than half the time estimated for the internal development effort.

The result included significant new capabilities, such as smartphone mobility, as well as nearly all the functionality of the six existing clinical platforms Apollo was replacing. The new capabilities included disease management, patient case management, and wellness. Subsequent enhancements took as little as six weeks to bring to market.

**OUTCOME:**

## Robust Services Platform for 25M Participants

Apollo is Alere's third-generation platform for care management. The health management system supports care management with device support (e.g., weight scales, blood pressure cuffs, glucometers) for personal health and fitness monitoring, case management, health and wellness, and provider integration. The platform's health portal facilitates provider and participant engagement, including mobile access to the portal's personal health record (PHR).

A key aspect of the new platform is functionality that dynamically creates highly specialized workflows. Using Pega's modular approach and dynamic rules management capabilities, Apollo's care plans are automatically modified as new data is obtained.

The new platform has scaled up well, with more than 25 million participants and approximately 5,000 clinical users, including over 2,000 nurses and more

than 50 physicians. More than 300,000 data records from biometric devices and reference labs are processed daily, and 100 million transactions are processed monthly.



Alere Health, now part of UnitedHealth Group, provides personalized support, condition management, case management, well-being, wellness, and women's and

children's health services. It provides these services, on behalf of Alere's clients, to patients who rely on these services to help them maintain and improve their health.



# FOCUSING ON THE PATIENT JOURNEY

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## Business Goals

- Drive actionable change and process improvement in omni-channel communications
- Deliver individualized support to patients
- Integrate customer databases and third-party service for patient-journey integrity

## Results

- Improved quality and value of patient interactions
- Delivered support for rapid changes around products and indications
- Enabled more tailored interactions based on patient data and history

- 
- 150 healthcare professionals
  - 30 languages across 100 countries
  - 30 million multi-channel interactions yearly
  - 16 of the world's top 20 pharmaceuticals
- 

“*The healthcare environment is rapidly and constantly evolving. We needed technology that would break down information silos in order to obtain valuable customer insights that our trusted advisors could leverage to improve the [patient] journey.*”

**Amit Rajaram**

Director, Pega Solutions, C3i Healthcare Connections (C3iHC)



## CHALLENGE AND VISION: Follow Each Patient's Journey Anytime, on Any Channel

In an era of personalized care, C3iHC recognized the need to provide deeper insights to its customer-facing experts to differentiate itself as a trusted advisor to patients.

To effectively engage patients and healthcare providers across a range of service types, C3iHC had to balance human interactions with scalable, cross-channel, decision-managing technologies.

C3iHC also wanted to help patients comply with their prescribed therapies, which required the ability to quickly determine and deliver the next best steps for patients, and provide context and continuity across multiple interactions for each patient. Such improved patient engagement would result in better adherence and outcomes.

The current system required employees to manually review data to personalize a complex journey of patient care.

C3iHC's vision was to follow its clients' patient journeys within any channel. The organization needed a solution that could provide insights so its experts could focus on the patient.

## HOW PEGA HELPED: Individualized Patient Services

Working with Pega, C3iHC implemented a comprehensive patient and healthcare provider solution, with an emphasis on product safety, medical information, patient support, and adherence.

Named CaseTrack360, the system enables access to any service through the same platform, from medical information to adverse event reporting. It is also designed to scale operations by leveraging common components across the customer base, reducing development and client onboarding times.

With the system, C3iHC can quickly adapt as new requirements and regulatory guidelines emerge. Agents no longer need to manually switch between systems, and they can access patient interaction data across platforms.

C3iHC can now deliver medical information, health coaching, patient assistance, adherence, and complaint/adverse event management services for new customers, products, therapies, information, and regulations. It now offers a more engaging, patient-centric experience, while improving operational efficiency.

## OUTCOME: Integrated Process Innovation for Improved Health

C3iHC can now engage better with patients, and provide more value for

customers. Results include an over 64% appointment confirmation rate, value-add support for over 70% of engagements, 100% identification of adverse events and product quality complaints, omni-channel interaction, intelligent system guidance, and better auditability. Further, 80% of calls are now answered in 20 seconds.

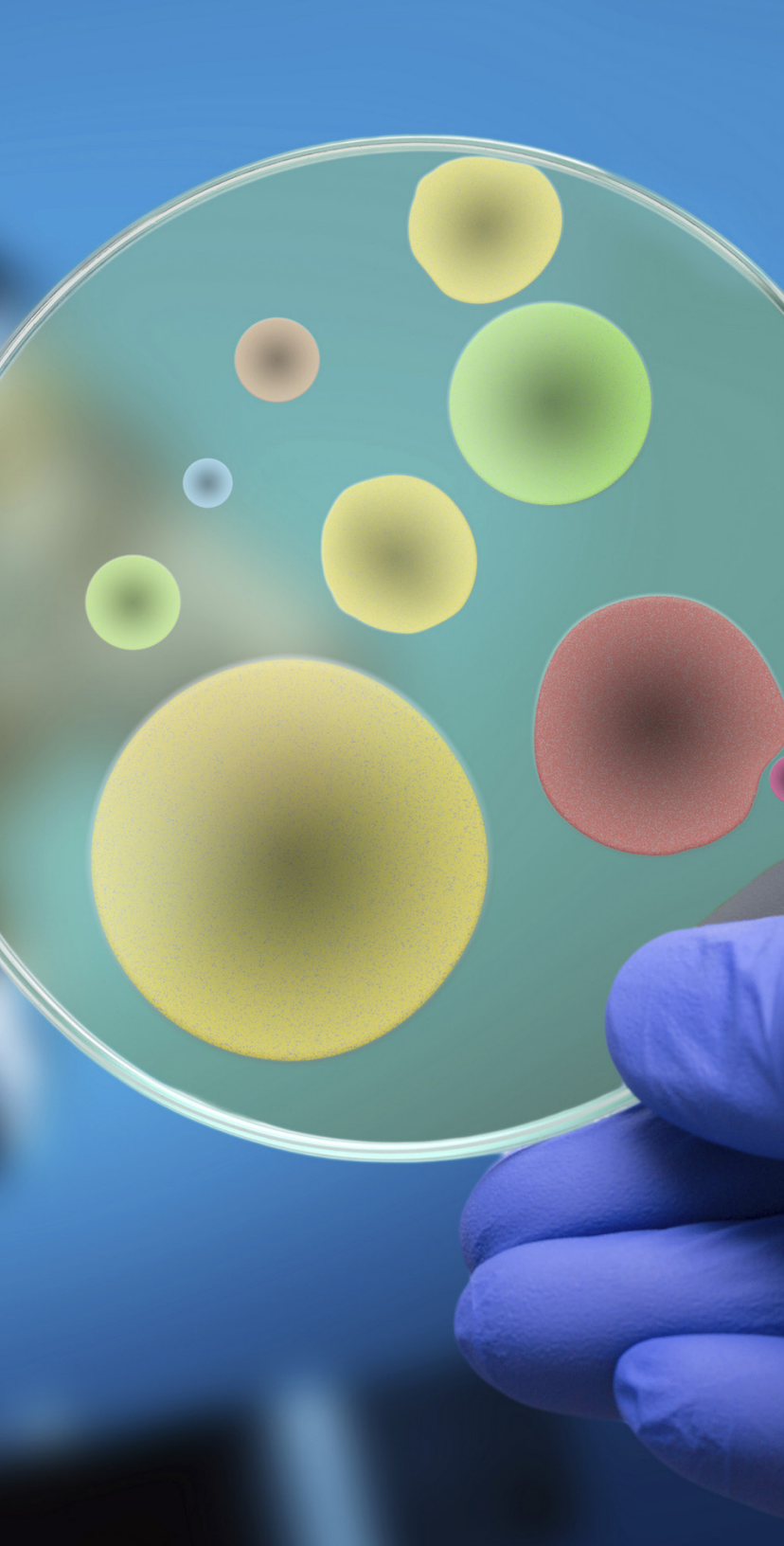
The system leverages information across various silos, enabling advanced insights to manage complex interactions, HIPAA compliance, and meaningful-use data. CaseTrack360 enables case intake and automates with business rules to reduce training time, improve operational efficiency, manage timelines and deadlines, and support regulatory compliance.

*“ With Pega, our specialized service agents can now focus on what matters most – the patient... As trusted advisors, we provide our patients with the premium level of quality service in any channel. ”*

**Kevin Connolly**  
Vice-President of Account Management,  
C3iHC



C3i Healthcare Connections, a division of Telerx, is an industry-leading business process outsourcer specializing in multi-channel engagement of patients and healthcare professionals, and enterprise personnel, via a network of global contact centers.



# REDUCING THE TIME AND COST OF CLINICAL TRIALS

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## Business Goals

- Automate late stage clinical trial processes
- Ensure FDA compliance
- Reduce paper-based processes and manual steps
- Speed site selection process

## Results

- Reduced time and costs related to site selection
- Ensured compliance with regulations
- Increased transparency and reporting
- Turned site selection process into competitive differentiator

- 
- Multiple concurrent studies Hundreds of requirements per site
  - Seamlessly managing global complexity and regulatory variations
  - Hundreds of prospective sites per study
  - Built-in audit trails and compliance
- 

“ Pega’s solution makes cumbersome, manual, and critical tasks supporting late stage clinical trials easier, faster, more seamless, and more transparent. With Pega, we ensure rapid selection of appropriate sites and FDA compliance, while reducing overall costs and speeding time to trial. ”

CTMS Executive, Global CMO, Global Contract Research Organization



**CHALLENGE AND VISION:**

## Revolutionizing Clinical Trial Operations

This global contract research organization (CRO) struggled to efficiently complete tasks for clinical trials. The regulations and multiple requirements associated with the site selection process required significant manual effort and tracking.

The site selection process was slow due to the volume of manual work and FDA-mandated regulations. Without efficient processes, the CRO was unable to effectively deliver status reports to sites and clients and was not able to maximize time or revenue.

Existing Clinical Trial Management Systems (CTMS) were not able to automate or track work, so the CRO could not guarantee that the sites met FDA requirements. Instead, each site had to confirm that they had met the hundreds of requirements and provide the necessary documentation on their own, resulting in incomplete submissions and missed deadlines.

Because there was no automated communication between the CRO and the sites, there was no easy way to track and notify sites of their status during the selection process. The CRO's team was forced to manually review each submission, a time-consuming and tedious process.

The CRO knew that by automating its existing manual procedures, it could save time, speed up the site selection process, and improve communication.

**HOW PEGA HELPED:**

## Automated Late-Stage Clinical Trial Workflows

The CRO chose the Pega platform to automate its late-stage clinical trial workflows.

By eliminating manual spreadsheets, streamlining processes, and ensuring greater visibility into each task, the CRO is now able to quickly handle complex activities and at lower overall costs. Pega integrates with clinical systems and manages the department's email, fax, and paper-based communications internally and externally. Pega's Process and Case Management solution facilitates design and updates, while Pega's Build for Change capabilities allow the CRO to quickly adapt to new customer and regulatory requirements.

The new solution has enabled the CRO to move its documentation request and review process online. This allows the CRO to easily track each site's submission, report on status, and update relevant parties leveraging event-based triggers. The improved process eliminates guesswork, re-work, and missed deadlines that could delay or hinder site selection or otherwise disqualify sites from the review and from participating in the trial.

**OUTCOME:**

## Streamlined Processes Improve Transparency, Lower Costs

By enabling rapid and collaborative delivery, Pega enabled the CRO to quickly deploy the solution, achieving rapid time-to-value. The company reports reduced use of paper-based documentation and less manual intervention, ultimately resulting in lower overall costs. Improvements to the site-selection process also help provide a better experience to study sites and study sponsors. This helps differentiate the CRO from its competition. The CRO is able to ensure FDA requirements are met for site compliance and data integrity, and is able to ensure critical intellectual property is closely guarded via secure processes and document management – another important competitive differentiator.

### GLOBAL CONTRACT RESEARCH ORGANIZATION

With more than 6,000 staff operating in over 100 countries across six continents worldwide, this large contract research organization (CRO) works with pharmaceutical and biotech companies both large and small, providing scalable services to fit the size of any clinical trial, from Phase 1 through Phase 4.



# REDUCING OPERATIONAL COSTS \$4.3 MILLION

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## Business Goals

- Streamline healthcare provider (HCP) engagement processes
- Comply with global transparency regulations
- Bridge multiple systems with an efficient, user friendly application
- Improve operational transparency and audit capabilities

## Results

- \$4.3 million in annual savings
- Eliminated 72,000 hours of manual effort
- Enabled transparency and compliance with regulatory reporting requirements
- Enabled holistic view of all HCP engagement activities across all functional areas

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Over 2,000 salespeople use the system   ▪ Manages more than 250,000 HCP engagement requests per year

- 5+ years since go-live, with many incremental enhancements

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“ *Using Pega, we now have accurate, controlled data and the ability to run business reports based on ongoing interactions.* ”

Global Compliance Manager, Global Medical Device Manufacturer



**CHALLENGE AND VISION:**

## Improve Efficiency, Transparency of HCP Engagement

Life sciences companies interact with healthcare providers (HCP) through many channels - consulting, research, clinical studies, grants, donations, evaluations, and educational items. Sales, marketing, and compliance personnel struggle to collaborate and ensure transparency across these disparate activities.

Lack of control and oversight can create challenges to compliance with regulations like the Sunshine Act, and reduce overall effectiveness and efficiency of sales and marketing activities.

The systems and people behind HCP engagement activities are typically disconnected, lacking both transparency and synchronization.

This medical device manufacturer needed a solution that could bridge many systems across functional areas. The solution needed to be sophisticated and scalable enough to handle global and brand variations, yet also be simple and efficient.

The company's vision was for a comprehensive, agile solution allowing for end-to-end integrated workflow, capture of accurate data, audit and reporting capabilities, and efficient, user-friendly processes, with a rapid ability to adapt to new regulations.

**HOW PEGA HELPED:**

## Developed a Connected HCP Engagement Layer for All Interactions

The solution, delivered with Pega's platform, Life Sciences Foundation, and Aggregate Spend Application, provides a comprehensive HCP engagement platform that can be easily modified and fine-tuned to ensure the company meets its business needs today and in the future.

The resulting business application captures the required information regarding engagement plans, budgets, venues, agreements, events, and covered recipient database. It also captures their product master file from sales, marketing, compliance staff, and supporting systems. Additionally, the solution facilitates the governance of spend thresholds, fair market value, operational rules, HCP portals, and the processes and procedures that must be followed by internal users and the company's external partners when interacting with one another regarding products or transfers of value.

Pega's platform and applications uniquely provided the company with the ability to integrate all of its disparate systems, handle the variation in requirements across programs and interaction types, and improve efficiency for sales reps and supporting personnel.

**OUTCOME:**

## Improved Compliance, Efficiency and Customer Engagement

With an initial nine-month implementation, the Pega solution has now been in production since 2011 and has seen numerous upgrades and enhancements since. The current system has been upgraded to the Pega 7 platform. It has also migrated from initially being managed on premise by the customer to now residing on the Pega Cloud.

With Pega, the organization is now in a solid position to easily and rapidly provide all required information in support of transparency regulations. It has also increased efficiencies and standardized HCP engagement processes across its enterprise. Approximately 250,000 requests get initiated annually with 2,000 salespeople using the system monthly. As a result of the new application, the company estimates an incremental \$4.3 million in savings based on improved efficiencies and productivity among the sales staff.

These benefits also enable the company's sales teams to engage more seamlessly with HCPs, providing customers an overall improved interaction with the company.

### GLOBAL MEDICAL DEVICE MANUFACTURER

As one of the world's leading manufacturers of diagnostic imaging equipment, this company produces conventional and digital X-ray, computed tomography (CT), magnetic resonance (MR), ultrasound, positron emission tomography (PET), and nuclear medicine. The company earned \$158 billion in 2014 and is committed to developing innovations for rural and emerging markets that help clinicians and healthcare providers deliver quality care at lower costs.



# MANAGING DRUG SAFETY ACROSS GLOBAL PARTNERSHIPS

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## Business Goals

- Reduce costs of PVA creation and management
- Reduce manual work from PVA tracking, data collection, reporting, and content distribution
- Improve transparency for compliance and oversight
- Reduce costs of duplicate/overlapping/disconnected systems

## Results

- Moved exchange with partners to central organization
- Eliminated manual tracking of periodic reviews
- Reduced reporting effort from five days to 0.5 days
- Improved ability to demonstrate compliance
- Significantly reduced response time to information requests during inspections and audits

- 
- Supporting all Pfizer products and partners globally
  - 5,800 products
  - 500 partners
  - 250 markets
  - 650 pharmacovigilance agreements
  - Integrated with multiple Pfizer enterprise systems
- 

“ We’ve been able to centralize the tracking of exchange of adverse events, aggregate reports, and safety signals with our partners in our global group. That was only made possible by having the efficiencies and the automation that the system brought. ”

**Jeffrey Hanson**

Senior Information Analyst, Pfizer Inc.



**CHALLENGE AND VISION:**

## Automated Oversight of Pharmacovigilance

Like all pharmaceutical companies, Pfizer is responsible for constant and comprehensive oversight for the safety of its products. This effort-intensive responsibility becomes even more complex and challenging when it comes to global partners.

From a practical perspective, Pfizer needed to manually manage pharmacovigilance agreements (PVAs) with its hundreds of global partners and actively track all PV activities defined by those PVAs for thousands of products worldwide. Strict regulatory oversight from health authorities and frequent reporting and audit requirements means that Pfizer also must be able to provide transparency and complete auditability.

Existing PV software vendors offered little help in solving these challenges, but Pfizer's PV leadership saw an opportunity to innovate and improve compliance and efficiency. Pfizer looked at the problem not just as tracking PVAs, but also as deconstructing the PVA information into actionable tasks that could be tracked and monitored.

**HOW PEGA HELPED:**

## Rapidly Delivered of an Integrated Solution

Pfizer leveraged Pega's industry-leading business process management and dynamic case management capabilities, along with Pega's Pharmacovigilance application to deliver its Pharmacovigilance Exchange (PVX) solution in less than four months.

Pfizer's rapid deployment was facilitated not only by Pega's Direct Capture of Objectives tool, but also by Pega's patented Situational Layer Cake, which enabled the reuse of many of Pfizer's existing components from other Pega solutions throughout Pfizer, reducing development efforts by an estimated 30%.

**OUTCOME:**

## Improved Efficiency and Compliance

The PVX application has reduced or eliminated a significant amount of manual work for Pfizer. It starts with the creation or import of a PVA.

The lifecycle of each PVA is managed within Pega, including creation, review, approval, and updates. PVA milestones are automatically tracked with notifications and alerts for key dates. This alone improves transparency and compliance, but it's actually the second component of the application that delivers the most innovation and value.

Once a PVA is active, PVX captures the structured details about each activity – aggregate reports, risk management, label updates, etc. It defines who is responsible for each activity, along with any deadlines or systems associated with that activity. Pega then tracks each activity, alerting when each is due and accessing on-demand data from Pfizer's other PV systems. Lastly, it includes comprehensive reporting and audit capabilities to improve transparency and reduce audit efforts.

“*It's become an integral tool for our PVA licensing group. It's given us a much better visibility into our landscape of pharmacovigilance agreements. It's improved our data collection, and enhanced our reporting. It's brought workflow to our periodic reviews.*”

**Jeffrey Hanson**  
Senior Information Analyst,  
Pfizer Inc.



For more than 150 years, Pfizer has brought people therapies that extend and significantly improve their lives. Its global portfolio includes medicines and vaccines, as well as many of the world's best-known consumer healthcare products.



# REDUCED RISK AND IMPROVED COMPLIANCE: PATIENT-CENTRIC REMS

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## Business Goals

- Provide a patient-focused system to comply with FDA Risk Evaluation and Mitigation Strategies (REMS)
- Streamline call-center processes while protecting patients from risk and improving their health outcomes
- Enable rapid and reliable access to critical therapies for patients in need

## Results

- Improved patient experience while increasing efficiencies by 30%
- Met FDA REMS compliance needs.
- Reduced program costs by \$1.5M annually
- Built-in support for changing regulatory needs

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“ We reduced costs while complying with FDA mandates with intelligent use of self-service channels. ”

Vice-President of Information Technology, Top Global Biotech Company



**CHALLENGE AND VISION:**

## Manage Risk and Compliance

Pharmaceuticals companies with certain potentially high-risk products are required to comply with the U.S. Food & Drug Administration's Risk Evaluation and Mitigation Strategy (REMS) mandate. REMS requires companies to implement programs to manage the risks associated with a drug or biological product. A REMS program can include a medication guide, patient package insert, communication plan, elements to ensure safe use, and/or an implementation system. An implementation system can pose a particular challenge, as it typically includes technology that must bring together patients, providers, and pharmacies all into the same system in real-time.

For this pharmaceutical firm's implementation system, compliance required synchronization of regular patient diagnostic results with the release of medication from the pharmacy. The company's existing systems were not flexible or agile enough to enable real-time synchronization or rapid changes.

The system needed the agility to manage the dispensing of critical high-risk drugs globally, and in a timely manner to patients in need while complying with REMS and ensuring patient safety. The company assumed it would need a separate contact center management solution in addition to a business rules and process management platforms to ensure compliance.

**HOW PEGA HELPED:**

## Integrated BPM with Customer Engagement

The pharma company determined that Pega was the best partner for delivering a fully integrated, end-to-end solution that would enable it to distribute drugs globally and in compliance with regulatory requirements, meeting the company's long-term plan and reducing costs.

Working with Pega, the pharma company streamlined the registration process (patient, prescriber, and pharmacy); the prescription process of filling out surveys to determine risk (patient and prescriber); and the dispensing process (pharmacy) across all channels, including fax, IVR, contact center, and Web self-service.

By doing so, the pharma reduced manual intervention and overall costs, while enabling it to be more patient-focused when providing support.

**OUTCOME:**

## An Agile, Patient-Centric System that Reduces Health Risks

The company can now make changes to its REMS programs in days instead of the months that were previously required, allowing it to maintain patient safety, compliance, and better serve its growing patient base. Additionally, the company was able to increase efficiencies by 30%, redeploy 30 contact service representatives to other

areas within the organization, and reduce program costs by \$1.5 million annually.

More vital than efficiency though, through ensuring demonstrable compliance with REMS prescription regulations for high-risk drugs, ultimately the company also improved the patient's experience and quality of life by ensuring timely access to needed specialty products while eliminating health risks to patients.

### TOP GLOBAL BIOTECH COMPANY

This top pharmaceuticals company focuses on providing innovative and individualized personal medicine to improve patient health outcomes.



# A SECURE, AUTOMATED DRUG COMPARATOR NETWORK

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## Business Goals

- Automate manual processes
- Compartmentalize transactions
- Simplify process for users
- Provide a robust platform with high availability and security
- Ensure expandability and scalability

## Results

- Retired manual process
- Developed Reliable means for sourcing drugs for clinical trials
- Standardized workflows across member companies
- Established foundation for future initiatives
- Cloud solution provided rapid deployment

- 
- Developing R&D standards to reduce cost and improve safety
  - Member companies elect leadership and provide employees
  - Primary focus, R&D standards to reduce cost, improve safety
  - Consortium of 21 traditional pharma companies
  - Overall faster time to market
- 

“*The biggest reason we chose Pega was the security aspect. We could not have companies seeing other companies' transactions. Pega worked really well for that.*”

Member Representative, TransCelerate BioPharma, Inc.



#### CHALLENGE AND VISION:

## Enable Clinical Sourcing for Multiple Companies

To prove they provide improved efficacy and safety, trials of new drugs for FDA approval must be compared with established therapies. Results from these comparison studies are used later by pharmaceutical companies to market the new drug.

Member companies are competitors in the same market, thus, transaction security and access are primary concerns. TransCelerate needed an expandable and agile platform that could dynamically adjust to unforeseen changes in the R&D market and maintain member confidentiality.

TransCelerate chose Pega based on its ability to quickly develop an agile solution, and keep competitor data secure.

Because clinical trials are usually conducted in multiple locations worldwide, buying and distributing these comparator drugs is expensive and risky.

TransCelerate envisioned a services platform that would allow it to implement industry best practices for sourcing drugs for clinical trials. Leveraging BPM for automation, the organization hoped to accelerate transactions and simplify user interactions with applications.

#### HOW PEGA HELPED:

## Implemented A Robust, Scalable Platform in the Cloud

Because every transaction has specific business rules and objections, an application was needed to address the dynamic needs from each member, regardless of language, region, or therapeutic area.

The biopharma industry is developing innovative new therapies, yet many of its operations are still archaic and not fully automated. Manual processes that shuffle spreadsheets between partners are not secure and are not transformational to drive new clinical innovations. BioPharma needed secure, dependable, and accurate solutions.

TransCelerate chose Pega for its ability to manage tight deadlines and for its Pega BPM and case management, where each transaction is a case. Securely compartmentalized transactions ensure that only member companies participating in the process have access.

Pega Cloud provides TransCelerate a company-neutral provisioning for future expansion of its application offerings, providing the high availability and scalability the member companies demand.

#### OUTCOME:

## Pega Technology Enhances Trust

Using the Pega Platform, pharmaceutical companies collaborated, captured

requirements, defined industry best practices, and implemented a solution that securely and privately orchestrates member transactions. Pega also fully automated manual processes among partners.

Secure, compartmentalized transactions ensure that only member companies participating in the process have access. Pega Cloud provided TransCelerate with company-neutral provisioning for future application expansion.

Pega Cloud also enabled TransCelerate's member companies to experience reduced costs, improved safety, and faster time to market. TransCelerate has also developed a sense of trust amongst its members and is scaling quickly.

“ *Pega's business process management software worked really well.* ”

Head Comparator Network,  
TransCelerate BioPharma Inc.

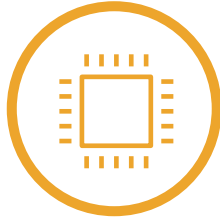


TransCelerate BioPharma Inc. is a non-profit organization with a mission to collaborate across the biopharmaceutical research and development community to identify, prioritize, design, and facilitate the implementation of solutions to drive efficient, effective, and high-quality delivery of new medicines, improving the health of people around the world.



## MANUFACTURING & HIGH TECH:

# EXECUTIVE FOREWORD



Manufacturers must navigate the most dramatic shift in industry history: from selling a product to selling a service. In an increasingly digital business world, automakers will sell mobility, not cars. Communications hardware manufacturers will sell connectivity, not infrastructure. Heavy equipment manufacturers will sell power and uptime, not engines or machines. The new mandate is clear: redefine the business in order to thrive in this new economic order.

Amid this tectonic shift, manufacturers cannot lose sight of their age-old goals. They must ensure supply chains and processes produce quality products around the world, with increasingly fast-changing markets and new value-chain realities. And they must continue optimizing customer satisfaction and maintaining customer loyalty during the lifetime of the relationship – whether that’s two years or two decades – and whether the customer resides in San Francisco, Singapore or Switzerland.

With sensor-enabled products, Internet of Things (IoT), predictive analytics, connected platforms, and intelligent automation, there’s never been more information available for manufacturers to use. But navigating the digital divide requires piecing together these capabilities while breaking through entrenched ways of doing business and moving quickly enough to seize fast-moving opportunities.

Pega is partnering with the global community of manufacturers, logistics, and service providers as they shift their operational and technology capabilities to anticipate and deliver solutions for this new era of demand and consumer behavior. By working with Pega, leading manufacturers are positioning themselves to discover the value of consumption and subscription-based as-a-service business models. They are realizing new levels of customer engagement, responding to real-time knowledge of product performance, and tuning increasingly agile global operations. We are helping them imagine and develop a whole new partner ecosystem around the goods they make and delivering an entirely new – and digitally connected -- customer experience.

Take a look at the case studies that follow to find out how Pega has helped some of the world’s most iconic brands discover new, more profitable ways of doing business – digitally. We are here to serve our customers, so please contact me with any questions at [bruce.williams@pega.com](mailto:bruce.williams@pega.com).

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**Steve Rudolph**

Vice-President and Business Line Leader, Communications & Media, Pegasystems



# DRIVING QUALITY AUTOMATION

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## Business Goals

- Create a single source for monitoring quality inspection responsibilities and results
- Expedite issue resolution and counter-measures
- Improve monitoring of quality process compliance
- Increase supplier quality accountability

## Results

- Reduced application development time 73%, from 52 weeks to 14 weeks
- Saved about \$6.6 million over five years
- Achieved 300%-plus ROI over five years

- 
- More than 12 manufacturing sites in North America
  - Thousands of workers using the mobile app
  - Inspection control function app monitors each auto part
- 

“ *I had high expectations for Pega, and they have been met.* ”

Vice-President, Quality Division, Auto Industry Giant



**CHALLENGE AND VISION:**

## Increase Automation of Quality Processes

This auto industry powerhouse has manufacturing facilities located throughout North America. Although well-defined, quality management at these facilities, as well as those of the automaker's parts suppliers, was still largely manual. The established quality processes are memorialized in a series of binders of documented processes used for training and reference.

The manufacturer wanted to automate key quality processes to improve controls, provide an audit history, and support compliance reporting.

**HOW PEGA HELPED:**

## Streamlined Quality Management with Cloud Apps

The automaker worked with Pega to create a Quality Information Management System (QIMS). The system would be supported by two initial applications: one for automating quality inspection responsibilities, and another for assembly line workers to identify and report issues.

The quality inspection application uses Pega business rules to identify and assign appropriate inspection responsibility. Assignments, notifications, overrides, and reassignments are managed with the Pega 7 Cloud application.

The assembly line app manages notifications to external suppliers and

internal quality engineering. It applies Pega business rules to categorize each incident of non-conformance.

Pega started by providing a Methodology Alignment Workshop. Though the company is not yet Agile, it is interested in rapid, iterative development. The Pega-led and Cognizant-powered project team used the Direct Capture of Objectives (DCO) tool to quickly route requirements and design input to the development team.

**OUTCOME:**

## Faster Issue Resolution, Better Compliance Tracking

The project team developed the two production applications in parallel in approximately 14 weeks. This represents a major savings in application development time, as system development projects typically required more than a year for the manufacturer.

Since implementing QIMS in late August 2015, the company can now track quality processes with suppliers, expedite issue resolution, and conduct quality assurance and compliance reporting. SLAs are also used to ensure timely responses from parties, and to track process durations.

On the strength of this project success, the company has already started two other Pega projects, with three more on deck. Over the next few years, it will deploy at least eight more Pega-based QIMS projects, to further automate its supplier quality processes.

## AUTO INDUSTRY GIANT

This auto industry giant was committed to automating manufacturing quality processes in an effort to improve its already legendary program of continuous improvement. The new automated quality inspection and monitoring system provides line workers and external suppliers with key tools to measure quality, expedite issue resolution, and improve accountability and compliance.



# BECOMING AN ADAPTIVE ENTERPRISE

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## Business Goals

- Transition from a product-based to a solutions-oriented business model
- Enable end-to-end visibility across the global service supply chain
- Quickly and effectively make changes to service processes

## Results

- Faster time to market, from months to weeks
  - Increased process efficiency and user experience
  - Boosted asset recovery from a 91% recovery rate to 94.7%
- 

“ We love that Pega allows us to manage business processes and rules, and implement change in an agile manner. The adaptive analytics enable us to understand the effectiveness of the change, and then modify the business processes if required. ”

Director for Enterprise Architecture, Global High Tech Leader

**CHALLENGE AND VISION:**

## Digitize the Enterprise to Responds to Continuous Change

Faced with great change in industry business models, technologies, markets, and competitors – and the desire to move from a “product and services” company to an “IT” solutions company – this global high-tech leader needed to become an adaptive enterprise: enabled by processes architected for change and a robust business information architecture. The company also needed to enable “fast IT” to deliver change at the speed of business.

The global service supply chain processes, however, were reliant on isolated ERP systems and manual processes. While the company’s \$8 billion Global Service Logistics and Operations function delivers 900,000 parts from 1,400 depots, it relied on separate tools for workflow management, rules management, process automation, process execution, decisioning, and analytics.

The company focused on enabling end-to-end visibility of its global service supply chain processes by moving to an intelligent business process management platform that functions as a unifying business layer.

**HOW PEGA HELPED:**

## Increased Agility by Empowering the Business and Simplifying IT

Pega was chosen for its speed and responsiveness to change. It instituted Pega

as a business rules management system for all of the company’s global service supply chain applications and processes.

Users now have a single dashboard, personalized to their organizational role, as well as end-to-end visibility and a consistent view of the business, with the ability to see real-time information from back-office systems and ERP solutions.

The company also implemented a rules-based engine for asset recovery, exception-based order management, and escalation management, which minimizes order exceptions that jeopardize the customer experience.

With Pega, business users can manage business rules and policies with minimal IT support. Because they can simulate the impact of changes beforehand, users can make changes on-demand. Using adaptive analytics, they can also assess the effectiveness of new processes and make modifications if required.

**OUTCOME:**

## Digitization Across the Enterprise Delivers Increased Visibility, Speed of Change

All of the enterprise’s standard service metrics – efficiency, speed, cost, user experience, business risk – have trended in the right direction.

Time-to-market for new IT capabilities has collapsed from three to six months, to two or four weeks, with many deployed

directly by the business. The company also developed a central competency center, with a growing catalog of over 20 reusable Pega-built assets.

Infrastructure costs decreased, as Pega runs in the cloud. The four-month global rollout resulted in dramatic productivity gains.

The company’s asset recovery operations moved from a 91% recovery rate, to 94.7%. “Pega’s ‘Build for Change’ capability and their commitment to Agile has reduced time to enablement from months to days – an efficiency savings of \$1.4M,” says the company’s Business Technologist in Global Service Logistics and Operations. “Annual business improvements include a \$1.3M reduction in freight cost, parts recovery of \$120M, and an additional \$8M benefit via new invoice capability.”

### GLOBAL HIGH TECH LEADER

This \$50 billion worldwide networking leader is focused on transforming how people connect, communicate, and collaborate. With more than 70,000 employees in 400-plus offices in over 120 countries, the company designs and sells products, provides services, and delivers integrated solutions to develop and connect networks around the world.



# FUTURE-PROOFING OUTAGE MANAGEMENT

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## Business Goals

- Increase collaboration for outage process stakeholders
- Improve on-time performance to meet customer expectations
- Create full business unit visibility
- Build a platform for future transformation/digitization

## Results

- Centralized outage planning information
- Enabled end-to-end visibility
- Lowered compliance costs
- Enabled future process customization

- 
- Integration of data from SAP, Salesforce.com, PrimaVera, local sources
  - 24x7 "follow the sun" case management    ▪ Maximum extensibility, cost control, reuse
- 

“ Pega is a strategic partner in our digital transformation ... Pega give us the flexibility and agility to support our global use cases across multiple time zones and geographies. ”

Lead Project Manager, Global Leader in Power Generation



#### CHALLENGE AND VISION:

## Develop a Single Platform to Manage Planned Outages

The company is a global leader in ensuring high reliability and optimal performance of rotating power equipment for the utility, oil & gas, and industrial processing industries.

It was taking up to 1.5 years, however, for the company to plan and execute periodic required outages for turbines housed in customer power plants. Because outage information was scattered across many systems and countries, it was difficult to compile essential data and manage work status updates. Providing managers with coherent, reliable data access would boost outage management efficiency, resulting in more satisfied energy partners.

In 2015, the company launched an aggressive initiative to increase customer satisfaction through improved on-time performance, full transparency, and efficiency of the outage management process. The envisioned solution would implement a dashboard and management platform capable of handling complex resolutions of planned outages on a global scale.

#### HOW PEGA HELPED:

## Unified Diverse System Landscape with Agile Platform

After considering several partners, the company chose Pega for its ability to build

the envisioned global case management system. The tipping point in the decision was Pega's unique ability to consolidate the company's highly distributed, disjointed, hard-to-manage, and inconsistent system landscape into a single, cost-effective, Agile platform.

Agile offered the business a fast track to implement, control, and limit scope creep and associated costs — all of which were key goals for the company.

With the Pega 7 platform, the enterprise was able to integrate resources across Salesforce.com, SAP, and other legacy applications. Pega case management capabilities provided the framework for developing business rules to handle diverse outage scenarios, and Pega 7 Cloud provided critical 24x7 “follow the sun” operations and support for the global company.

#### OUTCOME:

## Less Costly, More Transparent Outage Management

Now up and running, the new global case management platform centralizes critical outage-related information from the company's diverse, distributed systems. The case management dashboard provides requisite transparency for efficient outage planning and execution, regardless of time zone differences or project manager location.

One of the greatest benefits is the money it saved by avoiding fines related to data-related mistakes in outage planning and

resolution. Penalties are specific to the service levels of individual customers, and can easily run into the hundreds of thousands of euros.

Looking to the future, the company will be able to customize the solution across product lines and regions in response to changing market and regulatory demands, in large part because of the built-in capabilities of Pega's underlying architecture.

### GLOBAL LEADER IN POWER GENERATION

This global services powerhouse is focused on electrification, automation, and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, the company supplies systems for power generation, transmission, and medical diagnosis.



# BPO BOOSTS CUSTOMER EXPERIENCE

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## Business Goals

- Enhance the customer experience
- Decrease total call handling time
- Improve quality assurance scores of customer service reps
- Increase upsell and cross-sell opportunities

## Results

- Improved average handle time 40%
- Boosted quality assurance scores from 94% to 96%
- Raised customer satisfaction scores from 91% to 99%

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“ Pega Robotic Automation provides great options for agents' dashboard displays, while other applications run in the background. This allows them to focus better on the tasks at hand and improves the experience for the customer on the phone. ”

Director of Customer Care, Leading National Business Process Outsourcer



**CHALLENGE AND VISION:**

## Focus Less on the Process and More on the Customer

At this leading business process service provider, customer service reps relied on disparate applications and websites from clients, partners and internal systems, resulting in manual processes and redundant steps when serving callers. CSRs sometimes needed to focus more on system navigation than the customer experience. Multiple systems also posed the risk of inaccuracy, and agents lacked the consolidated view of customer data needed to efficiently respond to inquiries and service requests.

“In order to keep our leadership position and better serve our customers, a change was in order,” says the director of customer care at the company.

**HOW PEGA HELPED:**

## Enabled Better Data, Intelligent Guidance to Drive Better Service

Working with Pega, the company’s first robotic automations were built in three weeks and deployed after a short testing period. The business rolled out the solution to one team at a time, working with untrained agents to make side-by-side comparisons of the new and old ways of doing business.

The Pega Robotic Automation solution was easily adapted to the company’s various applications and websites, both internal and client- or supplier-owned. The solution incorporated a flexible design, enabling the business’s development team to experiment with the right sequencing of workflows most useful data for agents. The result: a more comprehensive view of the customer data, and the ability for agents to access the right information at the right time.

Pega’s solutions consulting teams provided on-site help during the initial deployment as part of its enablement model. This allowed the company’s development team to receive firsthand guidance and mentoring, as well as tips for building future solutions.

**OUTCOME:**

## Fast Achievement of Key Metrics, Satisfaction Scores

The company reduced new agent training time by a full 1.5 days for new hires, with transitional ramp-up time to achieve key metrics dropping by almost 25%. The company has already begun to expand its use of Pega’s Robotic Automation to other major client contact centers. To date, it has built more than 30 robotic automations deployed across thousands of agent desktops – and plans to develop another dozen within the next six months. Pega’s Agile approach has also become the standard methodology for addressing smaller projects, such as providing an

aggregated 360-degree customer view that includes intelligent guidance for agents to improve their upselling effectiveness. With continued progress, the company envisions expanding Pega’s use into other departments, such as client services and accounting. The company continues to hold focus groups to enhance ease of use and identify new automation opportunities.

### LEADING NATIONAL BUSINESS PROCESS OUTSOURCER

This business process outsourcer helps world-class organizations optimize their operations through strategic marketing and business intelligence. The company provides robust customer care services to support millions of reward cards fulfilled annually on behalf of its blue-chip client roster. Its customer care center handles over three million calls annually.



# WARRANTY PROGRAM SAVES AUTO OEM \$53M A YEAR

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## Business Goals

- Create a unified, global warranty program
- Reduce warranty claims costs
- Minimize fraudulent claims; correctly settle legitimate ones
- Lower maintenance and IT support costs

## Results

- 400% faster execution speeds
- \$53 million annual operating and claims savings
- Improved claims accuracy
- New visibility into systemic quality issues

- 
- Rolling out to 12,000 dealers worldwide
  - Will process more than 18 million claims per year
  - Will support more than 150 DMS systems worldwide
- 

“ Every day sooner that you know about a problem, you can save one day's worth of bad production. Every day has a huge cost saving associated with it. Using our new system, we were able to connect an engineer to a dealership, to a technician, to a vehicle that had that exact concern, the minute it was written up on the service drive. ”

Global Strategy Manager, Top U.S. Auto Manufacturer





#### CHALLENGE AND VISION:

## Streamline Operations, Lower Costs with Global Warranty Solution

This auto OEM wanted to reduce overall costs while improving accountability, accuracy, and agility in its warranty operations. The company estimated that 8% to 10% of its annual warranty spend (\$17 million to \$19 million dollars) was due to erroneous or fraudulent claims, and that 10% to 12% of warranty claims were processed incorrectly.

The company realized that its existing warranty environment (comprised of 11 different systems in four regions and 29 languages) would never provide the worldwide-consolidated set of accurate and consistent outcomes it desired.

The manufacturer hoped to replace its 30-year-old warranty solution with one standardized on a single core set of business rules across the globe. The system would reduce processing costs, minimize fraudulent claims, correctly settle legitimate claims, and increase funds recovered from suppliers.

Equally important, the system would identify systemic quality issues by providing access to complete repair data, which the existing system limited to 250 characters.

#### HOW PEGA HELPED:

## Established Global Business Rules to Improve the Warranty Process

The company chose Pega to support the global warranty solution primarily because of Pega's recognized leadership in iBPMS, scalability, and flexibility. Pega's prior work developing a warranty framework for the insurance industry gave the OEM the jump start it wanted.

As the foundation of this new warranty platform, Pega implemented a core global rule set for claims processing, and layered local rule sets to handle region-specific governance and processing needs.

To build the core rules set, Pega migrated and consolidated existing rules from the manufacturer's legacy environment onto the Pega platform, and introduced more complex rules that weren't possible in the old environment. These enhancements have helped the company ensure that claims are processed with greater accuracy, consistency, and timeliness.

The OEM will use the global warranty system to pay dealers for work they have completed on vehicles under warranty, as well as to alert engineers to potential problems on the production line.

#### OUTCOME:

## Greater Agility and Insight at Lower Overall Cost

The single, global warranty solution allows the business to adapt to changes in business conditions much more quickly. "The solution is enabling flexibility for processing claims with a finer degree of control and allowing implementation of more complex edits," says an IT manager at the auto maker.

Rules consolidation has improved processing speed by 400%. Improved control over authoring of new rules and processes has saved the company significant warranty expense, due to better cost controls and early detection of inappropriate payments. These tightened controls and reduced claims errors have resulted in an estimated \$53 million annual warranty-related savings.

As hoped, the greater access to accurate and consistent data has enabled the manufacturer to more quickly identify and respond to systemic quality failures.

### TOP U.S. AUTO MANUFACTURER

An iconic global automotive giant with over 200,000 employees, 70 plants worldwide and almost 12,000 dealers. The company's core business includes designing, manufacturing, marketing, and servicing a full line of cars, trucks, and SUVs, as well as luxury vehicles.



# DRIVING THE CUSTOMER DECISIONING HUB

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## Business Goals

- Develop next-generation customer platform to leverage 4G LTE connected cars
- Provide subscribers with cutting-edge in-vehicle safety and connectivity system
- Deliver a subscriber service interface for Web services and applications

## Results

- 1.5% higher subscriber retention in first six weeks
- Projected \$33 million annual revenue gain
- Updates on the fly (not quarterly or semi-annual)

- 
- 5,000 customer advisors worldwide as of Q4 2016
  - 100,000+ emergency calls routed monthly, North America
  - Over seven million subscribers
- 

“ *We're able to customize the response by channel and really give our advisors flexibility.* ”

Manager, Enterprise Decision Management Group, Leading U.S. Auto Manufacturer

**CHALLENGE AND VISION:**

## Streamlined the Experience for Our Global Subscribers

The connected service offered by a leading U.S. auto manufacturer needed a next-generation, sophisticated platform to serve its subscriber base, one that would support a global rollout easily and effectively. Legacy technology was expensive to maintain and difficult for advisors to use. The automobile OEM determined that slow advisor response time was a major factor in discouraging subscribers from renewing.

With the advent of new vehicles providing a 4G LTE capability, this provided a challenge to support the myriad of new capabilities, products, and services that came with this new technology. The company's product and services combinations became exponentially larger than before.

The company took this opportunity to move away from the bottleneck of a single channel, contact center decisioning model to a stand-alone decisioning engine that would drive capabilities into all channels that subscribers use to interact with the company—contact center, Web self-service, mobile application, and the in-car head unit.

**HOW PEGA HELPED:**

## Used an Out-of-the-Box Capability to Offer a Strategic Starting Point

This leading automaker chose Pega's solution after requirements vetting, ROI models, and technology assessments. The team saw the strategic advantage of Pega's out-of-the-box functionality. They didn't want a lot of customization to start, so that the system could be maintained easily. The Pega solution the company chose uses visual insights discovery, Visual Business Director, integrating next best actions, predictive and adaptive analytics, and decision arbitration.

From the start, project team members focused on identifying the business owner and kept that focus throughout the project. A central delivery status dashboard tracked activity through all phases, and the development team and product owners had daily standup meetings to stay on track.

Now, when a subscriber contacts the service across any channel, the Pega Customer Decision Hub uses rules, predictive intelligence, and machine learning to drive the next best action regardless of channel for consistent and relevant sales, cross-sales, and retention.

**OUTCOME:**

## Greater Agility and Insight at Lower Overall Cost

The manufacturer took the Customer Decision Hub and made it the brain of

the customer service experience. From first enrollment, to determining vehicle packaging, all the way to deactivating at the end of useful vehicle life, Pega worked with the automaker to determine the criteria that flowed into the related decisioning processes. Call routing rules, which previously lived in three different systems, were also united into a single decision hub.

Using the Pega Customer Decision Hub and the Pega Platform, the automaker's development teams make changes on the fly without having to tie the changes to a major release only done every four or six months. Subscribers see improvements incrementally, as need arises. And the service teams tap into the processing power of the manufacturer's fleet of 4G LTE cars.

Recently, the company's internal teams reviewed key customer value management metrics. The result? An expected \$33 million a year gain from improved conversion rates, profit margins, extensions of customer lifecycle on new conversions, and reduced margin dilutions.

### TOP U.S. CAR MANUFACTURER

One of Detroit's big three carmakers, has more than 200,000 employees and a presence in 157 countries. This automotive subsidiary, provides seven million customers with subscription-based in-vehicle security, communication, navigation, and remote diagnostics worldwide.

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## ABOUT PEGASYSTEMS

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Pegasystems (NASDAQ: PEGA) develops strategic applications for sales, marketing, service and operations. Pega's applications streamline critical business operations, connect enterprises to their customers seamlessly in real-time across channels, and adapt to meet rapidly changing requirements. Pega's Global 500 customers include the world's largest and most sophisticated enterprises. Pega's applications, available in the cloud or on- premises, are built on its unified Pega 7 platform, which uses visual tools to easily extend and change applications to meet clients' strategic business needs. Pega's clients report that Pega gives them the fastest time to value, extremely rapid deployment, efficient re-use and global scale.

For more information, please visit us at [WWW.PEGA.COM](http://WWW.PEGA.COM)