Breakout | Customer Service

Community Forum

Rabobank‘s Smart Investigate - Journey to the Pega Cloud

Pega SI at Rabobank

The Realm of Pega Cloud
in Rabobank Payments

Rabobank

Our story

1895 - Several banks were set up in different parts of the Netherlands based on the Raiffeisen system. This organizational model was based on self-help, taking individual and mutual responsibility, and the involvement of all stakeholders.

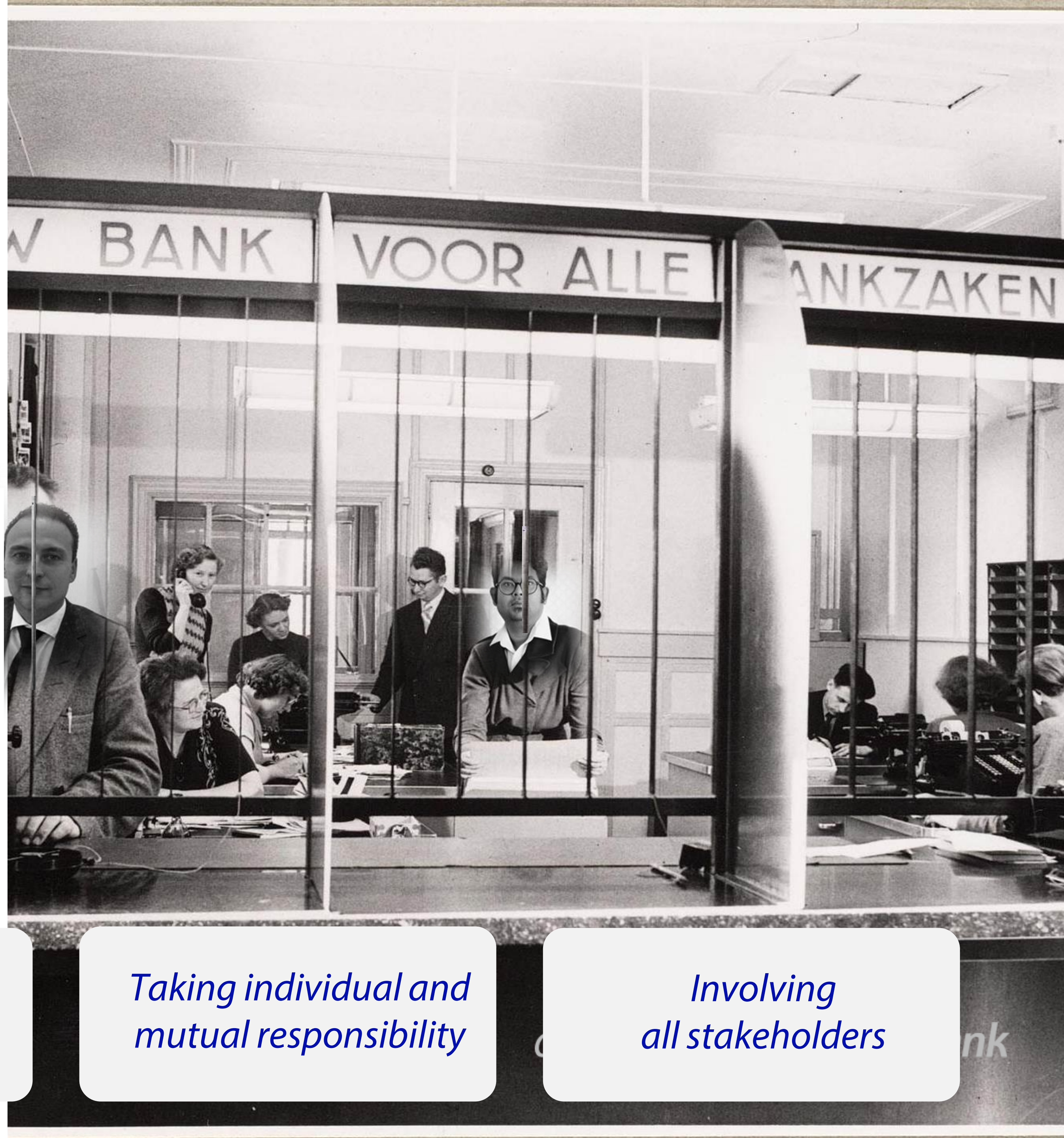
1910 – 600 banks 1920 – 1100 banks

1960 – almost every household has a bank account

Banking changed: Personal loanes and Mortgages of private customers.

To support the many banks in 1972 Raiffeisen bank and the Boerenleenbank merged into Rabobank

Today we are still committed to these same principles, and to making a difference in society.



Improving future agriculture and horticulture

Promoting self-sufficiency

Taking individual and mutual responsibility

Involving all stakeholders

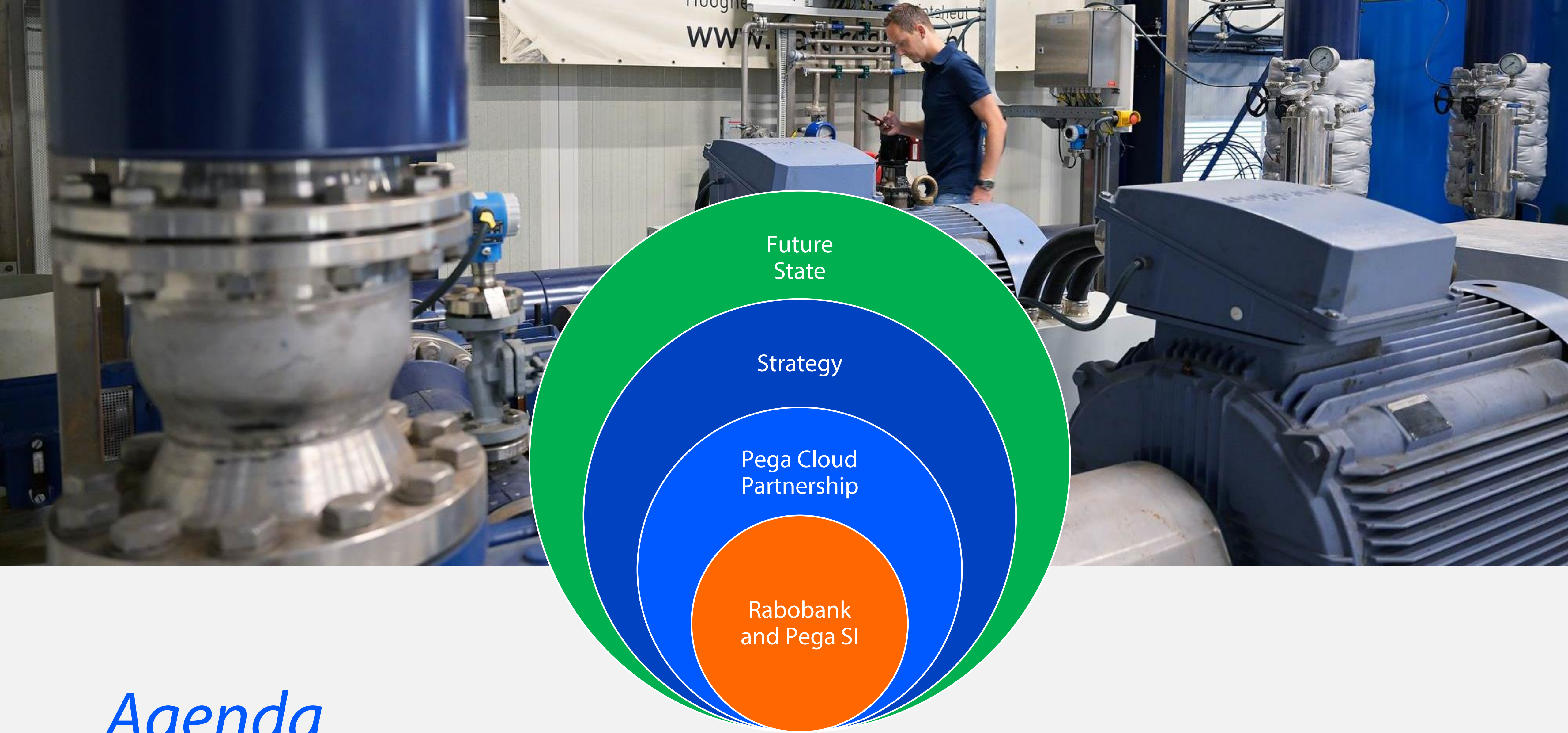
The Realm of Pega cloud in Rabobank Payments

Priyabrata Dasgupta
Pega Solution Architect

Tim Blonk
Product Owner Pega SI

de coöperatieve **Rabobank**

Agenda



Future State

Strategy

Pega Cloud Partnership

Rabobank and Pega SI

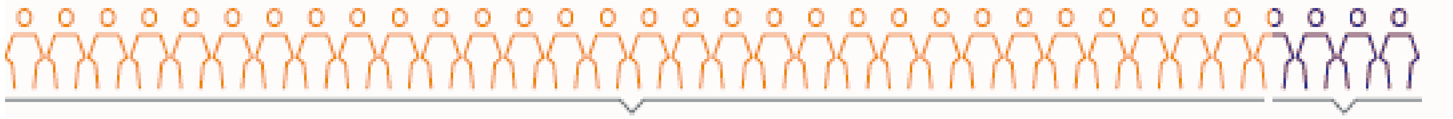
Rabobank

Rabobank at a Glance

Our Mission

Growing a better world together

Almost 9.1 million customers



8.3 million Dutch customers

0.8 million international customers

Rabobank in the Netherlands

Domestic Retail Banking

78 local Rabobanks
144 offices
2.2 million members
8.3 million private customers
0.8 million commercial customers

Wat we offer in the Netherlands

(amounts in EUR billions)

Dutch Private Mortgages ***193.0***	*Lending to Food & Agri* ***40.4***	*Leasing* ***1.3***
Savings ***152.9***	*Lending to Trade, Industry and Services* ***75.4***	

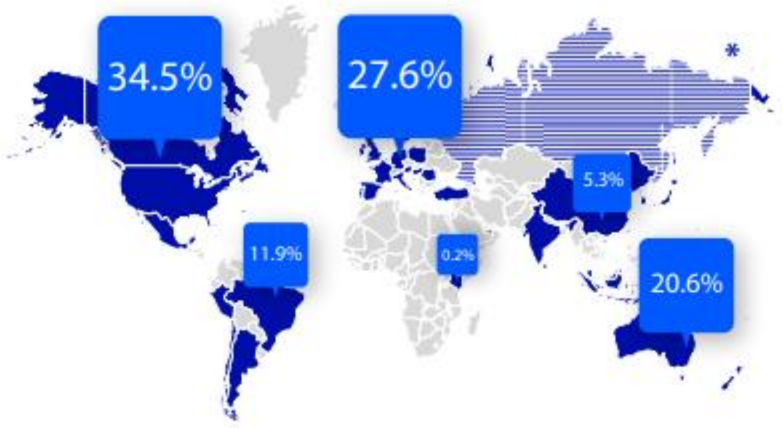
* Situation on December 31, 2022

Rabobank at a Glance

Situation on December 31, 2022

International

36 countries



€ 73.0 billion

Private sector lending to Food & Agri

€ 39.0 billion

Private sector lending to Trade, Industry and Services

€ 34.6 billion

Leasing

Process Overview

Payments Landscape

Pega SI in the Payments domain

Processes

Payment Investigation application consists of below high level processes

Investigations - WorldPay

- Unable to Apply
- Cancellation request
- Beneficiary Claims Non-Receipt
- Amendment Request
- Return of Funds (CT)
- Bank to Bank
- Blanco
- Miscellaneous

Investigations - SEPA

- Unable to Apply
- Cancellation request
- Beneficiary Claims Non-Receipt
- Amendment Request
- Return of Funds (CT)
- Bank to Bank
- Blanco
- Miscellaneous

Investigations - Cash

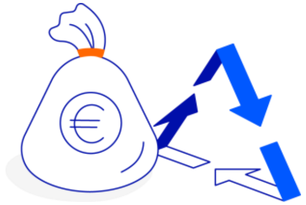
- Sealbag

Investigations – Direct Debit

- SEPA Direct debit On hold

Value Transfer - Savings

- Incoming Value Transfer
- Outgoing Value Transfer



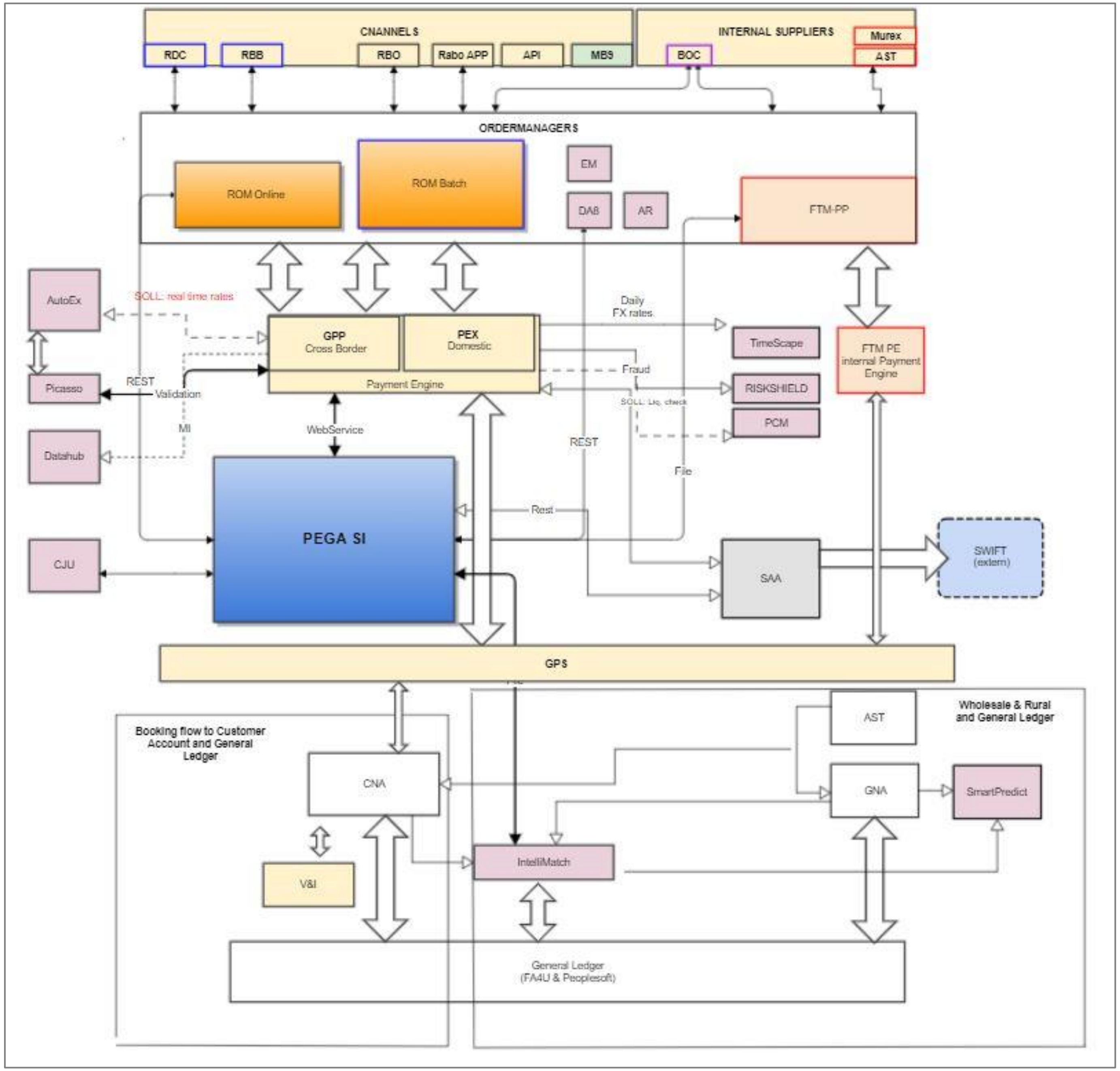
Reconciliation – Nostro

- Nostro Account
- Internal Account

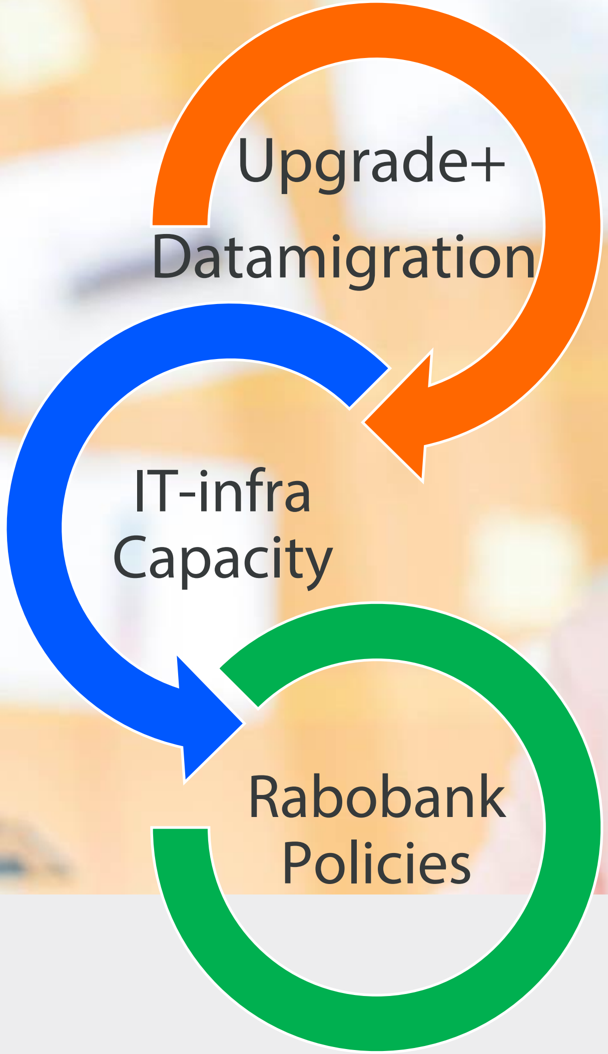
Pega SI in Payments Landscape

Pega SI application exitance in the Payments landscape – An AIC 232 application

- Connected with various Order Manager apps
- Payment execution apps
- Swift externally
- Wholesale and General Ledger for reconciliation processes
- Foreign Exchanges
- Front Office Siebel application through a number of api to perform client communications


CNANNELS
RDC
RBB
RBO
Rabo APP
API
MBS
INTERNAL SUPPLIERS
BOC
Murex
AST
ORDERMANAGERS
ROM Online
ROM Batch
EM
DAB
AR
FTM-PP
AutoEx
SOLL: real time rates
Picasso
REST
Validation
MI
Datahub
CJU
GPP
Cross Border
PEX
Domestic
Payment Engine
WebService
Daily
FX rates
Fraud
SOLL: Liq. check
REST
File
Rest
TimeScape
RISKSHIELD
PCM
FTM PE
internal Payment
Engine
PEGA SI
SAA
SWIFT
(extern)
GPS
Booking flow to Customer Account and General Ledger
CNA
V&I
IntelliMatch
AST
GNA
SmartPredict
Wholesale & Rural and General Ledger
General Ledger
(FA4U & Peoplesoft)

Rabobank



Upgrade+
Datamigration

IT-infra
Capacity

Rabobank
Policies

Pega Cloud Partnership

Rabobank Policies

- Buy over build
- Cloud First
- SaaS over PaaS

Known

- Knowledgebase in Rabobank
- Sharing of components
- Datamigration by Pega

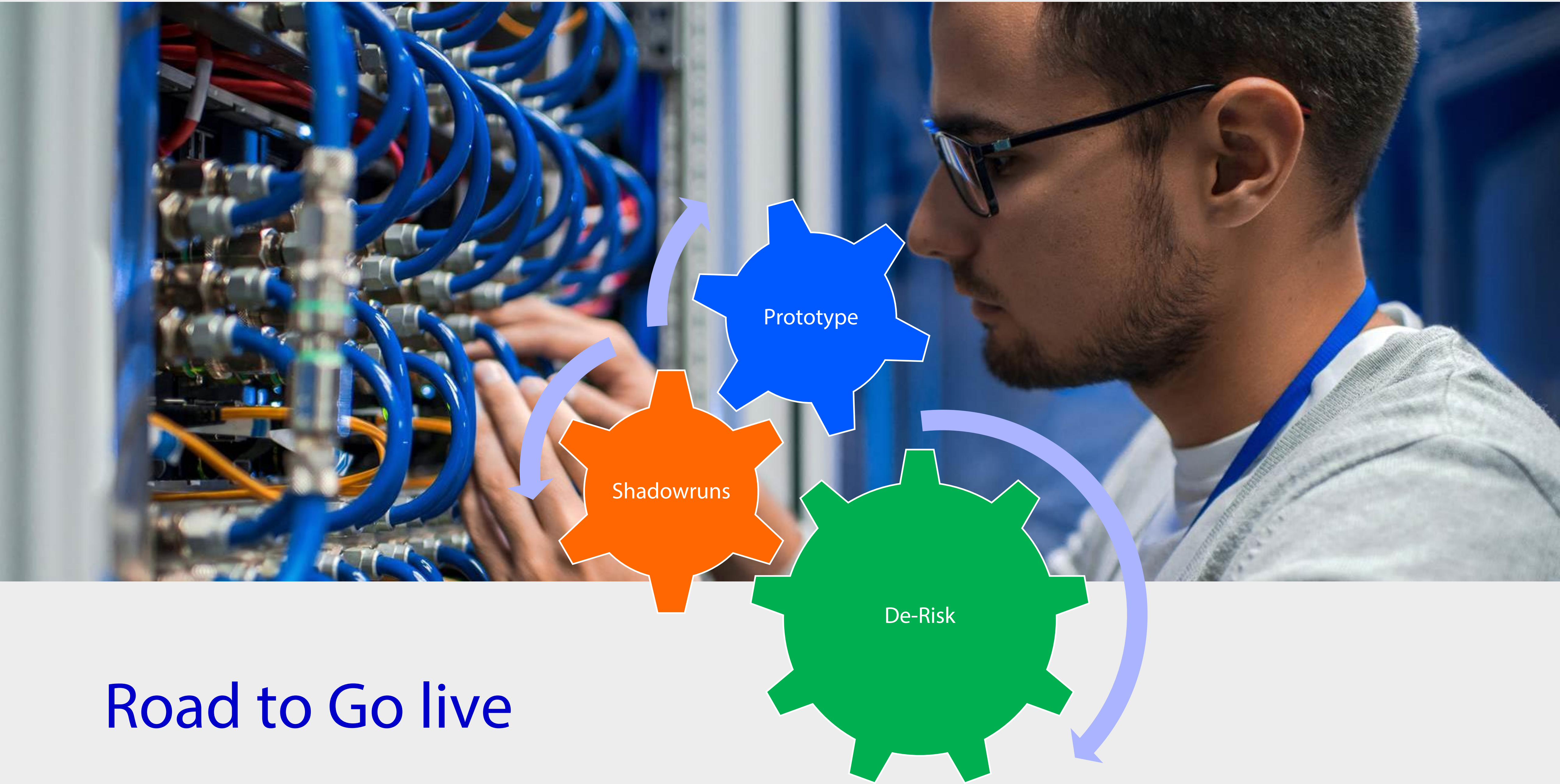
Live Cycle Management

- Infrastructure
- Security
- Monitoring
- Product upgrades

Pega Cloud

Partnership

Road to Go live



Prototype

Shadowruns

De-Risk

Risk Factors “Go live”

AIC 232 Application
- High value transactions
- No downtime during office hours
- Highly secured acces control
- Secure connections
- Signed messaging (anti-tampering)

Posibility of fased Go live
- 90% of Processes need historical data which means Datamigration
- 33 interfaces

Pega Cloud Live – At a glance

Assessment and Readiness

Platform, Application and Database assessment

Cloud compatibility

Assess the size & scope

Modernization

Upgrade Interface

Unsupported integrations

Design new integration patterns

Derisk implementation through on prem

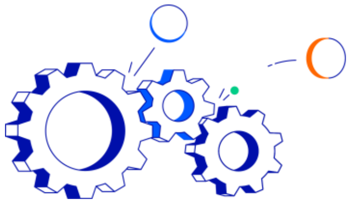
Ex: Event Bus, Funnel

Rule Migration

Business as usual on prem

Rule upgrade and migration plan

Tracking and retrofit



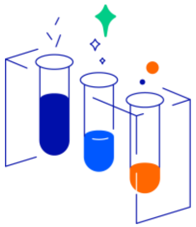
Data Migration & Shadowrun

Involving Lead architects in setup design

VPN tunnel, OCM, IP whitelist

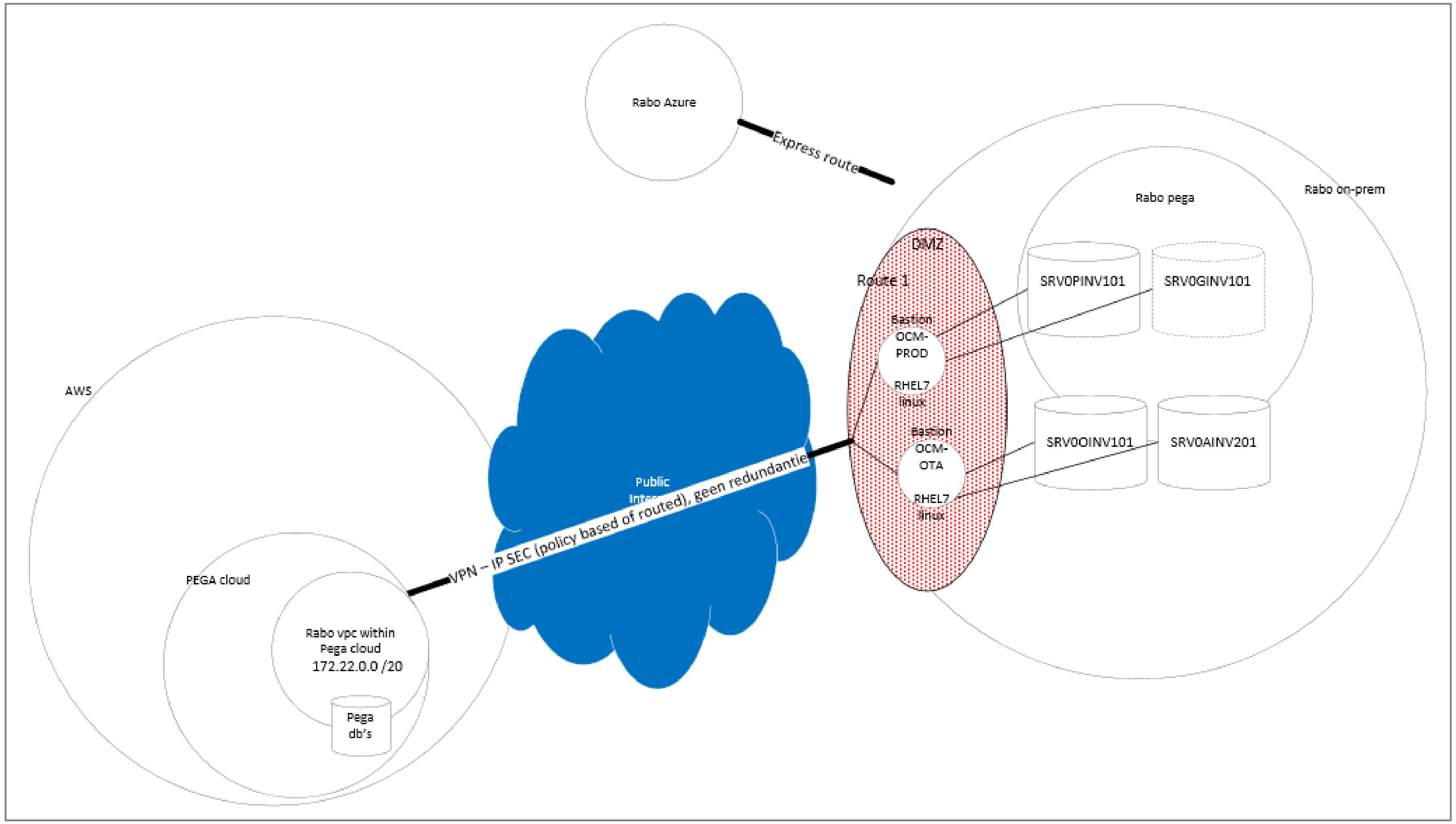
Connection test

Shadowrun with process onboarding

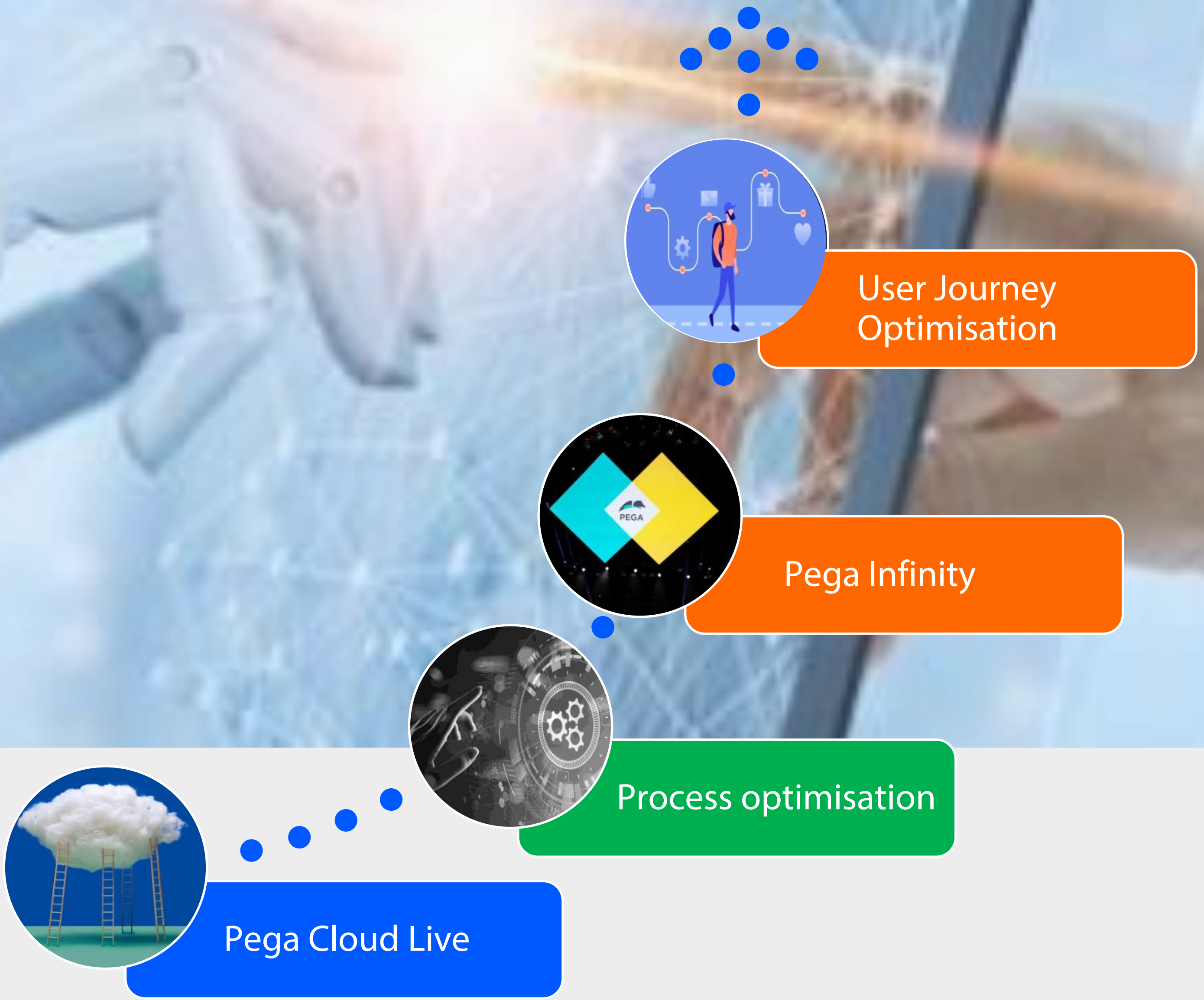


Data Migration

- Rabobank Payments Pega Cloud VPC with reserved IP space
- VPN setup through public internet connected to DMZ route
- Connect to dedicated Oracle Connection Manager specific to the environment
- Access to Rabobank Pega on-prem environment


Rabo Azure
Express route
Rabo pega
Rabo on-prem
DMZ
Route 1
Bastion
OCM-PROD
RHEL7 linux
Bastion
OCM-OTA
RHEL7 linux
SRVOPINV101
SRVOGINV101
SRVOOINV101
SRVOAINV201
AWS
Public
Inte
VPN – IP SEC (policy based of routed), geen redundantie
PEGA cloud
Rabo vpc within Pega cloud 172.22.0.0 /20
Pega db's

Future state



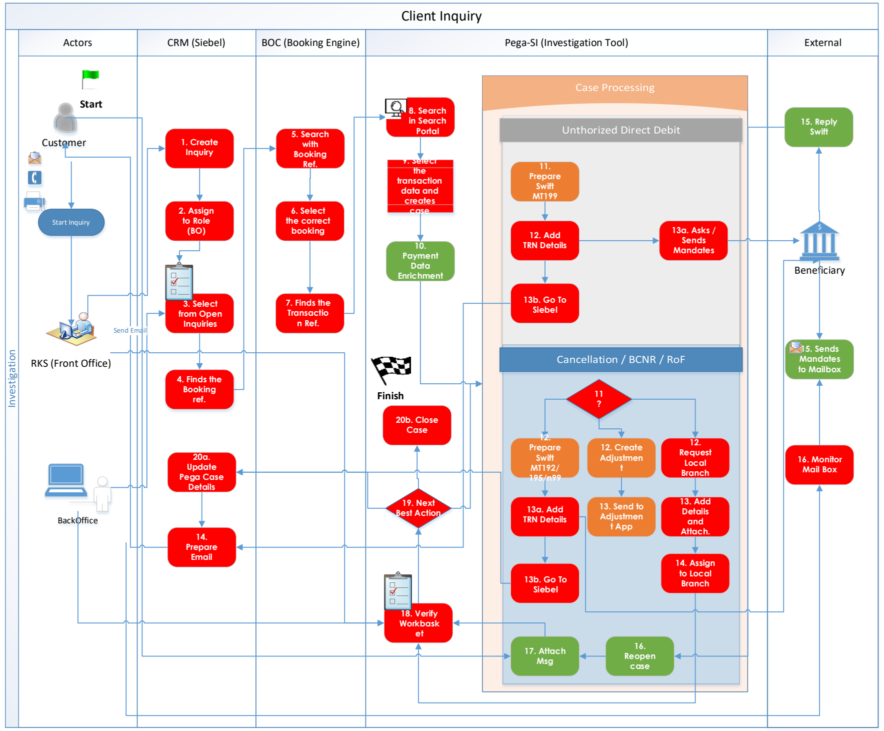
Pega Cloud Live

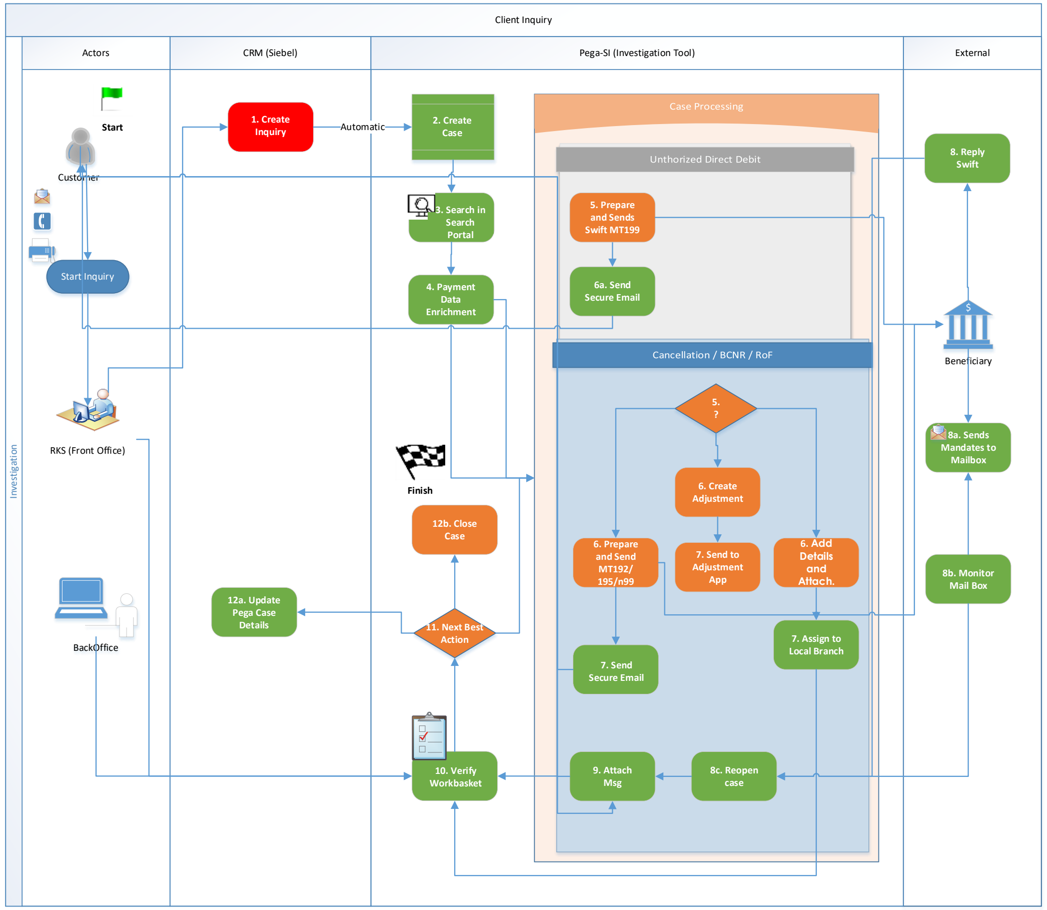
Process optimisation

Pega Infinity

User Journey Optimisation

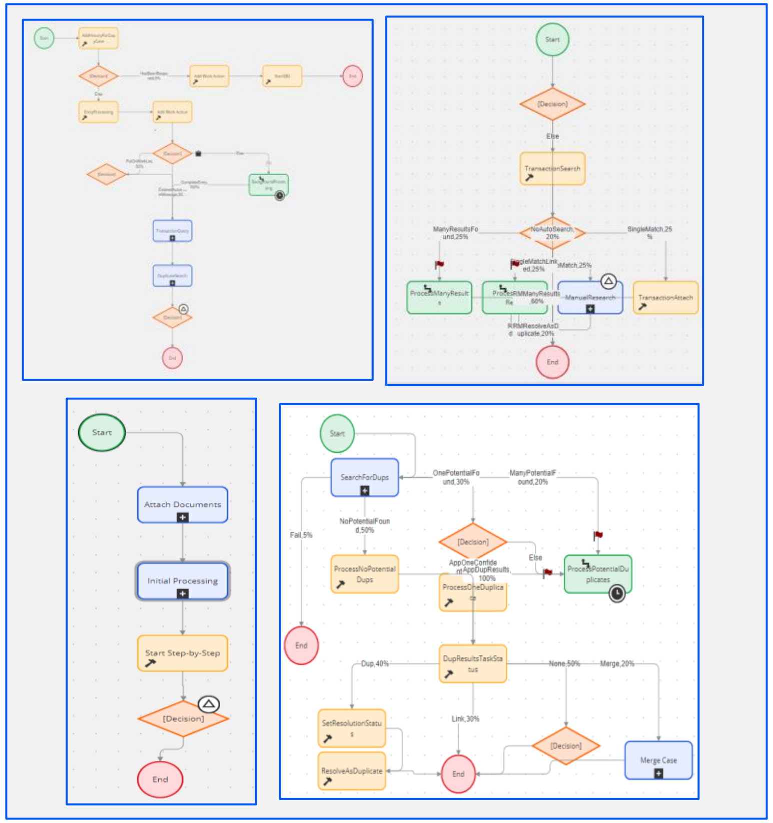
Optimisation - Process

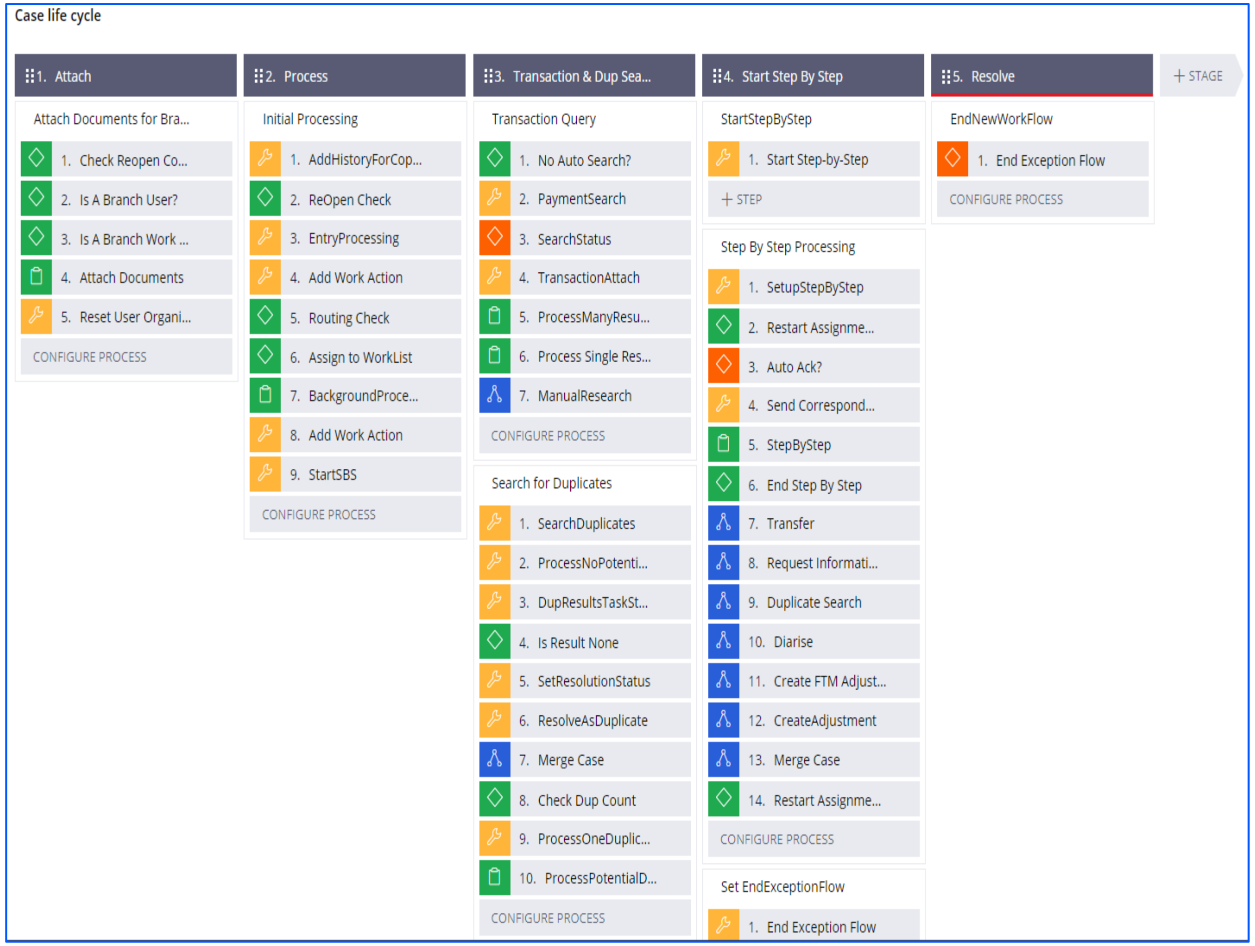

Client Inquiry
Actors
CRM (Siebel)
BOC (Booking Engine)
Pega-SI (Investigation Tool)
External
Investigation
Start
Customer
Start Inquiry
RKS (Front Office)
Send Email
BackOffice
1. Create Inquiry
2. Assign to Role (BO)
3. Select from Open Inquiries
4. Finds the Booking ref.
20a. Update Pega Case Details
14. Prepare Email
5. Search with Booking Ref.
6. Select the correct booking
7. Finds the Transaction Ref.
8. Search in Search Portal
9. Select the transaction data and creates case
10. Payment Data Enrichment
Finish
20b. Close Case
19. Next Best Action
18. Verify Workbasket
Case Processing
Unthorized Direct Debit
11. Prepare Swift MT199
12. Add TRN Details
13a. Asks / Sends Mandates
13b. Go To Siebel
Cancellation / BCNR / RoF
11 ?
12. Prepare Swift MT192/ 195/n99
12. Create Adjustment
12. Request Local Branch
13a. Add TRN Details
13. Send to Adjustment App
13. Add Details and Attach.
13b. Go To Siebel
14. Assign to Local Branch
17. Attach Msg
16. Reopen case
15. Reply Swift
Beneficiary
15. Sends Mandates to Mailbox
16. Monitor Mail Box


Client Inquiry
Actors
CRM (Siebel)
Pega-SI (Investigation Tool)
External
Investigation
Start
Customer
Start Inquiry
RKS (Front Office)
BackOffice
1. Create Inquiry
Automatic
2. Create Case
3. Search in Search Portal
4. Payment Data Enrichment
Finish
12b. Close Case
12a. Update Pega Case Details
11. Next Best Action
10. Verify Workbasket
Case Processing
Unthorized Direct Debit
5. Prepare and Sends Swift MT199
6a. Send Secure Email
Cancellation / BCNR / RoF
5. ?
6. Create Adjustment
6. Prepare and Send MT192/ 195/n99
7. Send to Adjustment App
6. Add Details and Attach.
7. Send Secure Email
7. Assign to Local Branch
9. Attach Msg
8c. Reopen case
8. Reply Swift
Beneficiary
8a. Sends Mandates to Mailbox
8b. Monitor Mail Box

Legend 🟥 **Manual** 🟧 **Guided** 🟩 **Automatic**

Infinity Based


Start
Attach Documents
Initial Processing
Start Step-by-Step
[Decision]
End
TransactionSearch
NoAutoSearch
ManualResearch
TransactionAttach
SearchForDups
ProcessNoPotentialDups
ProcessOneDuplicate
ProcessPotentialDuplicates
DupResultsTaskStatus
SetResolutionStatus
ResolveAsDuplicate
Merge Case



Case life cycle

1. Attach

Attach Documents for Bra...

1. Check Reopen Co...
2. Is A Branch User?
3. Is A Branch Work ...
4. Attach Documents
5. Reset User Organi...

CONFIGURE PROCESS

2. Process

Initial Processing

1. AddHistoryForCop...
2. ReOpen Check
3. EntryProcessing
4. Add Work Action
5. Routing Check
6. Assign to WorkList
7. BackgroundProce...
8. Add Work Action
9. StartSBS

CONFIGURE PROCESS

3. Transaction & Dup Sea...

Transaction Query

1. No Auto Search?
2. PaymentSearch
3. SearchStatus
4. TransactionAttach
5. ProcessManyResu...
6. Process Single Res...
7. ManualResearch

CONFIGURE PROCESS

Search for Duplicates

1. SearchDuplicates
2. ProcessNoPotenti...
3. DupResultsTaskSt...
4. Is Result None
5. SetResolutionStatus
6. ResolveAsDuplicate
7. Merge Case
8. Check Dup Count
9. ProcessOneDuplic...
10. ProcessPotentialD...

CONFIGURE PROCESS

4. Start Step By Step

StartStepByStep

1. Start Step-by-Step

+ STEP

Step By Step Processing

1. SetupStepByStep
2. Restart Assignme...
3. Auto Ack?
4. Send Correspond...
5. StepByStep
6. End Step By Step
7. Transfer
8. Request Informati...
9. Duplicate Search
10. Diarise
11. Create FTM Adjust...
12. CreateAdjustment
13. Merge Case
14. Restart Assignme...

CONFIGURE PROCESS

Set EndExceptionFlow

1. End Exception Flow

5. Resolve

EndNewWorkFlow

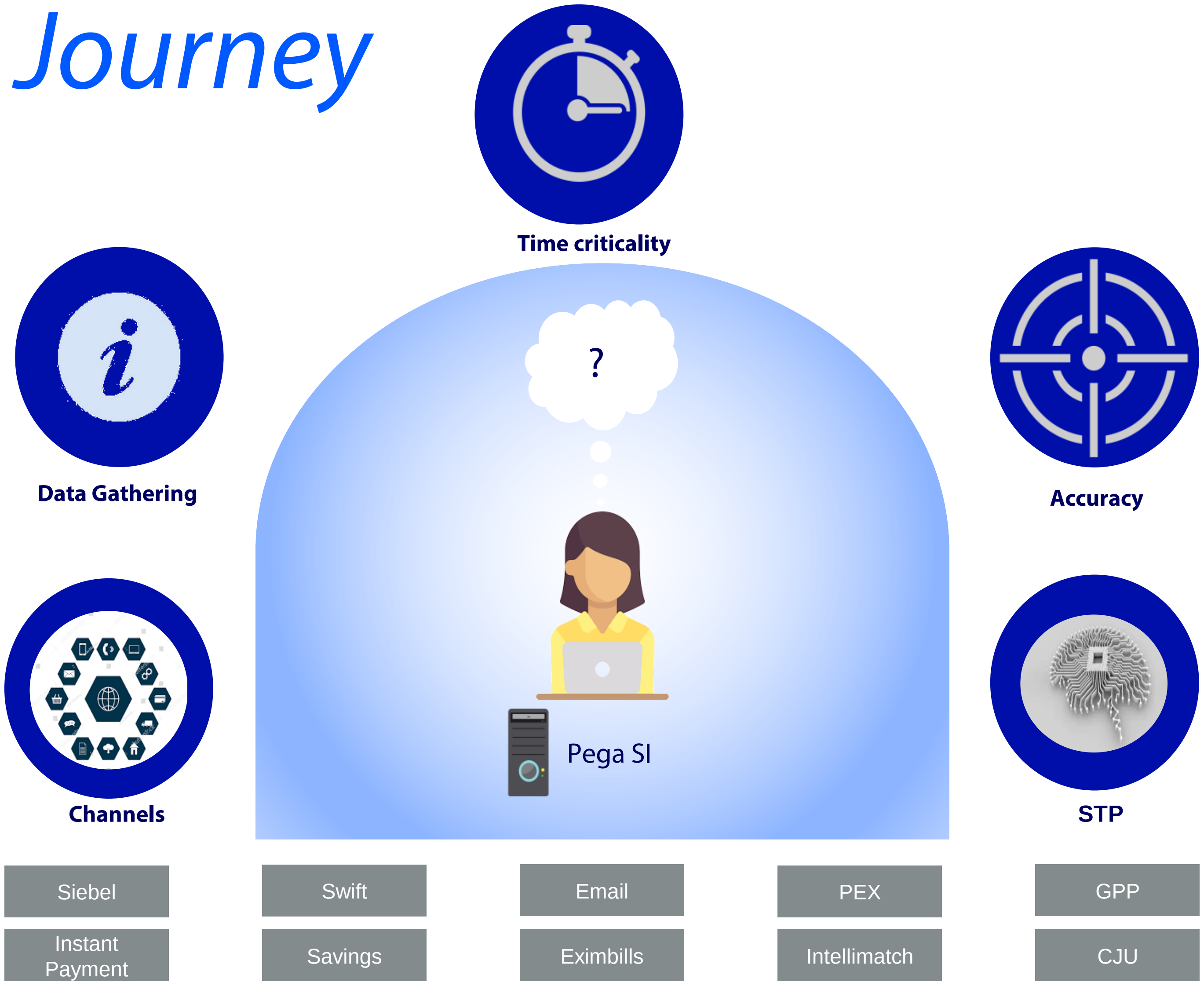
1. End Exception Flow

CONFIGURE PROCESS

+ STAGE

Optimisation - User Journey

- **Leverage technology** to identify exceptions, generate alerts and automate repairs and reprocessing
- **Reduce cost per investigations** of the case types based on an agreed criteria
- **Make complex processes simpler & cost efficient**
- Map the **PEGA SI user journeys** with upcoming infinity adoption
- Seamless user experience combine with **Pega case management** through stateless **interpreter DX**



Time criticality

Data Gathering

Accuracy

Channels

STP

?

Pega SI

Siebel

Instant Payment

Swift

Savings

Email

Eximbills

PEX

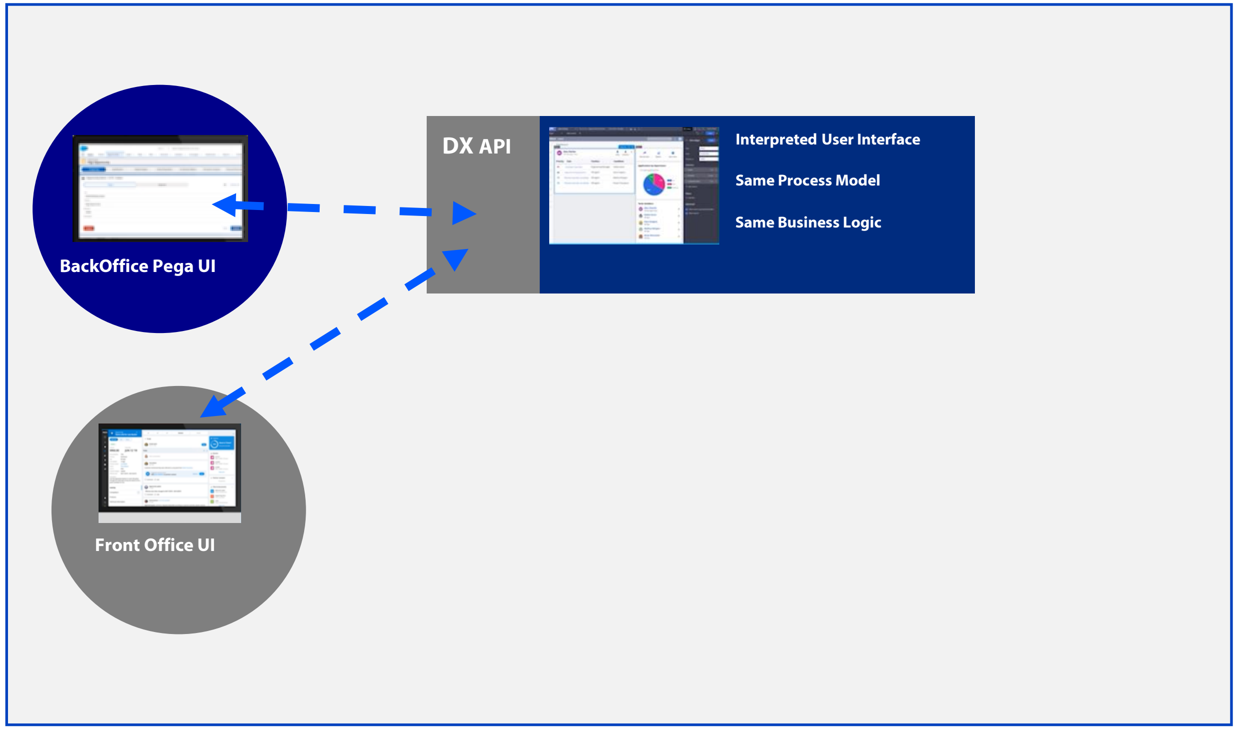
Intellimatch

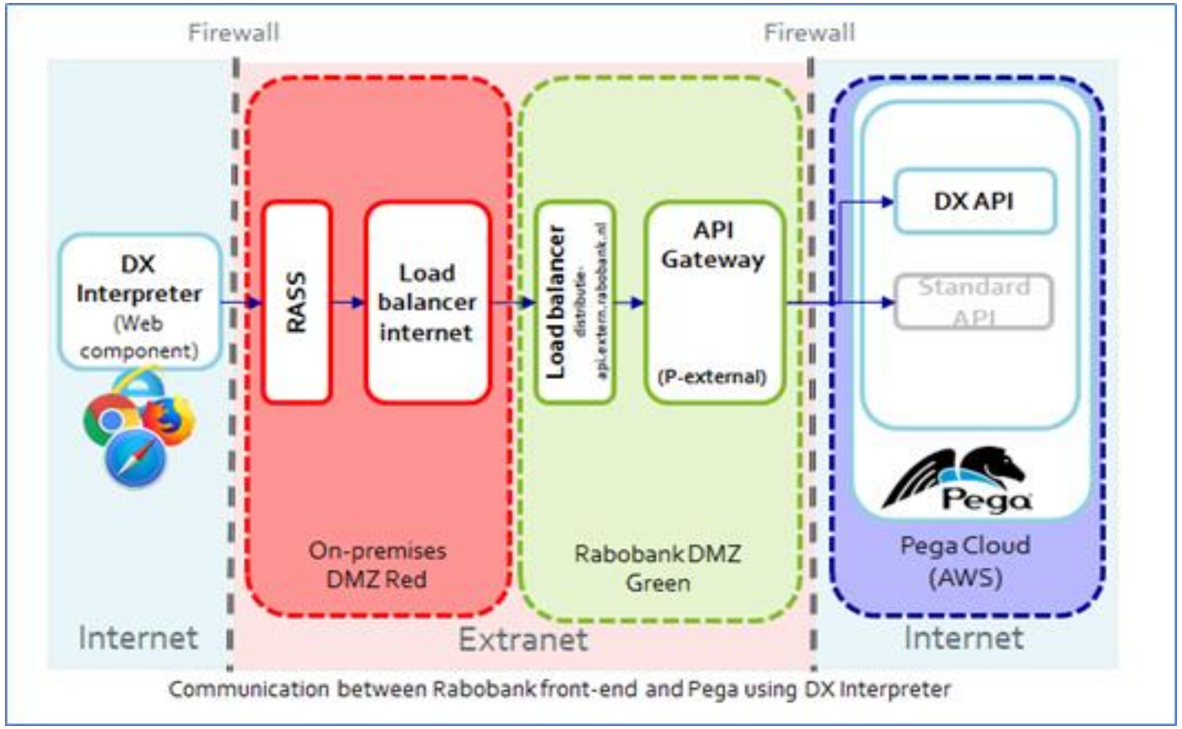
GPP

CJU

Thank you for your attention

Optimisation – User Journey through DX


BackOffice Pega UI
DX API
Interpreted User Interface
Same Process Model
Same Business Logic
Front Office UI


Firewall
Firewall
DX Interpreter (Web component)
RASS
Load balancer internet
Load balancer
distribute-api.extern.rabobank.nl
API Gateway
(P-external)
DX API
Standard API
Pega
On-premises DMZ Red
Rabobank DMZ Green
Pega Cloud (AWS)
Internet
Extranet
Internet

Communication between Rabobank front-end and Pega using DX Interpreter

- A centralized web component "DX Interpreter" invokes the APIs exposed on the API Gateway
- Reuse Rabobank defined authentication mechanism for Customer, Employee or Visitor – In this scenario it will mostly be Employee authentication
- Usage of API endpoints on gateway – based on authentication mechanism chosen

Rabobank