

KDD073 - Business Process Modelling for Syensqo

Status	Approved
Owner	WENNINGER-ext, Sascha
Stakeholders	NARAHARI-ext, Bhargavi

Issue

The SyWay program is explicitly tasked with simplifying and standardising the business processes of Syensqo. This means that the definition, through structured modelling, and ongoing management of business processes is essential not only to the success of the program, but to the ongoing sustainability of the solution. Business processes drive system behaviour, authorisations assigned to users, and operational process KPIs. It is thus important that processes are defined in a structured way using a formal modelling notation and producing a future-proof design asset, rather than as a picture using a drawing tool like Visio, so that they can be used as the basis for downstream processes such as user authorisation design. To ensure that process models are a future-proof information asset for Syensqo, an open standard modelling notation such as BPMN is essential. Syensqo do not currently have any tools for creating and managing models in a structured way. This document will recommend such a tool for use by the SyWay program.

Recommendation

SAP Signavio is recommended as the business process modelling tool for the SyWay program. This recommendation is partly based on Signavio's superior integration with SAP Best Practices process content and LeanIX. Comparable products within the Solvay/Syensqo environment (i.e. Celonis) lack proper licensing, and comparable SaaS-based process modelling tools are more expensive while also not offering integration with either SAP-provided content or LeanIX.

This recommendation does not impinge on the potential continued use of Celonis for process mining and generation of operational insights into selected business processes.

Background & Context

The SyWay program seeks to simplify and standardise Syensqo's business processes. The program thus requires a modelling tool which supports the creation of business process models using hierarchical process decomposition approaches: The tool must support modelling of high-level end-to-end value chains which are then iteratively decomposed into increasingly detailed process models. The level of detail increases with each level, until ultimately resulting in "Level 4" process models depicting a task-level flowchart with process steps, decisions, swimlanes for different process roles (i. e. actors), etc. For more details on the levels in a process decomposition, refer to [APQC - Understanding the PCF Elements.pdf](#)

Process steps used to perform work, either by manual execution of steps in a system, or automated execution by a background job, must support linking to the application system and executable transaction/function used to execute the step. This is necessary in order to derive application authorisations from the process models and ensures that business processes are imperative.

The program intends to use SAP-standard "best practice" process models as a foundation for modelling, and only deviate from these for genuine business reasons. This is aligned with the program charter which explicitly seeks to adopt SAP's standardised business processes; as a result the ability to use SAP's business process models and other collateral in the modelling tool becomes critical.

During the execution of the SyWay program and beyond, business representatives and other stakeholders must be able to easily view and comment on business process models. This practically requires an online, browser-based UI where process models can be published by authors, browsed, navigated including by following links and drill-downs to lower levels, and which supports commenting functionality. This requirement also demands a simple and cost-effective licensing model so that broad display-only access can be given without undue cost.

Incumbent Tools

Prior to the commencement of the SyWay program, Solvay had started to implement Celonis for process mining, process analysis and the creation of some operational reporting dashboards. However no licenses for the business process modelling module had been purchased. Some business processes had been drawn in Visio or other diagramming tools in isolated cases, but without a consistent structure or levelling.

Assumptions

- Process models should be maintained using [BPMN 2.0](#) (an open industry standard notation for business process modelling) in order to reduce lock-in and ensure processes can be migrated to other tools if needed.
- Simpler tools with more constrained functionality have a shorter learning curve and thus a higher likelihood of adoption, compared to fully-featured modelling tools that support many different types of models (e.g. ARIS). Tools with a steep learning curve, such as ARIS and IBM Blueworks, have been discounted from this evaluation due to the limited timeframe available to the SyWay project.
- The deployment of the tool must be simple enough to support the timeline of the SyWay Conceptual Design phase lasting 6 months; tools which would require hosting in a Syensqo server are thus not considered, and SaaS solutions are preferred.
- Process models should be widely accessible to Syensqo staff to display, but need only be editable by a relatively small group of people.
- The decision on process modelling tools does not presuppose a decision about process mining or process analytics - a capability for which Solvay uses Celonis.

Constraints

- The market for pure-play Business Process Modelling tools has contracted as vendors have expanded their scope beyond pure modelling, into low-code application development and execution (e.g. Bizagi, IBM Blueworks), added operational reporting and process monitoring features (e.g. Signavio), or have grown vastly more complex in an attempt to be a single tool to model all aspects of an enterprise (e.g. ARIS). In many cases this has detracted from the economics of these tools for the limited use case required by SyWay.
- Because of the time constraints of the Conceptual Design phase of the SyWay program, any process modelling tool needs to be deployed quickly and used productively by consultants with minimal training. Due to these constraints, complex and powerful enterprise-grade modelling tools such as ARIS and IBM Blueworks were not considered due to their setup and administration effort and learning curve. Furthermore there were no known requirements for broader enterprise modelling tools like these.

Impacts

- The full Signavio Process Manager license is more than 60 times the price of the Collaboration Hub license (permitting viewing and commenting on models, but not editing them). Hence the number of Process Manager licenses must be restricted and managed carefully. In order to manage costs, not everyone who could conceivably contribute to process models can receive a license.

Business Rules

None identified for the Conceptual Design phase.

Options considered

Option A: Bizagi

[Bizagi](#) is a SaaS-based process management and automation suite. The product originated as a desktop application for business process modelling targeted at smaller companies which could not justify the large investments in infrastructure, tooling, and skills demanded by ARIS. Bizagi supports the open-source BPMN notation for interoperability, and web-based environment for publishing process models for colleagues to navigate, view, and comment on. Since 2021, Bizagi has extended its traditional core product with "low-code/no-code" application modelling and execution capabilities so that it's possible to build workflow-driven business applications and execute these in Bizagi's runtime.

Option B: Signavio

On public launch, [Signavio's](#) core product was one of the first browser-based BPMN process modelling environments. Over time, and especially since its acquisition by SAP in 2021, the company added features supporting process governance, process transformation, and process mining to better compete with Celonis. SAP positions Signavio alongside LeanIX as core tools to understand, manage, and improve, a company's processes and systems.

Option C: Celonis

[Celonis](#) originated from the "process mining" side of business process management, originally partnering with SAP to leverage the HANA database to analyse low-level transactions occurring in a system, and using these data points to derive insights on actual process execution in the absence of process models. Over time the company extended its capabilities to also include process modelling through additionally-licensed modules. Solvay had implemented Celonis some time before 2024 for process mining of some processes, as well as some operational reporting dashboards focusing on some processes. However Solvay did not implement the process modelling functionality, nor had obtained a license for it.

Evaluation

The evaluation in this document is scoped only to the features needed by the SyWay program, i.e. modelling business processes in BPMN notation, and using SAP Best Practices process models as a baseline.

Signavio emerges as the recommended choice for process modelling, partly due to its superior ability to use SAP Best Practices content and integrate with LeanIX. Celonis's strengths are in process mining and gaining insights into business processes as they are actually being executed in a company - features which are not relevant for this particular problem statement.

	Option A Bizagi	Option B Signavio	Option C Celonis
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Sim plicity	+ Modelling tool focused on BPMN models - Unwanted features (e.g. low-code app modelling, execution engine) cannot be turned off or hidden from users.	+ Modelling tool focused on BPMN models + Process mining and analytics features can be disabled	+ Modelling tool focused on BPMN models + Process mining and analytics features can be disabled
Feat ure fit	+ Modelling tool focused on BPMN models - Modelling requires a Windows PC (display/commenting can be done via web browser) - No bulk import for BPMN models; SAP Best Practices content would need to be imported one-by-one (>3000 models) - Bizagi's development roadmap appears focused on low-code app development rather than process modelling	+ Modelling tool focused on BPMN models + Entirely browser-based tooling for editing, viewing, and commenting + Simple process for importing SAP Best Practices content; inherent alignment with SyWay program charter preferring the use of SAP Best Practice processes. + Native integration with LeanIX to enable use of LeanIX artefacts in process models.	+ BPMN-compliant models can be created in the Celonis Process Repository + Entirely browser-based tooling for editing, viewing, and commenting - Celonis's development roadmap appears focused on process mining and gathering insights from processes as they are running in a system, rather than modelling "to-be" processes. - No bulk import for BPMN models; SAP Best Practices content would need to be imported one-by-one (>3000 models)
Depl oym ent speed	+ SaaS-based solution - New vendor to Syensqo; would require contract setup and review	+ SaaS-based solution + Owned by SAP since 2023, hence simpler commercial onboarding	- Complications with separation project as Celonis is used for process mining and monitoring at Solvay, and is planned to be transitioned. We would need to avoid two landscapes. - Solvay are not licensed for the process modelling capabilities of Celonis.
Cost	+ Windows Desktop app available for free - Collaboration/publishing features are only available as part of a bundled offering including low-code app runtime with a starting price USD 140k.	- Licenses to create/edit models are relatively expensive + Licenses for display/commenting are cost-competitive	- Solvay are not licensed for the process modelling capabilities of Celonis, and thus these are not automatically available to Syensqo under TSA. ● Pricing was understood to be comparable to Signavio, although no detailed negotiation was entered into.

See also

File	Modified
PDF File KDD073 approval email.pdf	Jun 17, 2025 by DANKIR-ext, Soukaina
PDF File APQC - Understanding the PCF Elements.pdf	Jul 18, 2024 by WENNINGER-ext, Sascha

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Change log

Version	Published	Changed By	Comment
CURRENT (v. 16)	May 14, 2025 12:16	WENNINGER-ext, Sascha	
v. 15	May 02, 2025 14:03	WENNINGER-ext, Sascha	
v. 14	Jul 30, 2024 03:01	WENNINGER-ext, Sascha	
v. 13	Jul 25, 2024 16:35	WENNINGER-ext, Sascha	
v. 12	Jul 25, 2024 09:52	WENNINGER-ext, Sascha	
v. 11	Jul 23, 2024 11:42	WENNINGER-ext, Sascha	
v. 10	Jul 23, 2024 11:35	WENNINGER-ext, Sascha	
v. 9	Jul 23, 2024 11:18	WENNINGER-ext, Sascha	
v. 8	Jul 23, 2024 11:15	WENNINGER-ext, Sascha	
v. 7	Jul 21, 2024 16:17	WENNINGER-ext, Sascha	

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Jun 16, 2025	Actor	Type	Activity	Version
Approved	 DANKIR-ext, Soukaina	State	changed state to Approved at 7:32 pm	v16
Pending SteerCo Review	 DANKIR-ext, Soukaina	State	gave <i>Final Approval</i> approval at 7:32 pm	
Jun 10, 2025				
	 PETTIFORD-ext, owen	State	changed expiry date to '24 Jun, 2025 02:07 pm' at 2:07 pm	
		State	changed state to Pending SteerCo Review at 2:07 pm	v16
Pending Stakeholder Review	 PETTIFORD-ext, owen	State	gave <i>Stakeholder Review</i> approval at 2:07 pm	
May 28, 2025				
	WENNINGER-ext, Sascha	State	assigned approval <i>Stakeholder Review</i> to  PETTIFORD-ext, owen at 9:41 am	