



Keynote | Build for the Future

# Community Forum

The future is autonomous - Building a self-driving business with AI-powered decisioning & workflow automation.





# The Future is Autonomous

Building a self-driving business  
with AI-powered decisioning & workflow automation.

November 2022

# Complex forces are driving disruption

making things harder than ever for your customers and your business

## ECONOMIC

Customers struggling to keep up with inflation



## EMPLOYMENT

Competitive labor market, distributed workforce



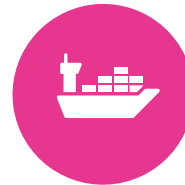
## GEOPOLITICAL

Regulatory and revenue stream uncertainty



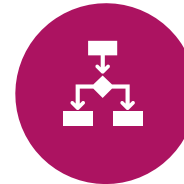
## SUPPLY CHAINS

Supply chain reliability and cost pressures



## ENVIRONMENTAL, SOCIAL & GOVERNANCE

Stakeholder expectations and the rise of ESG



## BUSINESS MODEL

New market entrants, disruptive business models

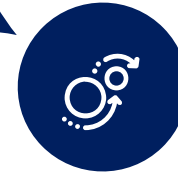


Global, regional, and industry market pressures

Leaders are already transforming



Hyper-personalized engagement



Agile everywhere



Seamless as-a-Service experiences



Intense focus on efficiency and margins

AUTONOMOUS OPERATIONS

Organizations are looking to better align and become more autonomous across their operations, service, and engagement

96%

operations leaders say building an adaptable business is a priority

25%

say they're an intelligent automation enterprise





There is no finish line.

**You can't stop the rate of change.**

**You can only  
build for it.**

# Pega builds agility into your organization so you can work smarter, unify experiences, and adapt instantly

Our low-code platform for AI-powered decisioning and workflow automation lets you:

Personalize Engagement	Accelerate Acquisition & Onboarding	Automate Customer Service	Streamline Operations	Resolve Exceptions
 <p><b>£100M profit</b> increase in a single market from 3x higher offer acceptance</p>	 <p><b>From days to hours</b> reduction in time to onboard new vendors</p>	 <p><b>3-minute reduction</b> in average handle time across 10K agents and 100 service processes</p>	 <p><b>2X productivity</b> of 400K field staff with zero downtime</p>	 <p><b>70% faster</b> dispute resolution</p>

Drive scalable, mission-critical value across your enterprise.

Personalize  
**Engagement**

Accelerate  
**Acquisition  
& Onboarding**

Automate  
**Customer  
Service**

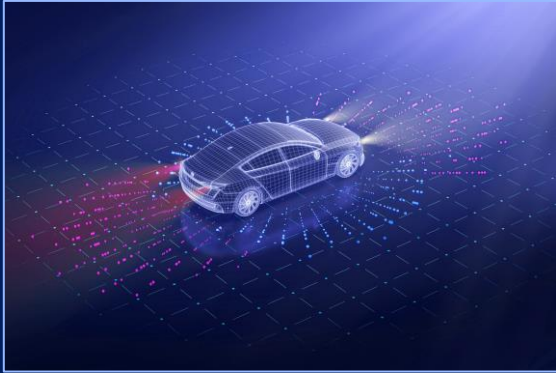
Streamline  
**Operations**

Resolve  
**Exceptions**

**True value comes from connecting  
these capabilities across business functions.**

**As only Pega can.**

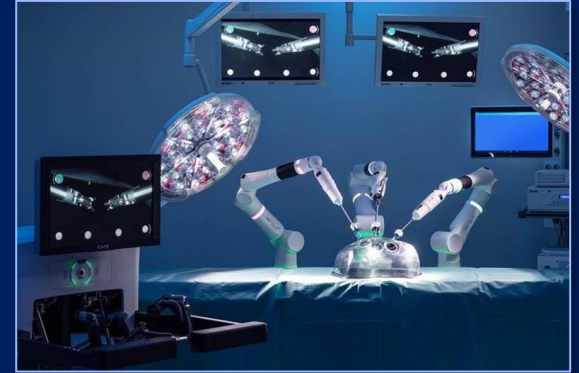
# The rise of autonomous



Driving



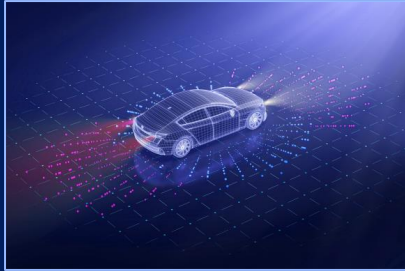
Warehouses & factories



Surgery



# The rise of autonomous



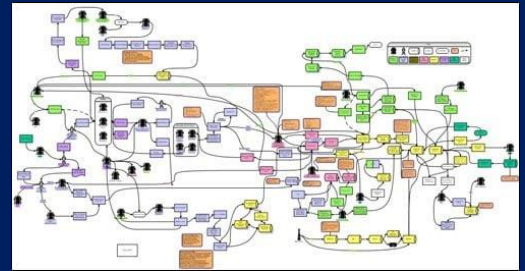
Driving



Warehouses & factories



Surgery



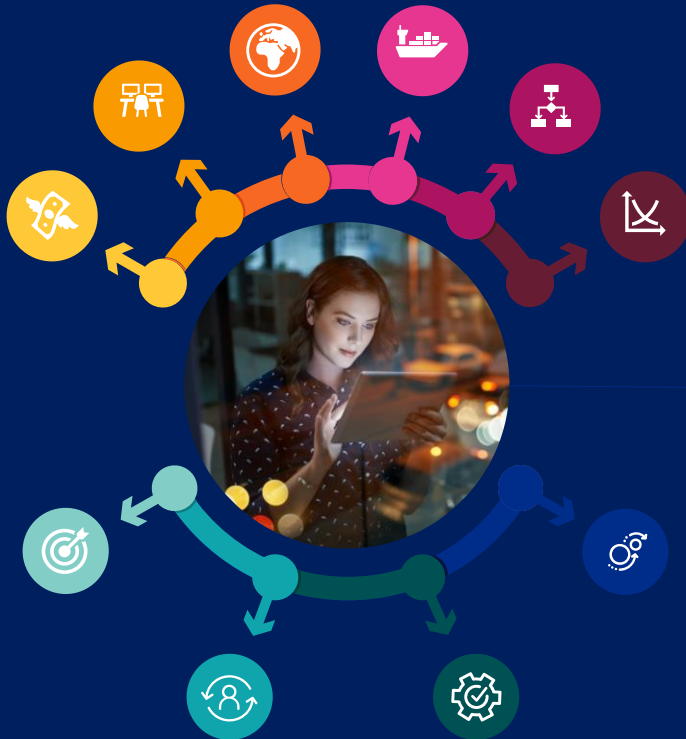
...But not business?

# Autonomous Enterprise



Delivers **hyper-personalized experiences at scale**  
throughout the **customer lifecycle** – from engagement to service through operations  
driven by **AI, automation, & continuous optimization.**





**Automatically approve**



**Flag for investigation**



**Offer new products**



**Decrease amount**



**Escalate**

# Learn → advise → drive



## Align your workforce to your strategy

End-to-end visibility  
Intelligent routing  
AI-driven prioritization



## Automate end-to-end outcomes

Low-code development  
AI developer assistance  
Scaled governance & community



## Engage with intelligence & personalization

Self-service  
Chat & email  
Voice AI



## Guide employees

Optimized design system  
AI-driven decision insight  
Knowledge management



## Continuously Optimize & improve

Process mining  
Workforce intelligence



Onboarding

Service

Operations

Exceptions



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Voice AI



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# Success demands the right business architecture & approach

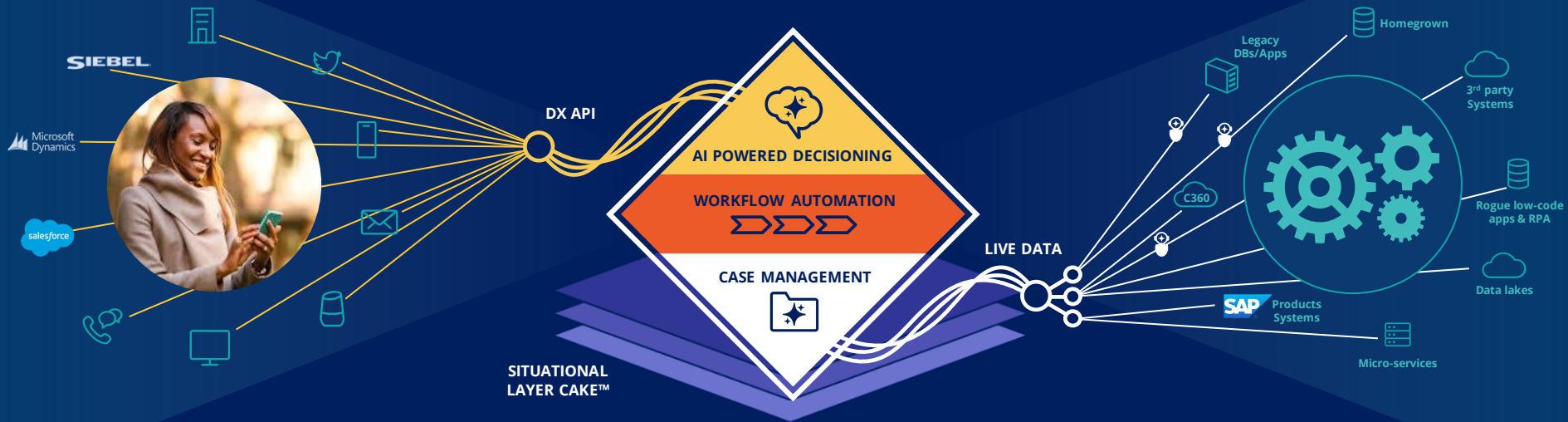


Many organizations make 2 common mistakes:

1. Embedding business and process logic into siloed **front-end** channels
2. Burying business and process logic into complex, product-centric **back-end** systems

# Center-out™ Business Architecture

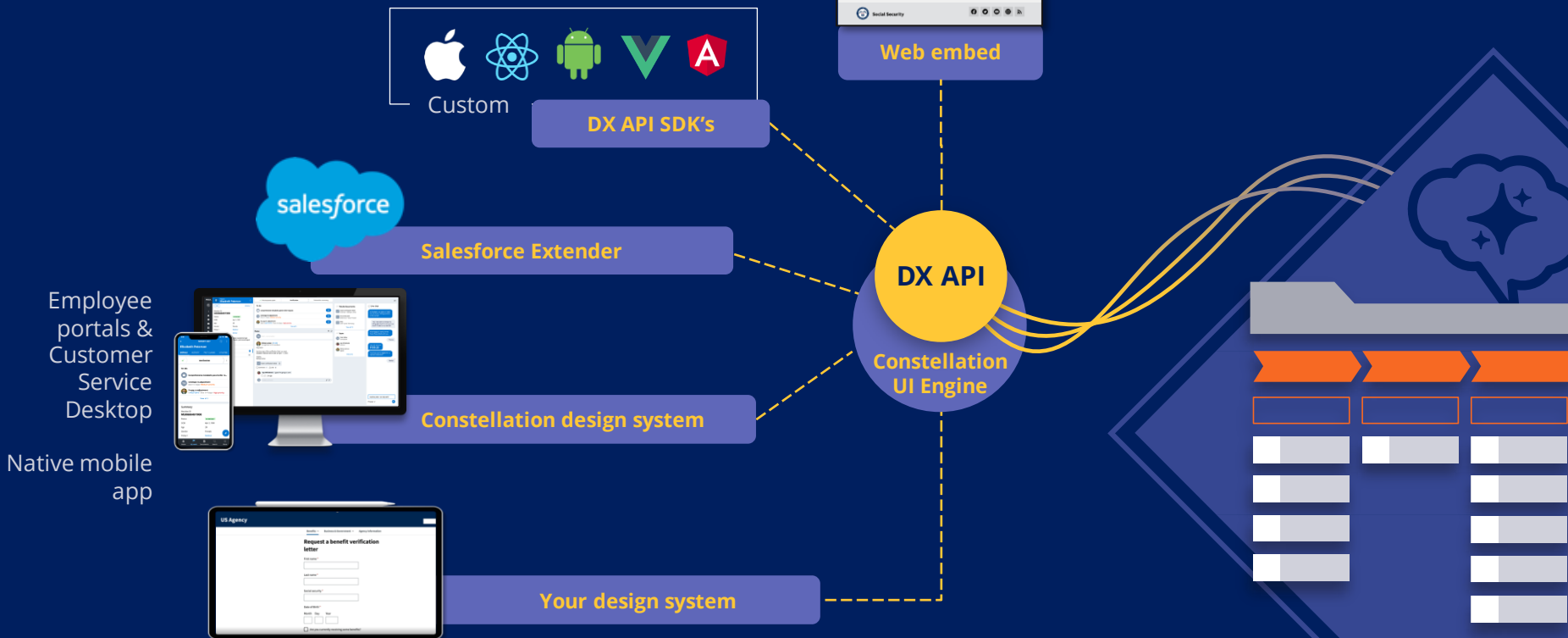
Put the customer journey, workflows, and decisions in the center

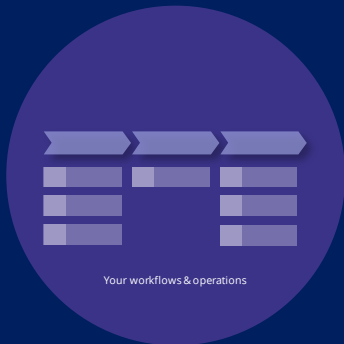


# Channel Independence

Extend across all your digital channels

Self-service





ET-1234 MISSING LAUGGAGE 3+ Transfer Resolve

I have a quick question on travel

Create case Travel tickets Travel request Missing tickets Other cases

Support, Robert  
I have a quick question on travel... Yesterday, 10:03 PM  
TRAVEL REQUEST Priority 85

Nathan Swanson  
My luggage did not arrive! 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Glenn Simpson  
Re: How much is a flight to Florida 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Ralph Green  
Re: Should I purchase travel insuran... 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Fred Greene  
My next vacation 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Aya Smith, Support and Raja  
I have a quick question on travel... 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Amy Davis  
Airport questions 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Aya Smith  
I have a quick question on travel... 24 Jan 2020  
MISSING LAUGGAGE Priority 10

Robert Stanton  
To: Amsot, Vijay, +2 more • Wed, Jan 5, 2021 9:12 AM •  
Subject: Re-I have a quick question on travel  
Hi Team,  
I'm still at the airport, I need help now! Attached the photo! Booked on Dec 5, 2021 9:05 AM  
Regards,  
Robert stanton  
Airport\_image.png  
Thank you Thanks for the update Other responses  
Reply Forward

Support  
To: Robert Wednesday • Jan 5, 2020 9:05 AM •  
Subject: Re-I have a quick question on travel  
Hi Robert,  
Thank you for your email. We will be contacting you shortly.  
Regards,  
Support Team

Robert Stanton  
To: Robert Wednesday • Jan 5, 2019 9:05 AM •

Copy to  
Customer email Mapped  
Arrival city Not mapped  
Customer name Mapped  
Flight number Not mapped

Entities  
Ticket number 7546383 7546383 #  
Customer email Mapped  
Arrival city Not mapped  
Customer name Not mapped  
Flight number Not mapped  
Vijay.Vaddem@in.pegas.com  
azharuddin.mohammadin.pegas.com  
Date Dec 5, 2021 9:05 AM  
Flight number FLJK403

Email header  
Sender email  
Travel request  
Customer email \* robert.stanton@hotmail.com  
Arrival city \* Hyderabad  
Customer name \*

Understand chat & email with AI



Address change (S-1032)

Address line 1 \* (617) 555-1212 ✓ X

Address line 2

Country \* United States

City Cambridge ✓ X State MA

Postal code 02142 ✓ X

Phone (617) 555-1212 ✓ X

Cell (617) 374-5557

FAX (617) 555-1212

Email jbrown2970@gmail.com

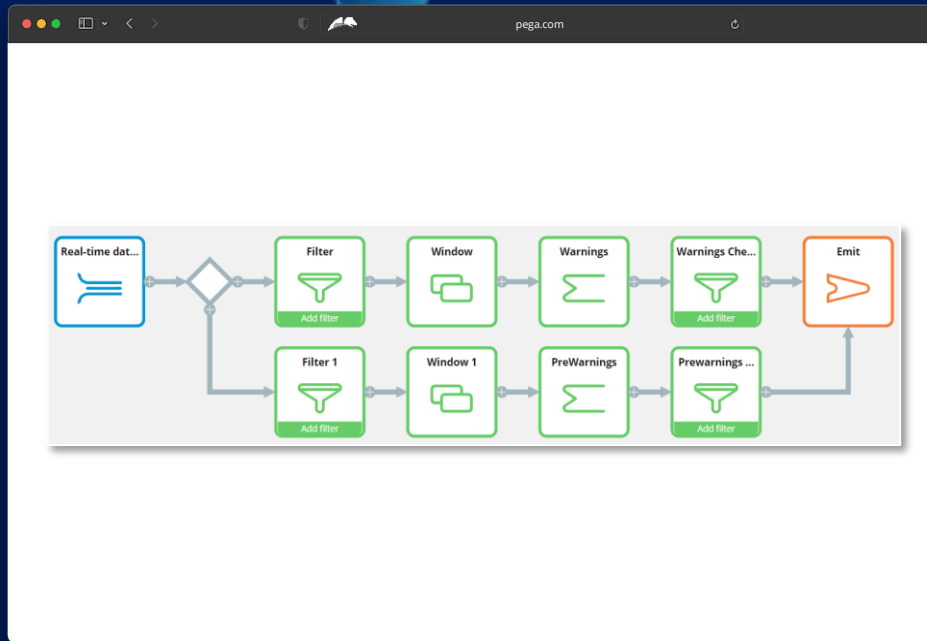
Submit

Account	Overview	Customer Inquiry
Account number <b>789543245678901</b>	Available balance <b>\$10,000.00</b>	Payment date <b>Aug 22, 2019</b>
Account type Credit card	Status Active	Minimum payment <b>\$2,568.30</b>
Account owner John Brown	Last statement date Jul 5, 2019	Last payment amount \$567.90
Address 342 main street Atlanta MA 29422 Egit	Next statement date Aug 10, 2019	Last payment posted May 19, 2019
		YTD payments \$2,042.00
		Available balance \$10,000.00
		Avg monthly balance \$9,500.00
		Account open date Sep 1, 2014



Your workflows & operations

Understand & act on telephony



Understand chat & email with AI

# Real-time AI to arbitrate the Next best action

Incoming Data Triggers Constant Re-Decisioning (<200 ms)

## Browsing History

Identifies Active Behaviors & Motivation

## Inbound Content Clicks

Reveals Categories of Interest or Evaluation

## Outbound Click-Throughs

Reveal Treatment & Timing Propensities

## Streaming Events

Provide Purchase, Retention & Service Predictors

## Active Agent Dialogs

Uncover Motivational & Emotional States

## Rejection Rationales

Reveal Readiness Levels & Decision Drivers

## Contiguous Interactions

Connect Previously Disparate Experiences

## Conversion Events

Trigger Cross-Channel Context Shifts



## Next Best Action

Proactive Retention Offer


- Sales Offers
- Retention Offers
- Pre-Emptive Service Nudges
- Nurture Messages

# Data and integration

Consume any local or enterprise data source with Live Data







Onboarding

Service

Operations

Exceptions



## Engage with intelligence & personalization

Self-service  
Chat & email  
Voice AI



## Align your workforce to your strategy

End-to-end visibility  
Intelligent routing  
AI-driven prioritization



## Guide employees

Optimized design system  
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Knowledge management



## Automate end-to-end outcomes

Low-code development  
AI developer assistance  
Scaled governance & community



## Continuously Optimize & improve

Process mining  
Workforce intelligence



Self-service



Agent



CSR



Specialist



Manager

# Route, assign, and prioritize across your organization.

PEGA Process Fabric x +

https://uplusbank.processfabric.com/worklist/

PEGA **Process Fabric™** My tasks Get next

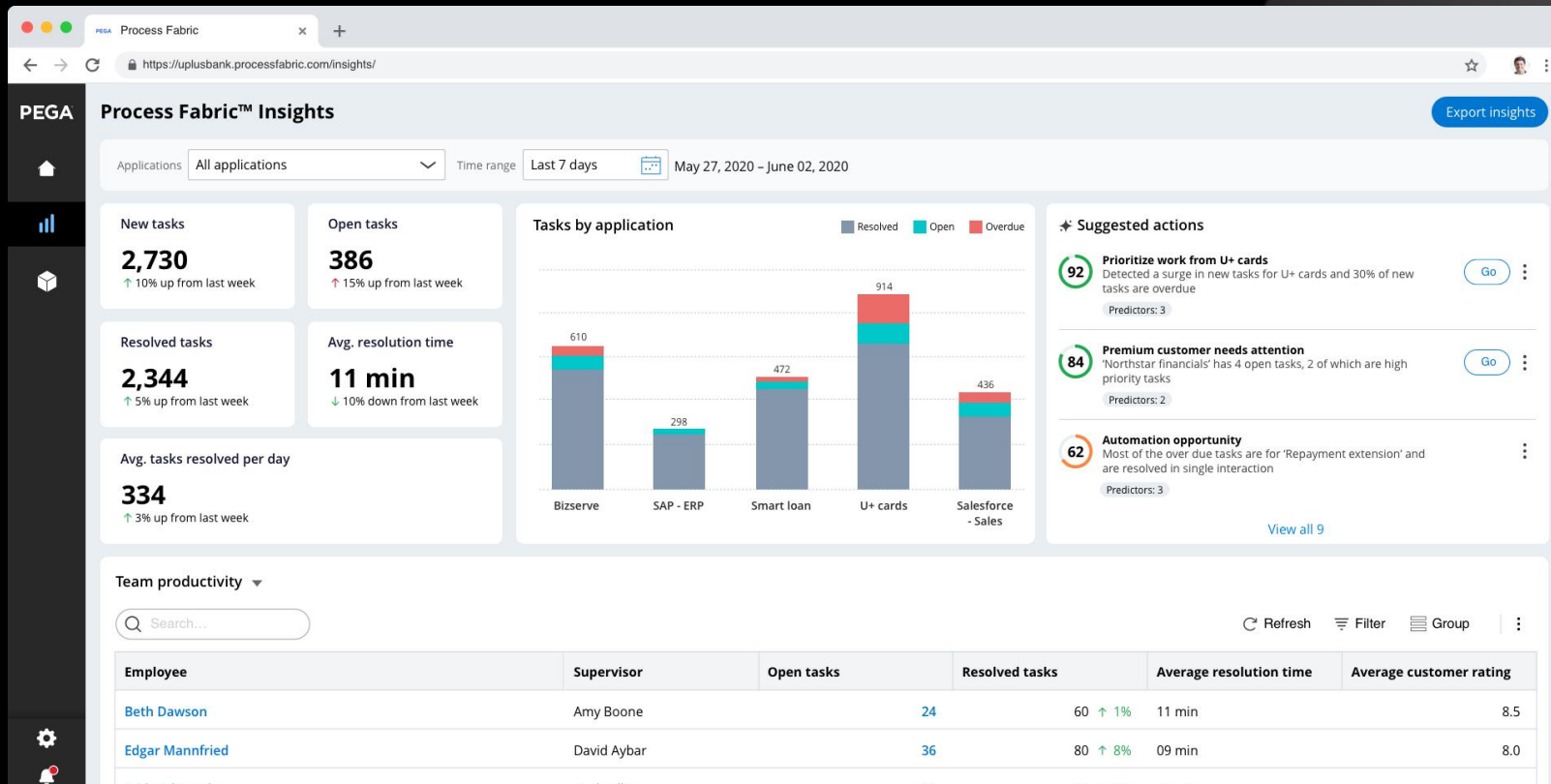
Search... Filter Sort Group


Task	Application	Customer	Priority	Due in
<a href="#">Payroll protection program eligibility</a>	Bizserve	Chargers cargo services	60	2d
<a href="#">Authorize recurring charge instructions</a>	U+ cards	Antony Husman	60	1d
<a href="#">Approve enhanced credit limit - corporate plan</a>	U+ cards	Northstar financials	60	2d
<a href="#">Payroll protection program eligibility</a>	Bizserve	Vinci and sons	40	2d
<a href="#">Schedule follow-up call</a>	Salesforce - Sales	Will Larson	40	1d
<a href="#">Take risk assessment survey</a>	SAP - ERP	— —	10	1d
<a href="#">Send pricing quote</a>	Salesforce - Sales	Therese Brow	10	2d
<a href="#">Review duplicate transaction</a>	Smart disputes	Matt Healy	10	2d

1-8 of 8

# Provide transparency across your organization.

Build tailored reports & worklists which showcase progress toward your goals.





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Workforce intelligence

PEGA

Patient  
**Elizabeth Peterson**

Edit Actions

Member ID  
**M20668491900**

Status **IN PATIENT**

DOB Apr 2, 1991

Age 29

Gender Female

Policy 1 Medical

Policy 2 Dental

Past medical history  
Osteoporosis, neurogenic bladder, borderline high blood pressure, controlled diabetes, gastroesophageal reflux disease.

Details

Activity **2**

Past claims 12

File insurance claim

Verification

Interaction summary

To do

Comprehensive metabolic panel order request **Go**

Coverage re-adjustment Due in 3 days • Medium priority **Go**

Co-pay re-adjustment Task in ACCT-2913 • Due in 4 days • High priority **Go**

View all 5

Pulse

Start a conversation

Sidney Lamas in SR-680  
2m ago Sent to 24 members  
Hey team!

Here's a copy of the verification letter we need.  
Elizabeth Peterson sent it over on April 17, 2020.

Thanks,  
Sidney Lamas

Claim verification letter

Comment 1 Like 3

Aya Bhiladvala I agree! I'm going to save!

2m ago

Add a comment

ACTIVITY

UTILITIES LIVE CHAT

Files & documents

Claim verification letter  
Contract • Sidney Lamas

Insurance plan  
Reference • Evey Prosser

FAQ  
Link • Jobie Hennessy

View all 10

Team

Tadd Miller  
Consultant

Aya Bhiladvala  
Advisor

Sidney Lamas  
Agent

View all 6

UTILITIES



MENU



PEGA



A-2051

Auto claims



Collect Auto Claims ...

Claims Processing

Claim settlement



Edit

Actions



AutoClaimDetails

The auto insurance claim dated 7/25/2022 for policy no P-223344 has been routed to

Files & documents (1)

Standard accident form

Mike Garcia • 2m ago

Followers (1)



Jane Smith

Priority  
**10**

Status **PENDING**

Created Mike Garcia 3 minutes ago

Updated Mike Garcia 3 minutes ago

Policy number P-223344

Full Name Karen Lee

Date of birth 05/06/2003

Phone number 221-413-7309

Customer since 05/25/2021

Date of last claim --

License number 6TRJ299

Type of car SUV

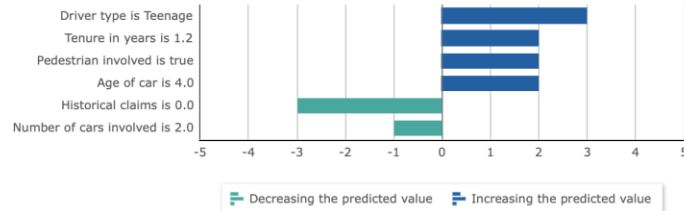
### ★ Prediction

Probability of missing SLA

**70.93%**

Avg. is 1.20%

#### Top influencing factors



7 total factors

### ★ Prediction

Probability of missing SLA

**70.93%**

Learn more

Pulse

Pulse

Search



Post



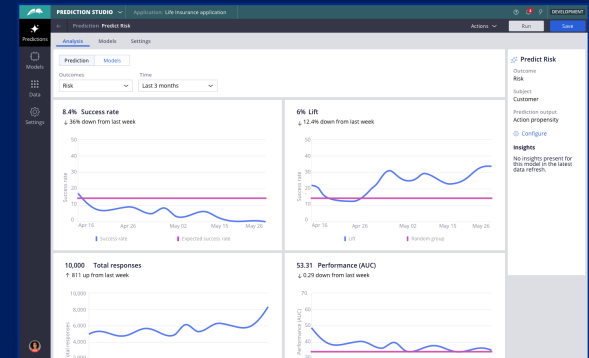
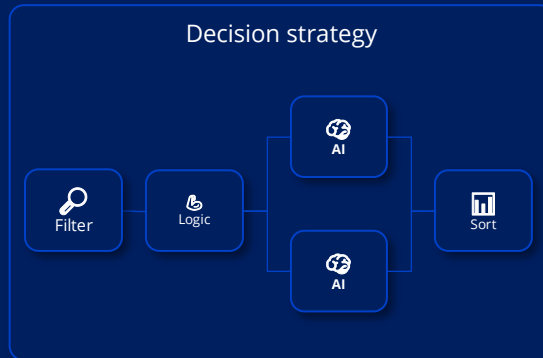
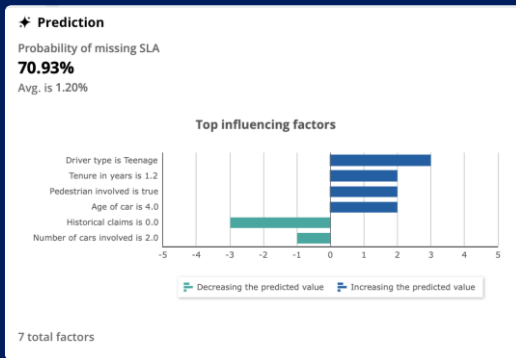
Start a conversation

Stakeholders (1)



Mike Garcia  
Owner

Tags (0)



## Transparent

Insight & audit into the key factors which drove AI to make the decision it did.

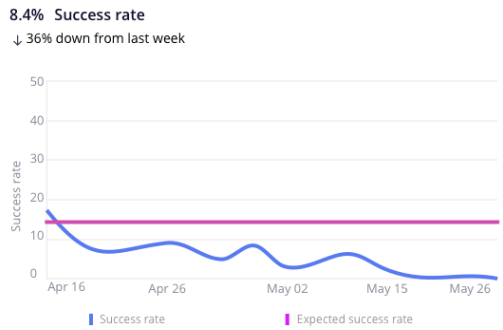
## Governed

Decisions which operate within boundaries – and are guided seamlessly by AI, rules, and people.

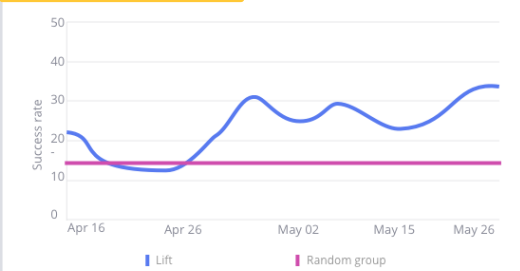
## Trustworthy

Monitoring & alerts which ensure AI is operating responsibly and effectively.





6% Lift  
↓ 12.4% down from last week



**Predict Risk**

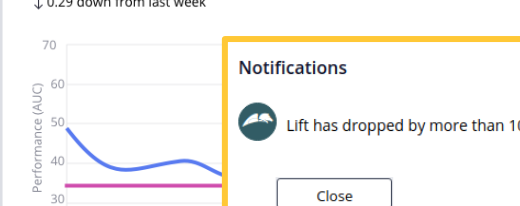
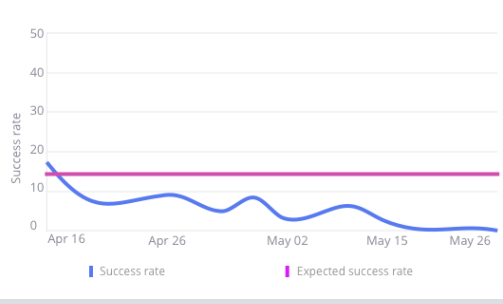
Outcome  
Risk

Subject  
Customer

Prediction output  
Action propensity

[Configure](#)


**Insights**  
No insights present for this model in the latest data refresh.



**Notifications** [Close]

Lift has dropped by more than 10% compared to the previous week

[Close]



Onboarding

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## Continuously Optimize & improve

Process mining  
Workforce intelligence

# Workflow automation powered by case management

Low-code App Studio enables business and IT to collaborate to create the right workflows



Define data, people and process with workflow automation powered by **case management**



Add AI powered automations and decisions into any workflow

The screenshot displays the Pega App Studio interface for an 'HR hub' application. The main view is 'Microjourney' for a 'Job application' case type. It shows a workflow with four stages: 1. Collect resume, 2. Screening, 3. Interview, and 4. Decision. Each stage contains specific steps and actions, such as 'Submit web', 'Screen & schedule', 'Interview', and 'Decision'. Below the workflow, the 'Personas & Channels' section lists various roles and their associated channels, including 'Candidate HR portal', 'Recruiter HR portal', 'Manager HR portal', and 'Candidate Facebook'. The 'Data' section lists data sources and fields, such as 'Applicant info Pega', 'Job opening Pega', and 'Resume Pega'. The interface includes a sidebar with navigation options like 'Overview', 'Case types', 'Data objects', 'Channels', 'Users', and 'Settings'. The top bar shows 'APP STUDIO', 'Application: HR hub', and 'Preview application'.

1. Collect resume	2. Screening	3. Interview	4. Decision
Submit web + STEP 1. New submission PARALLEL Submit Mashup + STEP 1. New submission + STEP	Screen & schedule 1. Review candidate info 2. Phone screen 3. Screening outcome 4. Schedule interview 5. Send reminders + STEP	Interview 1. Sign NDA 2. Rank candidate + STEP	Decision + STEP

Personas & Channels			
Candidate HR portal (MLP 2) Recruiter HR GO mobile (FUTURE) Candidate Facebook (FUTURE) + PERSONA	Recruiter HR portal (MLP 1) + PERSONA	Recruiter HR portal (MLP 1) Manager HR portal (MLP 2) + PERSONA	Recruiter HR portal (MLP 1) Manager HR portal (MLP 2) Manager Email (FUTURE) + PERSONA

Data			
Applicant info Pega (MLP 1) Applicant info LinkedIn (MLP 2) Resume Pega (FUTURE) + DATA	Applicant info Pega (MLP 1) Job opening Pega (MLP 1) Resume Pega (FUTURE) + DATA	Applicant info Pega (MLP 1) Job opening Pega (MLP 1) Resume Pega (MLP 2) + DATA	Applicant info Pega (MLP 1) Cost Center SAP (MLP 2) + DATA

Define the stages and steps required to achieve your outcome

Define the specific the people and channels engaged in each unit of work

Define data sources and data fields required for each workflow

# Deliver intelligent automation

Leverage AI and RPA to automate decisions and optimize future process execution



Define data, people and process with workflow automation powered by **case management**



Add AI powered automations and decisions into any workflow


The screenshot displays the Pega APP STUDIO interface for a 'Job Applicant' case type. The workflow is divided into four stages: 'Apply for job', 'Screening', 'Interview', and 'Decision'. The 'Screening' stage includes steps: '1. Review candidate info', '2. Phone screen', '3. Screening outcome', '4. Schedule interview', and '5. Send reminders'. The 'Interview' stage includes '1. Sign NDA' and '2. Rank candidate'. The 'Decision' stage is currently active. Two callout boxes highlight specific steps: '3. Screening outcome' (labeled 'Drive decisions with AI') and '5. Send reminders' (labeled 'Drive work with automations & RPA'). The interface also shows 'Personas & Channels' (Candidate, Recruiter, Hiring manager) and 'Data & Systems' (Applicant info, Pega, LinkedIn).

# What is a case?

Workflow automation powered by Case Management

A **case** represents the work that an organization performs to achieve an outcome. The case provides the unified context for your processes, logic, data, and intelligence.





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# What you think is going on



**Customer**  
calls to  
submit a  
dispute



**Agent**  
takes in info  
and triages to  
the right team



**Disputes  
processor**  
analyzes and  
completes  
work



**Payable**  
Pays out  
dispute to  
customer

# But there are loops and rework



**Customer**  
calls to  
submit a  
dispute



**Agent**  
takes in info  
and triages to  
the right team



**Disputes  
processor**  
analyzes and  
completes  
work



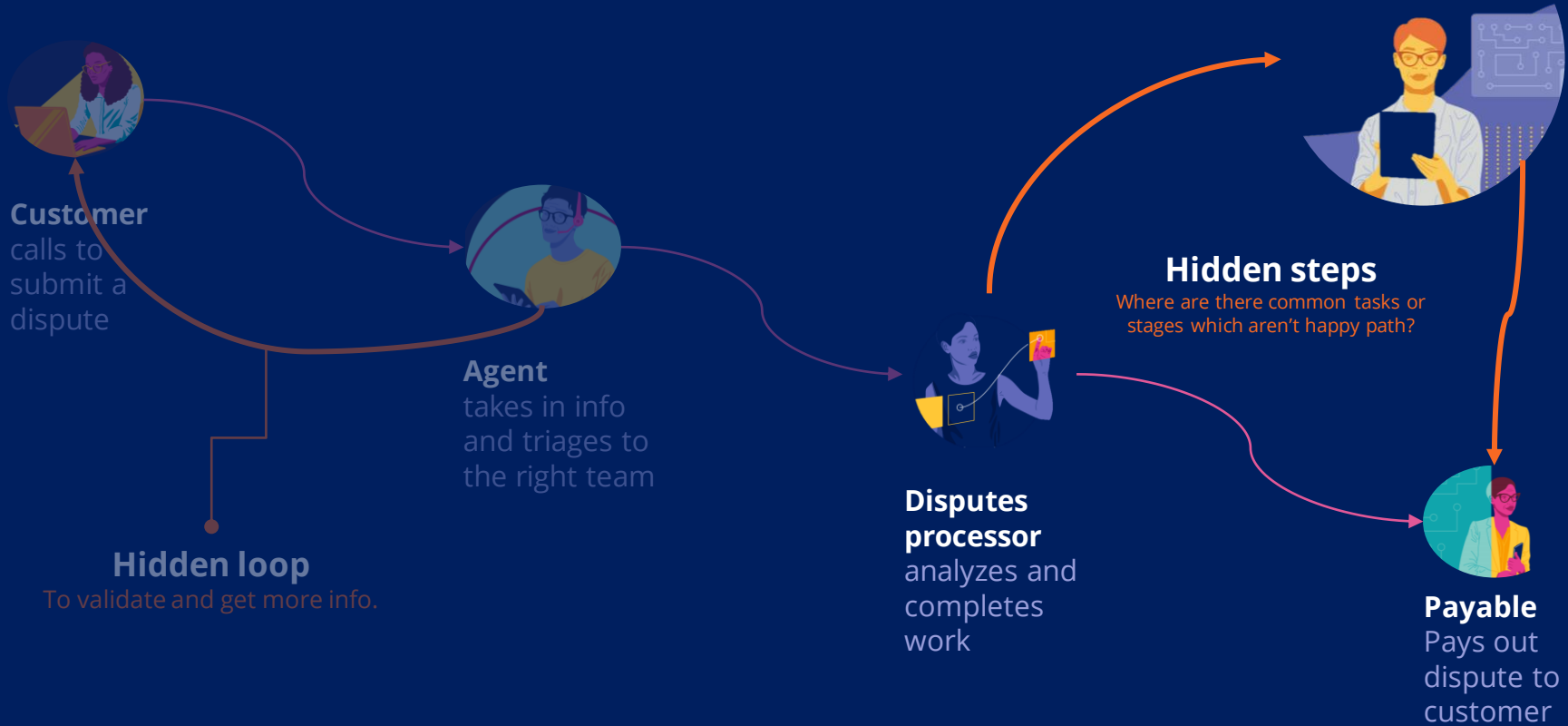
**Payable**  
Pays out  
dispute to  
customer

## Hidden loop

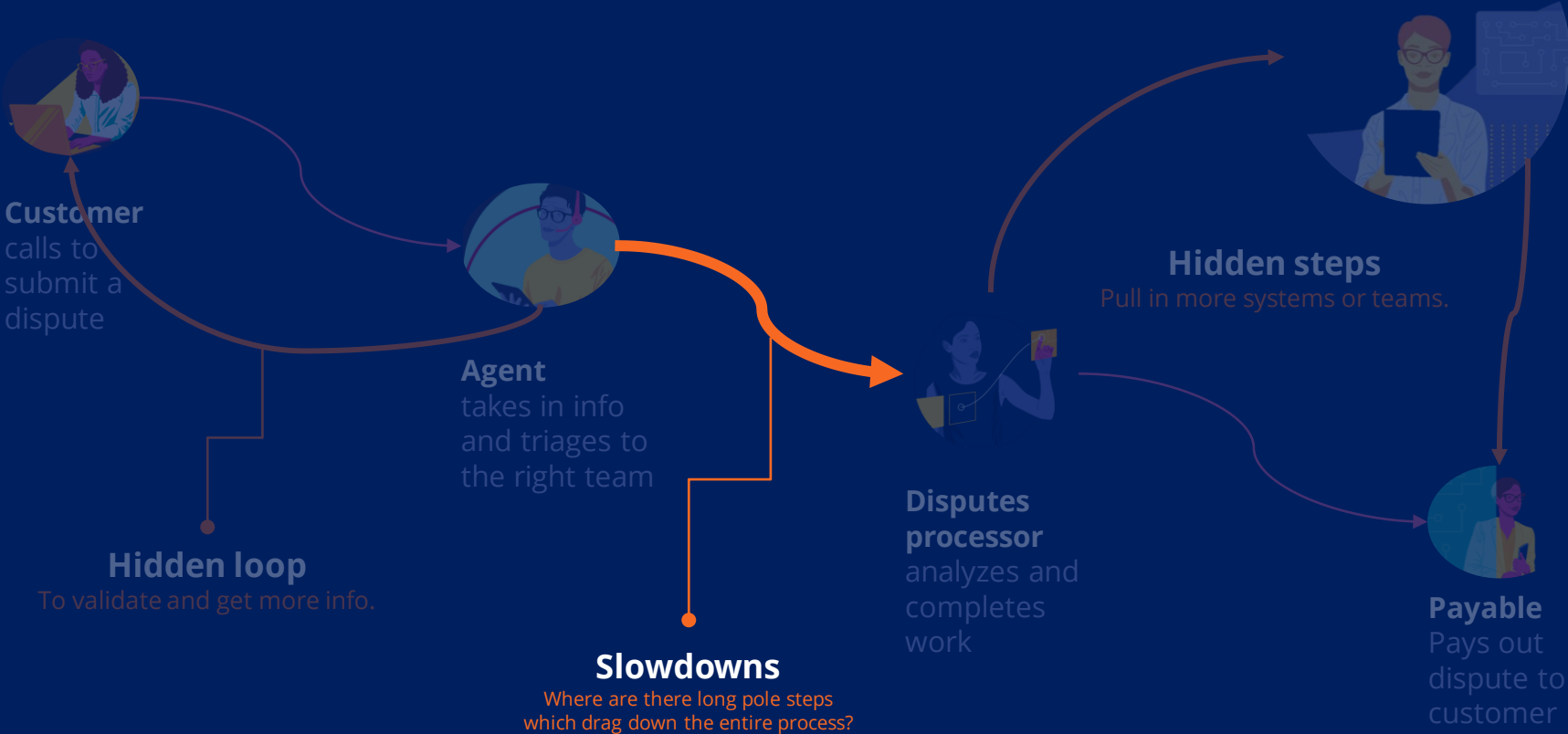
Where do teams or systems go back  
and forth before progressing?



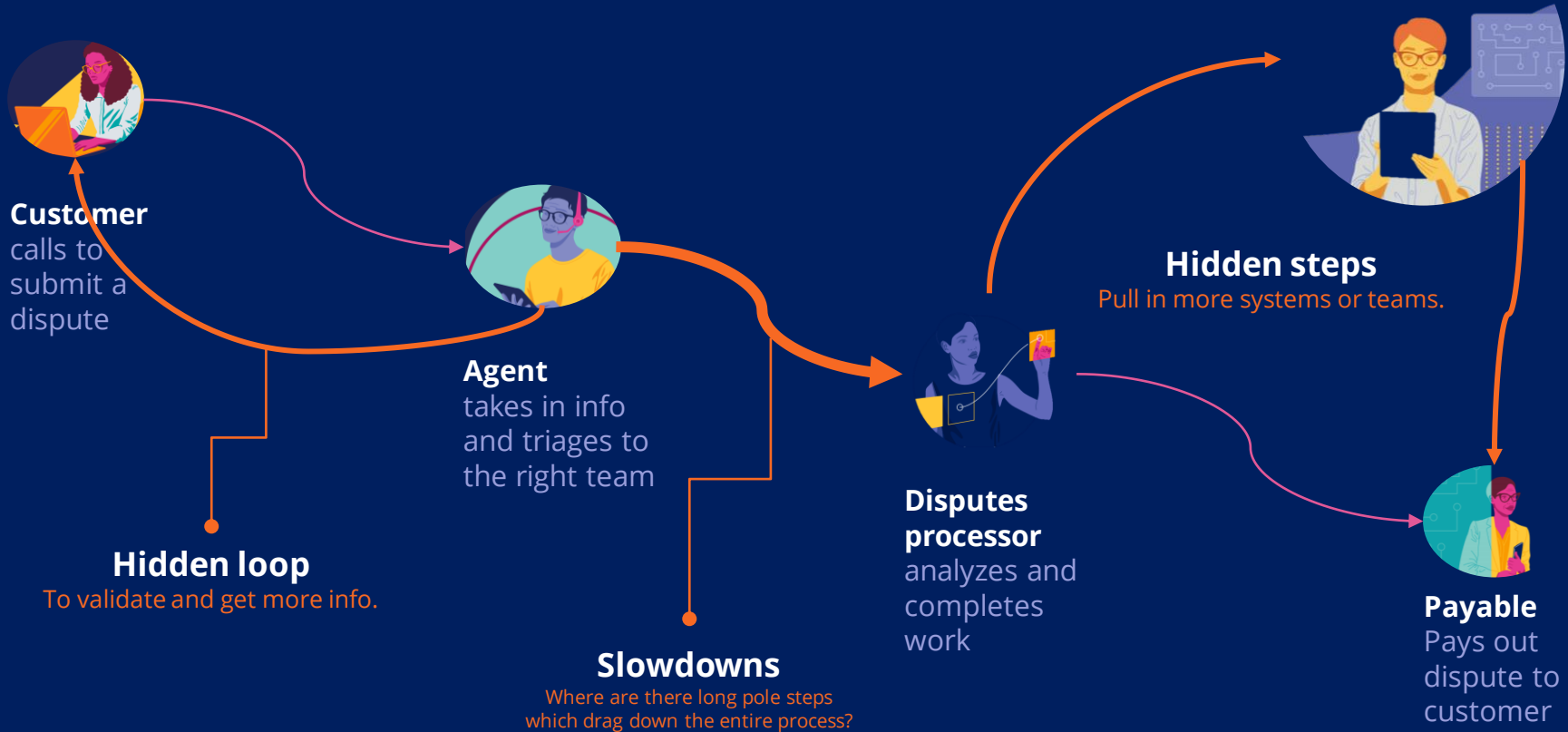
# And non-conformant processes



# And slowdowns



# What's actually going on





# Pega Platform Roadmap



# Pega Platform Cloud Architecture

Modern, stateless  
**front-end**



Client-side UI engine

Headless & custom

DX API

Powerful core  
**engine**

Low-code development

AI-powered decisioning

Workflow automation



Services API's

Functional  
**microservices**

Pega  
Diagnostic  
Cloud

UX static  
content

Strategy  
execution

Decision  
data store



Search &  
reporting



Stream  
service



Data grid  
service



Voice,  
Chat &  
message  
AI

Mobile  
packaging

Cloud control plane



Scalable, secure  
**cloud operations**

Monitoring

Provisioning

Orchestration



Security

Admin



**PEGA<sup>®</sup>**