

PegaWorld Nspire JUNE 9-11, 2024 | LAS VEGAS

Accelerating the ROI of Low Code Through **Enterprise Reuse**

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- 1. Reuse Best Practices are Evolving
- 2. Pega's Enterprise Reuse Roadmap
- 3. Basics of Modular Enterprise Reuse
- 4. Designing for Reuse
- 5. Client ROI Stories



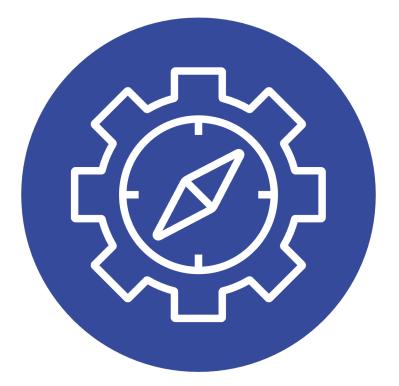


Al is changing everything.



Do More

Make every employee your best employee



Build More

Reduce development effort by 50%

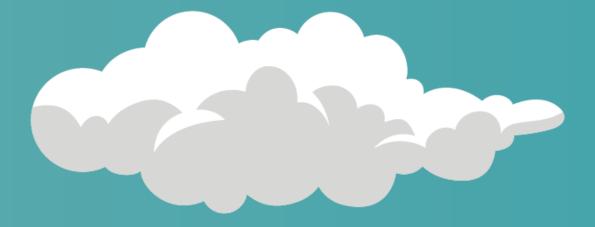


Envision More

Design the future in minutes



So how does **Enterprise Reuse** fit into the story?









Guiding Principles for Modern Enterprise Reuse in Pega



Build the "blocks"

APP STUDIO

Assemble the "blocks"



Interoperable

Leverage the same building blocks across authoring experiences, and across applications



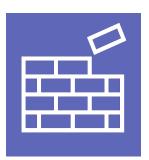
Updateable

Seamlessly update individual building blocks without impacting overall applications



Configurable

Control behavior without refactoring or rewriting business logic



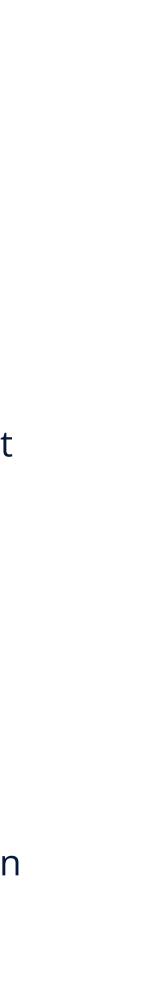
Modular

Avoid monolithic layers that are too large to maintain or upgrade



Governed

A Pega Center of Excellence should help design, deploy, maintain, and monitor the use of reusable building blocks



Pega Reuse + Pega AI Amplifies Build Acceleration

Modular Reuse Design & Build

"Build the blocks, assemble the blocks"

Fusion teams

Pega Enterprise Reuse

Center-out Business Architecture Situational Layer Cake Relevant Records App Factory

Pega GenAl Blueprint



Roadmap Pega Enterprise Reuse Leverage powerful building blocks.

Reuse for the Enterprise

Pega Situational Layer Cake

Rule Resolution

Pattern & Directed Class Inheritance

Application Inheritance

Rule Set Inheritance

Application **Components**

Pega Marketplace

Relevant **Records**

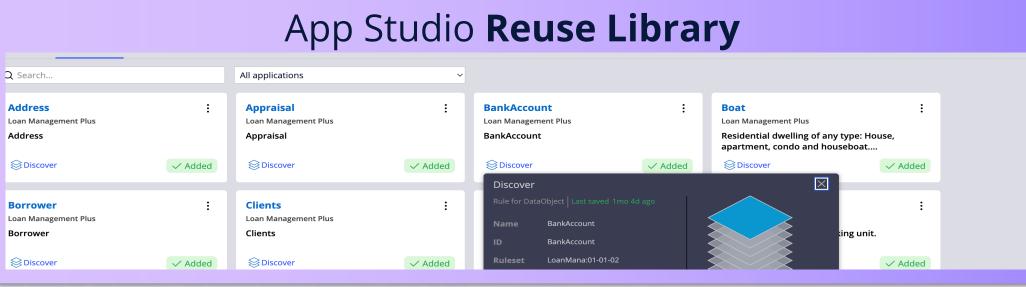
Rule **Availability**

Circumstancing

Application Templates

Pipeline Templates

Visibility for Developers

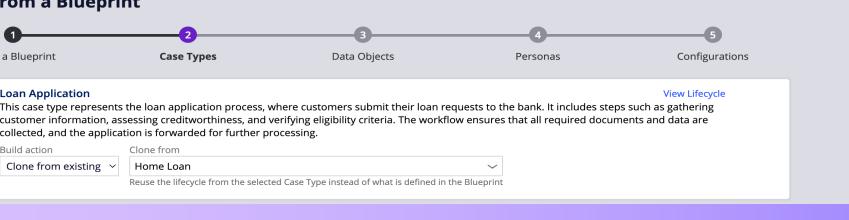


Pega GenAl[™] Blueprint Accelerator

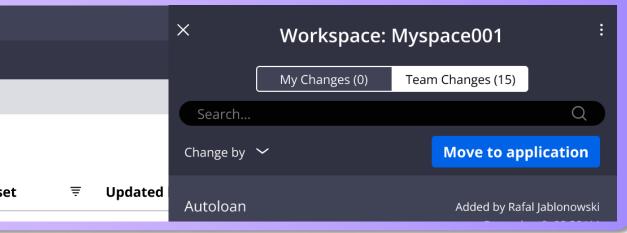
Extend from a Blueprint Case Types Select a Blueprin collected, and the application is forwarded for further processing Clone from Clone from existing \checkmark Home Loan

| Ŧ | Class | Ŧ | Rule type | Ŧ | Rulese |
|---|-------|---|-----------|---|--------|
| - | | - | | - | |
| | | | | | |
| | | | | | |

Pega Foundations



Operator Specific Branching



Enhanced Intelligence

Pega AutopilotTM Suggested Assets

Pega GenAl[™] Blueprint Extractor

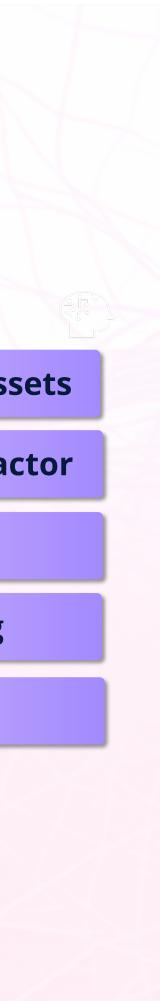
Studio Interoperability

Reuse Library Publishing

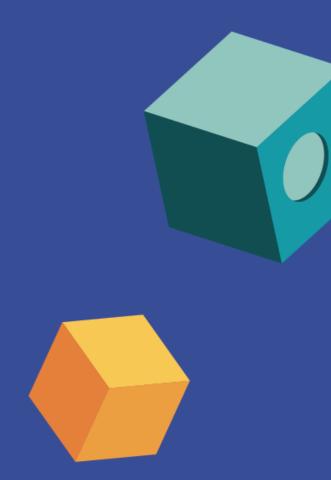
Contextual Insights

Future

Recent Additions





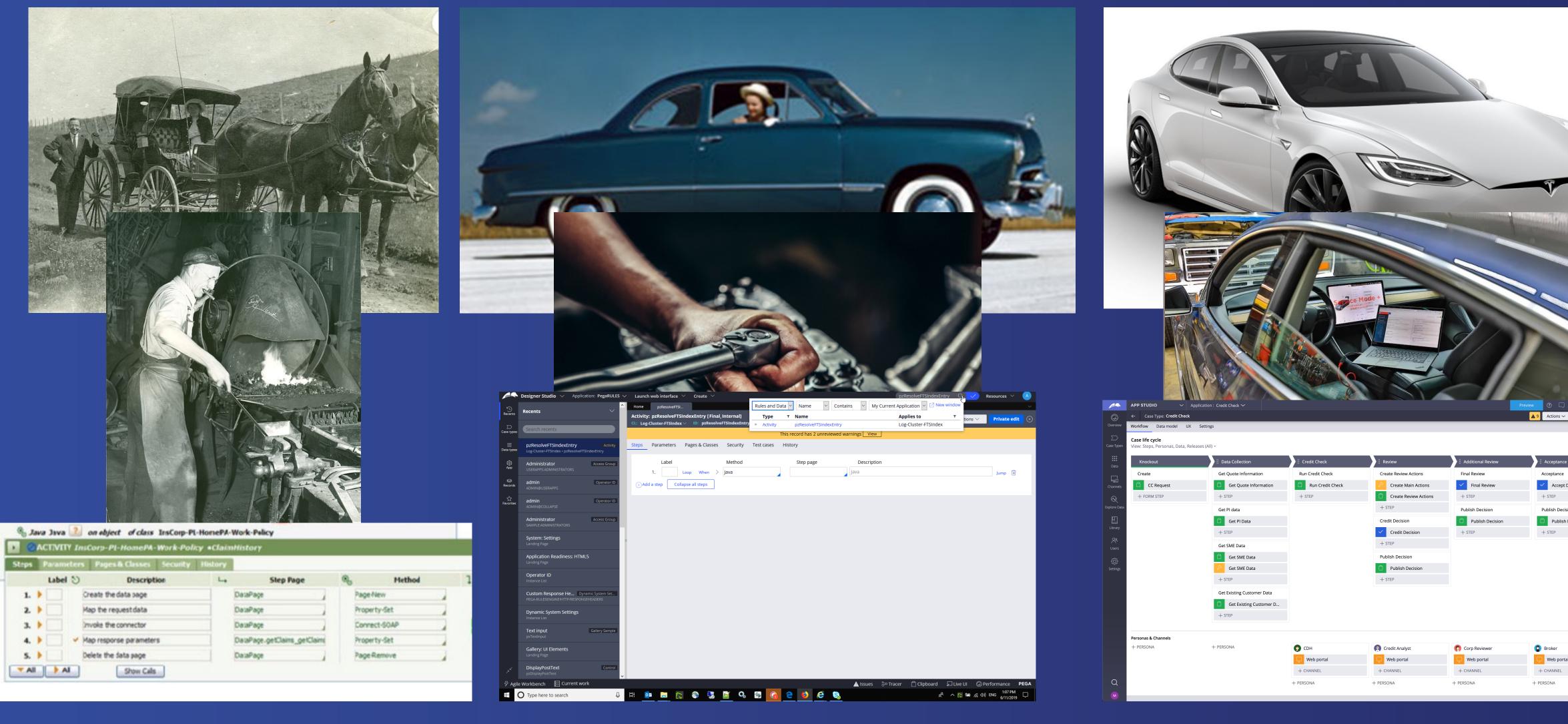


The basics of modular enterprise reuse





Skills Needed Changed Over the Years!



PRPC 5.X

Pega 7.X

Infinity '23 PegaWorldiNspire





Work Together

Document driven development.

System Architect does the work through instructions written down by the other delivery team members (Business, UX, PO...).



Model driven development.

Collaborative delivery in App Studio, with appropriate detailing by System Architects in Dev Studio, led by a clear vision from the PO.





OOTB Building Blocks

- Basic blocks to build basic applications quickly with the OOTB features from Pega App studio
- For simple processes and very quick delivery
- Good start for Minimum Loveable Product (MLP)1



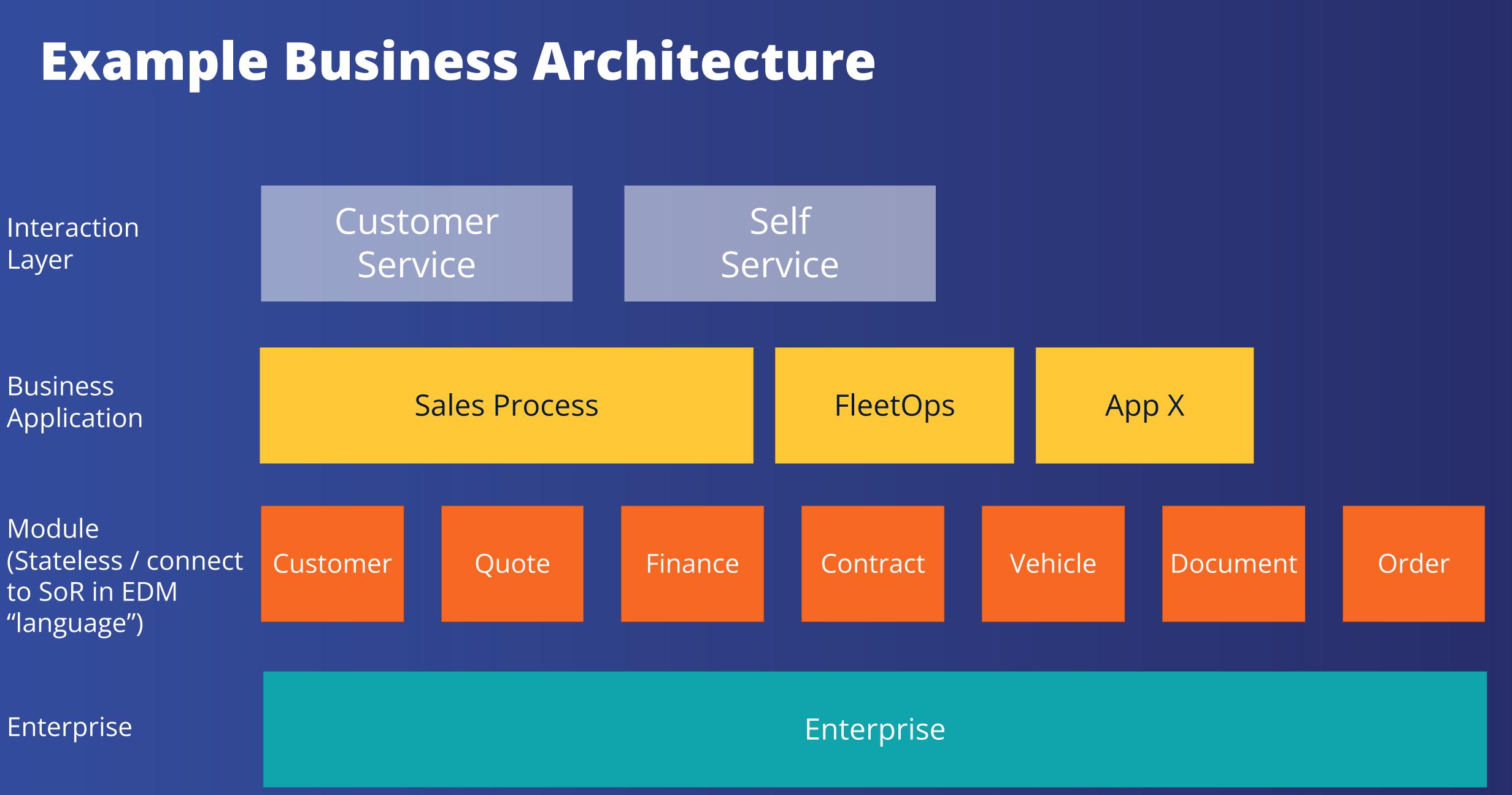


Extended Building Blocks

- Build new building blocks (like the rooftop stones, or wheels on the car) in App and Dev studio
- Assemble the new blocks from App studio to create more context specific applications fast and easy
- Needs decisions on what new building blocks (features) to build first
- Design using the available and new features in mind









Handle Multiple Countries/Labels and Innovation

Configuration / Innovation Layer

Sales Process LPUK

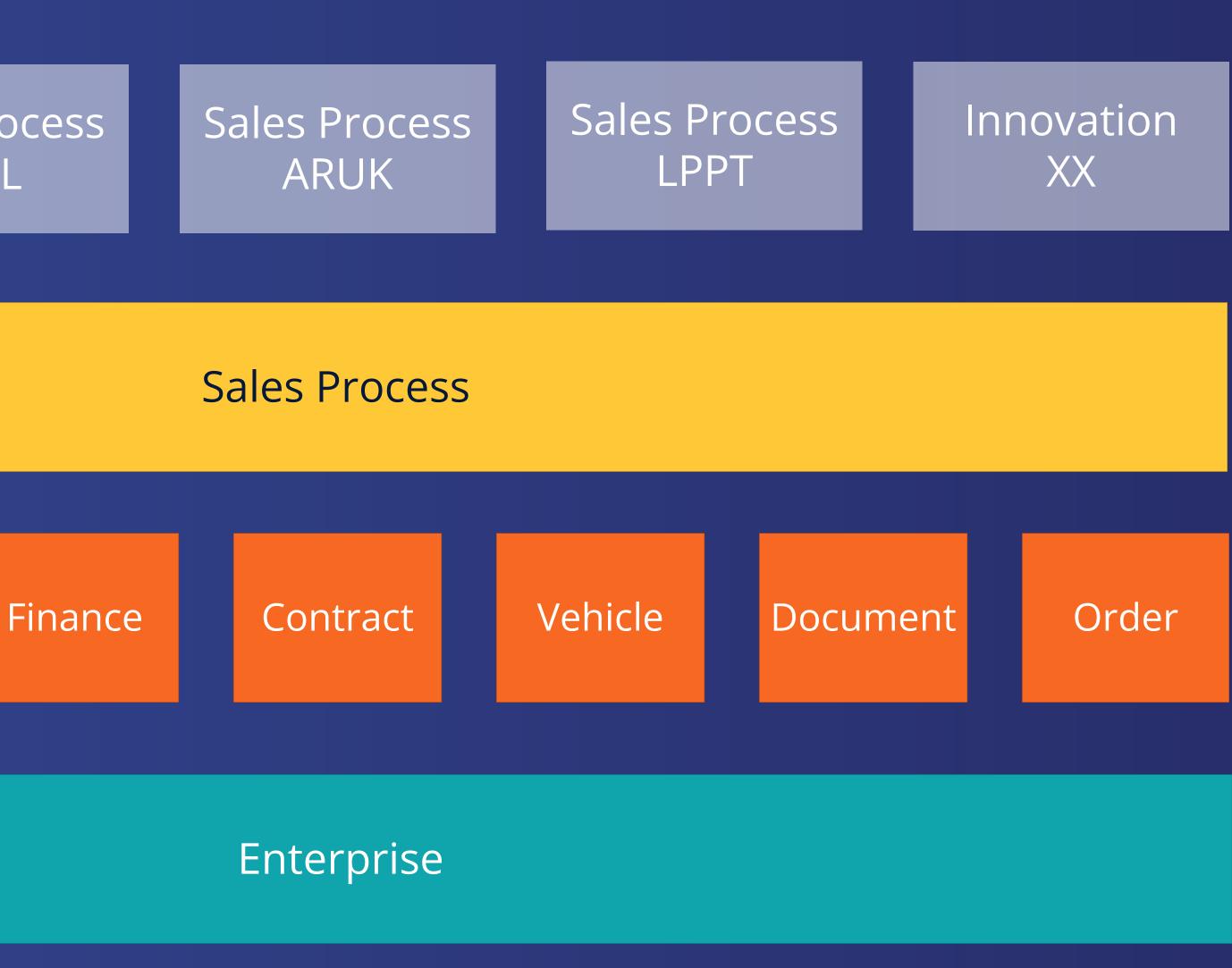
Sales Process LPNL

Business Application

Module (Stateless / connect to SoR in EDM "language")

Customer Quote

Enterprise





Business Architecture Implementation

Configuration

Configuration/ Innovation (application rule)

| | | | | | | and a configuration and | |
|--------|---|---|--------------------|---|------------------------------|-------------------------|-------|
| 100 | (1) que | | | | | | whees |
| ~ | Configuration name | Description | Type | Value (default) | Configuration set | Update date | |
| > | Configuration set : Communication | | | | | | Tese |
| ~ | Configuration set : Credit - Integrations | | | | | | Tese |
| | Credit Check Data Source | The data source for credit check | Picklist | NGDA | Credit - Integrations | 4/6/2022 | |
| \sim | Configuration set : Customer - Integrations | | | | | | Tese |
| | Account Data Source | The datasource for retrieving Account data | Picklist | SalesTorce_ESB | Customer - Integrations | 3/28/2022 | |
| | Contact Data Source | The datasource for retrieving Contact data | Picklist | SalesTorce_ESB | Customer - Integrations | 3/29/2022 | 0 |
| | Identification Data Source | The datasource for retrieving identification types | Picklist | 000 | Customer - Integrations | 46/2022 | 0 |
| > | Configuration set : Dataclog | | | | | | Tese |
| \sim | Configuration set : DND | | | | | | Tese |
| | DNB Block ID List | DNB Block ID List used to fetch block ids (example "block", block", block: block: data source system : https://direct.dirb.com/VB.0/onamizations | Text (single line) | companyinfo_L3_v1.ownershipinsight_L1_v1.principalscontacts_L3_v2 | DNB | 5/90/2022 | 0 |
| | DNB Type Code for Registration | DNB Type Code for selecting Registration | Text (single line) | 2541 | DNB | 5/30/2022 | 0 |
| | DNB Type Code for SICCODE | DNB Type Code for selecting SICCODE | Text (single line) | 1016 | DNB | 5/30/2022 | 0 |
| | Retrieve Beneficiary | To retrieve Beneficiary owner from DNB | Boolean | true | DNB | 6/30/2022 | 0 |
| \sim | Configuration set : Document | | | | | | Teta |
| | Event Processing Access Group | Event Processing Access Group | Text (single line) | SalesProcessAgents | Document | 6/16/2022 | 0 |
| v | Configuration set : SalesProcess - Data Capture | | | | | | Total |
| | Allow Multiple Addresses | Toggle to allow multiple addresses being captured in the Sales process | Boolean | true | SalesProcess - Data Capiture | 2/21/2022 | 0 |
| | Capture Directors for SME | Capture Directors for SME | Boolean | true | SalesProcess - Data Capiture | 6/20/2022 | 0 |
| | Capture Shareholders For SME | Capture Shareholders For SWE | Boolean | true | SalesProcess - Data Capiture | 6/20/2022 | 0 |
| | Capture Signee for SME (during identifying stage) | Capture Signee for SME (during identifying stage) | Boolean | false | SalesProcess - Data Capiture | 6/20/2022 | 0 |
| | Capture Signee For Sole Traders | Capture Signee For Sole Traders | Boolean | | SalesProcess - Data Capiture | 7/18/2022 | 0 |
| | Capture UBO's For SME | Capture UBD's For SME | Boolean | true | SalesProcess - Data Capiture | 6/20/2022 | 0 |
| | CaptureQuoteDetailsFromCarCatalog | Captute Quote Details From CarCatalog | Boolean | | SalesProcess - Data Capiture | 7/21/2022 | 0 |
| | Contract Type - Multiple Vehicles | Holds the value of the contract type to be sent to CLM system in case of Multiple Vehicle | Text (single line) | Multiple Vehicles | SalesProcess - Data Capitare | 5/30/2022 | 0 |
| | Contract Type - Single Vehicle | Holds the value of the contract type to be sent to CLM system in case of Single vehicle | Text (single line) | Single Vehicle | SalesProcess - Data Capiture | 5/30/2022 | 0 |
| | Country for Validation | The country which will be used as validation | Text (single line) | GB | SalesProcess - Data Capiture | 2/28/2022 | 0 |
| | Dependiture details | How the expenditure details are requested | Picklist | Detailed | SalesProcess - Data Capiture | 2/28/2022 | 0 |
| | Show Data Capture Result for SVE | Show Data capture result for SME | Boolean | false | SalesProcess - Data Capiture | 6/9/2022 | 0 |

Business Application (application rule)



| | APP STUDIO 🛛 🗸 | Application : Sales Process Global 🗸 |
|--------------|---------------------|--------------------------------------|
| Ø | ← Case types | |
| | Q Search case types | 3 case types |
| Case types | Case types | Туре |
| eee eee | Customer Order | Standard |
| | Quote To Delivery | Standard |
| Channels | Service Order | Standard |
| \otimes | | |
| Explore Data | | |

Module Application (application rule)

Data model

| ← Case type: Customer Order | | | | | Actions ✓ Save and run | S |
|-------------------------------|----------------|---------------------|----------------|-------------------------|--------------------------------|-----------|
| Workflow Data model User inte | rface Settings | | | | | |
| | | | | | fields W | alidation |
| | Q Show sy | stem fields | | | View data model Primary fields | Add field |
| Name | | T ID | Туре | Uptions | Application Layer 🛛 👻 | |
| Account | | Account | Embedded data | Account | Customer | |
| Bank | | Bank | Embedded data | Bank | Sales Process Global | Ø |
| Business Financials | | BusinessFinancials | Embedded data | Financial Info | Sales Process Global | |
| Cashflow | | Cashflow | Embedded data | LPC-Quote-Data-Cashflow | Quote | ٢ |
| Directors | | Directors | Embedded data | Contact | Sales Process Global | ٩ |
| DNB Company | | DNBCompany | Data reference | DNB Company Search | Sales Process Global | ٩ |
| Invoicing Contact | | InvoicingContact | Embedded data | Contact | Sales Process Global | Ø |
| Lead | | Lead | Embedded data | Lead | Sales | 0 |
| MLC Quote Calculation | | MLCQuoteCalculation | Embedded data | MLC Quote Calculation | Quote | Ø |
| Opportunity | | Opportunity | Embedded data | Opportunity | Sales | |
| Partner | | Partner | Embedded data | Partner | Sales Partner | |

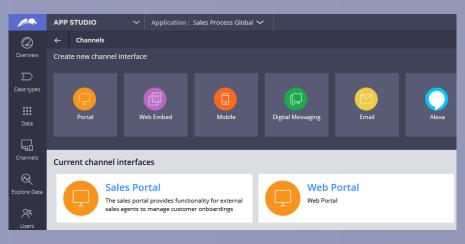
Data Pages



Localization

| | APP STUDIO V Application : Sales Process LPNO DEV V | | | | |
|------------|---|--|--|--|--|
| \bigcirc | ← Localization | | | | |
| Overview | TRANSLATION PACKS ADDITIONAL TEXT | | | | |
| Σ | Create and import translation pack to localize your applications. | | | | |
| Case types | | | | | |
| 000 | Language | | | | |
| Data | Norwegian NO (norsk) | | | | |
| Data | Norwegian NO (norsk) | | | | |

Channel



Orchestration

Data objects

(Form) Views

| APP STUDIO V Appli | ication : Sales Process 🗸 | | | | Preview 🕐 🗔 🔆 🖗 🕂 🛛 |
|--|---------------------------|-----------------------------|---------------------------|-----------------------------|----------------------------|
| | | | | | |
| ← Case type: Customer Order | | | | | ▲ 7 Actions ~ Save and run |
| Workflow Data model User int | terface Settings | | | | |
| Case life cycle View: Steps, Personas, Data, Release | es (All) + | | | | |
| Create | I Discovery | Identifying | Eredit Check | # Accepting | Review |
| Create | # Discovery | | | | # Review |
| Create | Login | Confirm Customer (Existing) | Capture Personal CC Input | CDD Process | Accepting |
| Create | 🗍 Login | Confirm Customer | D PI Customer Input | Capture CDD Input | Wait All Evidence Accept |
| - | _ | | | | |
| + FORM STEP | + STEP | + STEP | Pl Financials Input | + STEP | Final Review |
| | Create Sales Data | Identify Customer (New) | + STEP | PARALLEL | + STEP |
| | | | | Sign Multi Vehicle Contract | |
| | Create Lead | 🗋 Validate Contact | Capture Company CC Input | | |
| | | | | | |

Processes (Features)

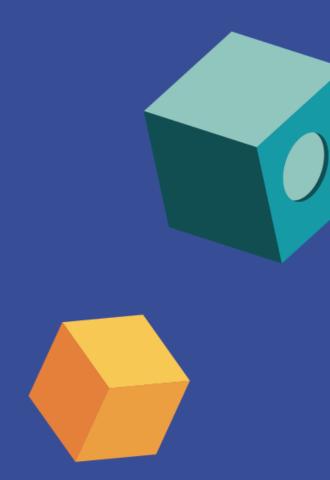
Integrations

(Data) Views

| Data pages | | | Referenced By | Systems of record |
|----------------------|-------------|---------|------------------|-------------------|
| Create Contact In SF | Create Role | +6 more | 🛱 Customer Order | SalesForce Global |
| | | | | |

| - | APP STUDIO V Application : S | | Preview 🕲 🗔 🖓 |
|------------------|---|--|--|
| 0 | ← Case type: Customer Order | | Actions 🛩 Sav |
| | Workflow Data model User interface | Settings | |
| D H types | Order Approved Order Rejected | Edit view: Step: Capture Contact details - PI 🕕 | Preview |
| 111 Data | Partner1 Details Partner2 Details Partner3 Details | Cone column Edit | Step: Capture Contact details - Pl Personal details |
| 5 | Partner3 Details Partner4 Details Personal Guarantor approval screen | View name Step: Capture Contact details - PI | Title * First name * |
| | Propreitor Details pyActionDisplayError | Region A | Middle name Last name |
| | Q2d Childs List ReviewCreditCheckOutcome | Personal details Embedded data | Email * |
| | Select Existing Contacts Service Exception For Sales Agent Service Exception For User | Customer gives their consent for processing of L. Boolean () | Mobile |
| I≫ 40× | Step: Capture Additional Contact details Step: Capture Contact details - P1 | Personal details Embedded data 🛞 🗎 | Date of birth |
| (i) Maria | Step: Capture Director Details | + Add | un f to free ET |
| enge | Step: Capture Financial Information Step: Capture ShareHolder Detail | | Customer gives their consent for processing of their personal information LeasePlan's terms and conditions. |
| | State Company Gamilies | | |





Design for reuse!





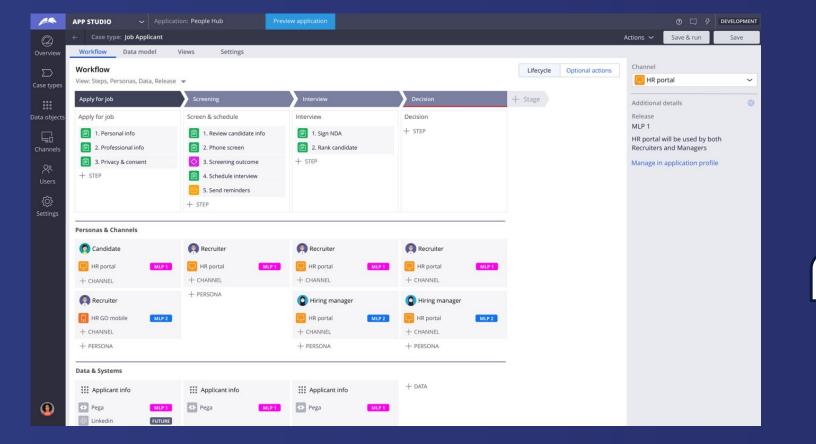


How to get to the Model



App Studio Detailing





PegaWorld**iNspıre**

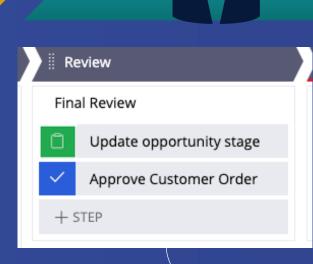


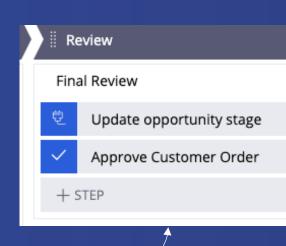
Implement Features

BA

Need to update opportunity to "close deal" in SF when we start the final review.

PO





SA

5

Need to update in SF when Approved

Param: Status: "Close Deal"

- User story
- Refinement
- Build
- Test feature
- Test Process
- Deploy



Deploy

• Deploy

PegaWorld**iNspire**

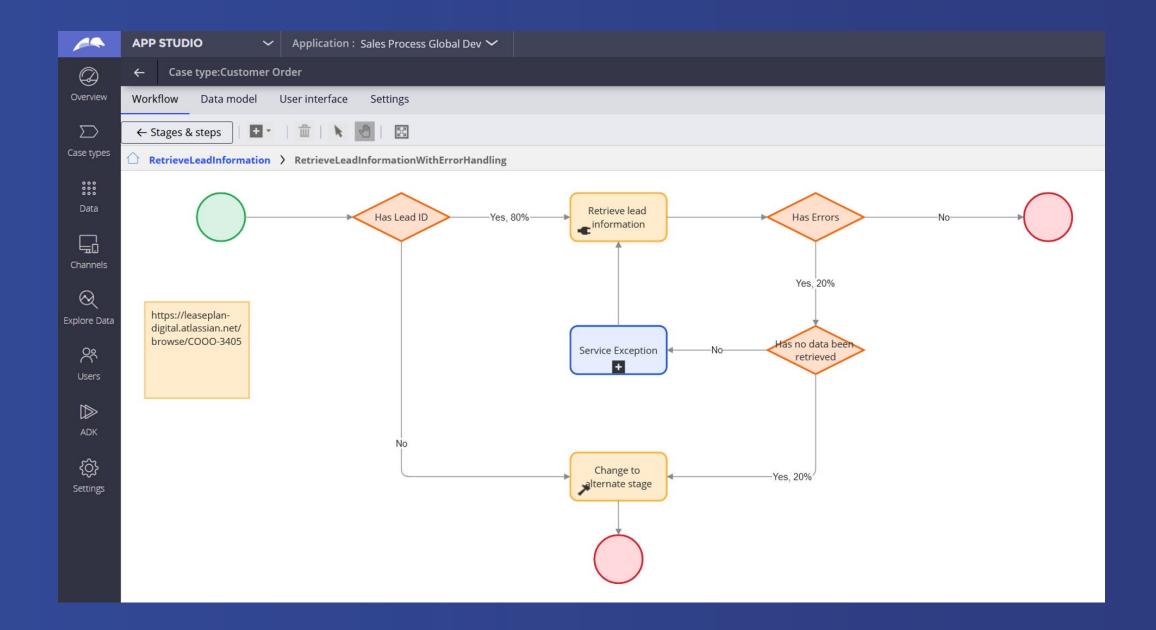


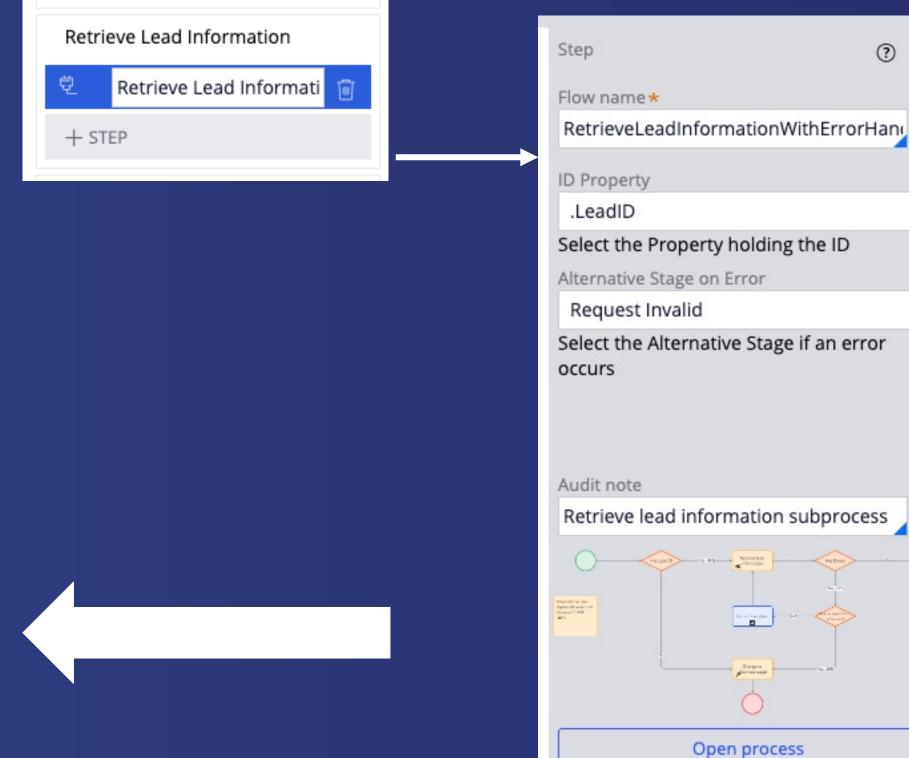
Feature Example (Design for Re-Use)

Design reusable business features in such a way that they can be <u>easily configured in App Studio</u> by the Business Architect.

Build reusable business features in the <u>shareable layer</u> of the architecture. (Module Application).

Result: higher re-use and **accelerated builds**.









How Do You Get Your ROI?

During Design

- Design features once and reuse many times
- Focus on the important part of the business process
- More efficient design sessions

During Build

- Only new features need to be built
- Build is easier because atomic features have clear inputs and outputs
- QA is simplified since features can be easily tested without running a whole case type



During Maintenance

- New version of an integration can be implemented in one place, and applications can consume the new version as needed
- Fix can be applied once in a Module and consuming applications automatically benefit

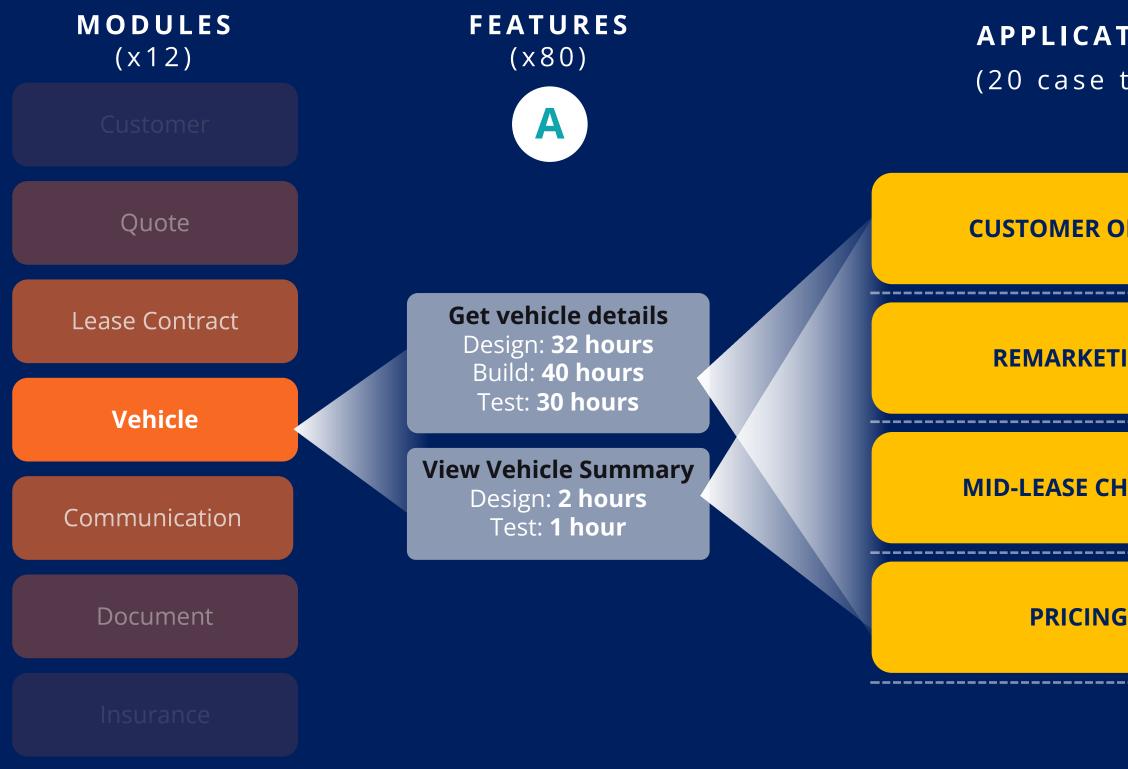
Overall

- Faster time to market
- Richer MLP for new case types and apps because of features reuse
- Reduced dependency on highly experienced System Architects; shift to Business Architects





ROI Example with Enterprise Reuse

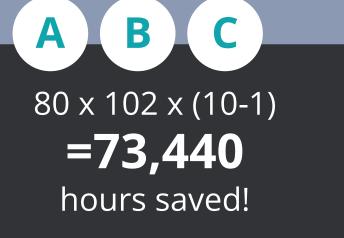


Average saving will be **102 hours per feature** on each subsequent use.

B

Around **20** case types were built, and on average each feature is used **10** times by a case.

| ATIONS e types) | TRADITIONAL | MODULAR | S A V I N G S |
|---------------------------|---|---|--|
| RORDER | Design: 32 hours Build: 40 hours Test: 30 hours | Design: 32 hours Build: 40 hours Test: 30 hours | |
| ETING | Design: 32 hours Build: 40 hours Test: 30 hours | | |
| CHANGE | Design: 32 hours Build: 40 hours Test: 30 hours | | |
| NG | Design: 32 hours Build: 40 hours Test: 30 hours | | |
| TOTALS | Design: 128 hours Build: 160 hours Test: 120 hours Total: 408 hours | Design : 32 hours Build : 40 hours Test : 30 hours Total: 102 hours | Design: 96 hours Build: 120 hours Test: 90 hours Total: 306 hours less! |





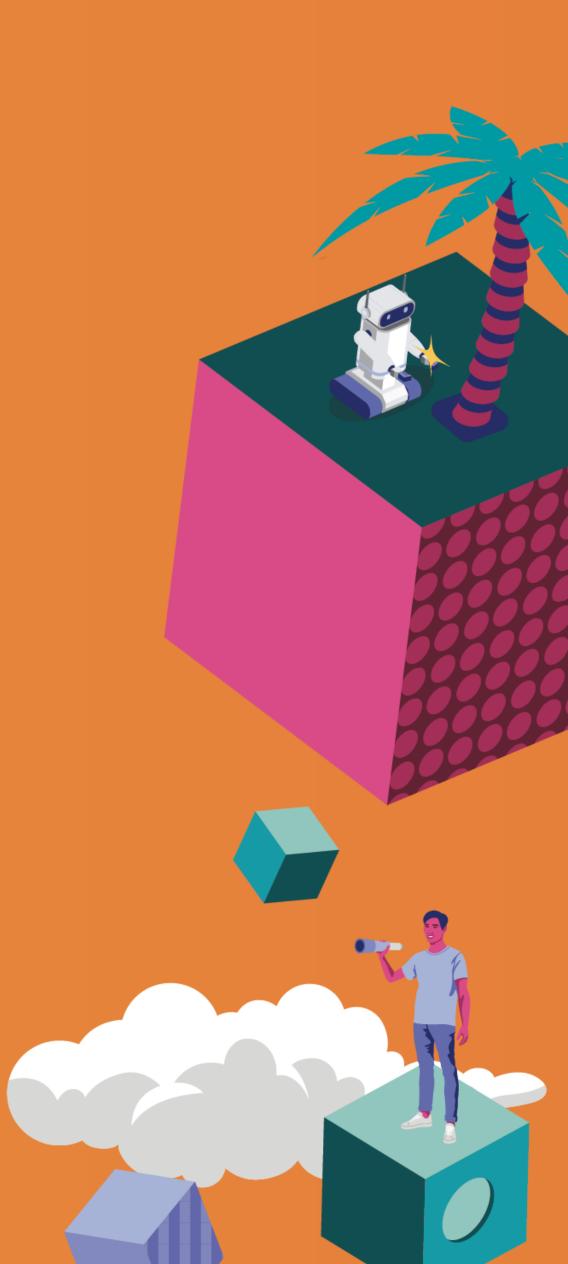
Client and partner stories











Our clients have a lot to say...

Rabobank/Bank

"This new approach has improved communication within the team, enhancing mutual understanding. As a developer, I also feel more comfortable collaborating inside App Studio rather than relying solely on paper or whiteboards."

Lex Ruijter/LeasePlan

"The promise appears in your face. The Accelerators - Modules together with the use of app studio and Constellation are a dream come true. Less work leading to shorter Time to market, more consistency in design and reuse of patterns you get instant ROI, instant UI and instant business value. Governance is easier at a lower cost."

ING/Bank

"With the Low Code Enterprise training, Pega has helped ING to understand what is possible with Pega and how we need to change our way of working so that we can deliver on ING's digital ambitions in a faster way."

Car Insurance

"I was skeptical first that we could deliver this new application with Pega in 7 months, now I think we can deliver the application within 3 to 4 months."



Telenet/Telco

"The pace and quality of the first version of the application was an eye opener for the participants, showing the true potential of low-code development in Pega and translating the theory into practice."





Aaseya Is Driving Enterprise Reuse





Client are adopting Modular Enterprise Reuse with the help of Aaseya

- LeasePlan for Car Leasing pioneered with Pega.
- NEOM and in MOMRAH's for City Management.
- Billing Component for whole of MOMRAH and other Municipalities/Private companies across KSA.
- Updating other existing projects whenever feasible using the modular approach to maximize savings.

Aaseya is evangelizing Modular Enterprise Reuse across their organization

- Organized numerous hackathons.
- Disseminated the experience gained from these projects to all colleagues through training sessions.
- Packaged best practices as Service Offerings.





Pega Training and enablement

- **Business Architect Mission**
- Low Code App Builder Mission
- Low Code App Builder Extended Mission
- <u>Constellation Adoption Mission</u>
- Modular Enterprise Reuse Foundation Mission
- <u>Reusable Elements Pega Docs Journey</u>
- <u>Innovation With Pega GenAl Mission (Blueprint)</u>
- **Guided workshop**: Low Code Enterprise Development, a 3-day workshop with hands-on enablement that combines Modular Enterprise Reuse, Constellation and Blueprint best practices to build your first app version in 3 days. Offered by Pega Consulting. Contact <u>Marco.Duizer@pega.com</u> or <u>Steve.Dietz@pega.com</u>





Questions?







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