SAP and Mendix: Maintain business agility and innovation while migrating to S4/HANA

Han Pieter Duyverman / Mendix Expert & Teamlead / MxBlue
Erno Rorive, Sr. Product Manager Mendix
SAP and Mendix Join Forces

Mendix has become a SAP Solution Extension end of 2017
This is the story why?
Key SAP Processes Are Customized in ECC Systems

- Order to Cash
- Procure to Pay
- Hire to Retire
- Plan to Produce

64% have application backlog of more than 1 year
45% report lack of skilled development resources
50% report high SAP application development costs
47% report difficulties in integrating with existing systems
30–50% custom applications will need adjustments during upgrades

Sources: How to solve the App Delivery Gap, Mendix White Paper based on sponsored research conducted with ASUG, based on SAP DBS (CQC) Solution Transition Assessment and follow-up services
# Key Concerns of SAP Customers Moving to SAP S/4HANA

<table>
<thead>
<tr>
<th>Concern</th>
<th>Less than $500 million</th>
<th>More than $500 million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data migration</td>
<td>67%</td>
<td>71%</td>
</tr>
<tr>
<td>Ability to keep custom processes</td>
<td>62%</td>
<td>47%</td>
</tr>
<tr>
<td>Budget constraints</td>
<td>51%</td>
<td>41%</td>
</tr>
<tr>
<td>Unplanned downtime</td>
<td>45%</td>
<td>41%</td>
</tr>
<tr>
<td>Customer/vendor confusion</td>
<td>32%</td>
<td>24%</td>
</tr>
<tr>
<td>Security/privacy</td>
<td>31%</td>
<td>18%</td>
</tr>
<tr>
<td>Lack of critical functionality</td>
<td>27%</td>
<td>12%</td>
</tr>
<tr>
<td>Lack of quality technical support</td>
<td>26%</td>
<td>35%</td>
</tr>
<tr>
<td>Staying compliant with regulations</td>
<td>22%</td>
<td>18%</td>
</tr>
<tr>
<td>Loss of efficiency in data communication</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Why Mendix?

- Turn S/4 implementation costs to cloud revenue
- Develop apps for Business Suite (ECC)
- Accelerate your path to SAP S/4HANA
- Build an intelligent enterprise
Turn S/4 Implementation Costs to Cloud Revenue

From Costly Customizations

- User Interface
- Application
- Database

Customized ERP system

- Experiences with ERP implementations*):
  - Typical implementations are 18 months
  - 48% of ERP users receive only 50% or less of the expected benefits.
  - 52% experience operational disruption
  - 70% change 10–25% of the core code
- Extensions calling standard code (no APIs)
- Updates require major effort in custom code

To Future-Proof Extensions

- User Interface
- Application
- Database

Standard S/4HANA system

- Decoupled, lifecycle-stable extensions
- Clash-free development using whitelisted APIs
- No coding skills needed to create extensions
- App UI can be made consumer-grade without needing UI skills
- 70% lower development cost
- Align business requirements with application delivery

Custom App Development: “As-Is” vs ”To-Be”

Existing Platform

App. Backlog

- Develop 82%
- Traditional OR Low-code

- Custom Apps
- Redundant 10%
- Retire 8%

License & Labor Cost

- ABAP, webIDE, Fiori
  - $$$ (50 apps ex)
  - Cost Licenses/Services
  - Cost Dev/Maintenance

- MENDIX
  - $$$ (50 apps ex)
  - Cost Licenses/Services
  - Cost Dev/Maintenance

Time to Value

- Avg leadtime/app
- 6-10x faster

New Platform

- ERP Core Baseline
- S/4HANA

MIN. BUSINESS REQUIREMENTS

FUTURE PROOF BUSINESS ALIGNMENT

License & Labor Cost

Time to Value
So let's bring this to life!
Han Pieter Duyverman

Mendix Expert

Teamlead MxBlue
Leia the low code princess
Persona’s

Anjo Wolven
Sales Director
“Build an engaging Event App for MxWorld”

Toine Pothuizen
SAP consultant/architect
“Keep the core clean”

Leia
Low code princess
“Save me!”
Go make it!
Very High Level Architecture

mendix

Quests

SAP

kafka

SIEMENS

MindSphere
One level down – SAP Integration

Mendix Platform

Connectors

OData Connector

SAP Cloud Platform

Services

API Business Hub

Open Connectors

Destination Service

SAP (S/4HANA)

RFC/BAPI

API's

SOAP

OData

External API's (non SAP)
1. Service discovery (api.sap.com)
2. Read metadata
3. Postman Collection
4. SAP OData Connector
5. Show microflow to call SAP Service
6. Show result in Fiori
Go play it!
Keep IT real!
Lessons Learned

1. Leverage the power of both platforms
2. Work side by side with a SAP Consultant
3. Ask your SAP counterpart for working API samples in Postman
4. Understand how Odata works.
5. SAP OData Connector & Odata model creator are big time savers
6. This all works with standard components