

Harnessing the power of ECM & BPM

● BEST PRACTICE



**RAFFINERIE
HEIDE**

The company

Since 2010, Raffinerie Heide GmbH has been an independent member of the Klesch Group (UK)'s oil division. With some 500 employees and 30 trainees, the oil refinery is one of largest employers in the Dithmarschen region of Schleswig-Holstein, Germany. It generated revenue of 2 billion euros in the 2015 fiscal year. Raffinerie Heide can process 4.5 million tons of crude oil per year, which is enough to meet the entire oil requirements of all of Schleswig-Holstein. Built in 1940, the refinery produces conventional petroleum products including gasoline, diesel and aviation fuel, in addition to light fuel oil and raw materials for the chemical industry.

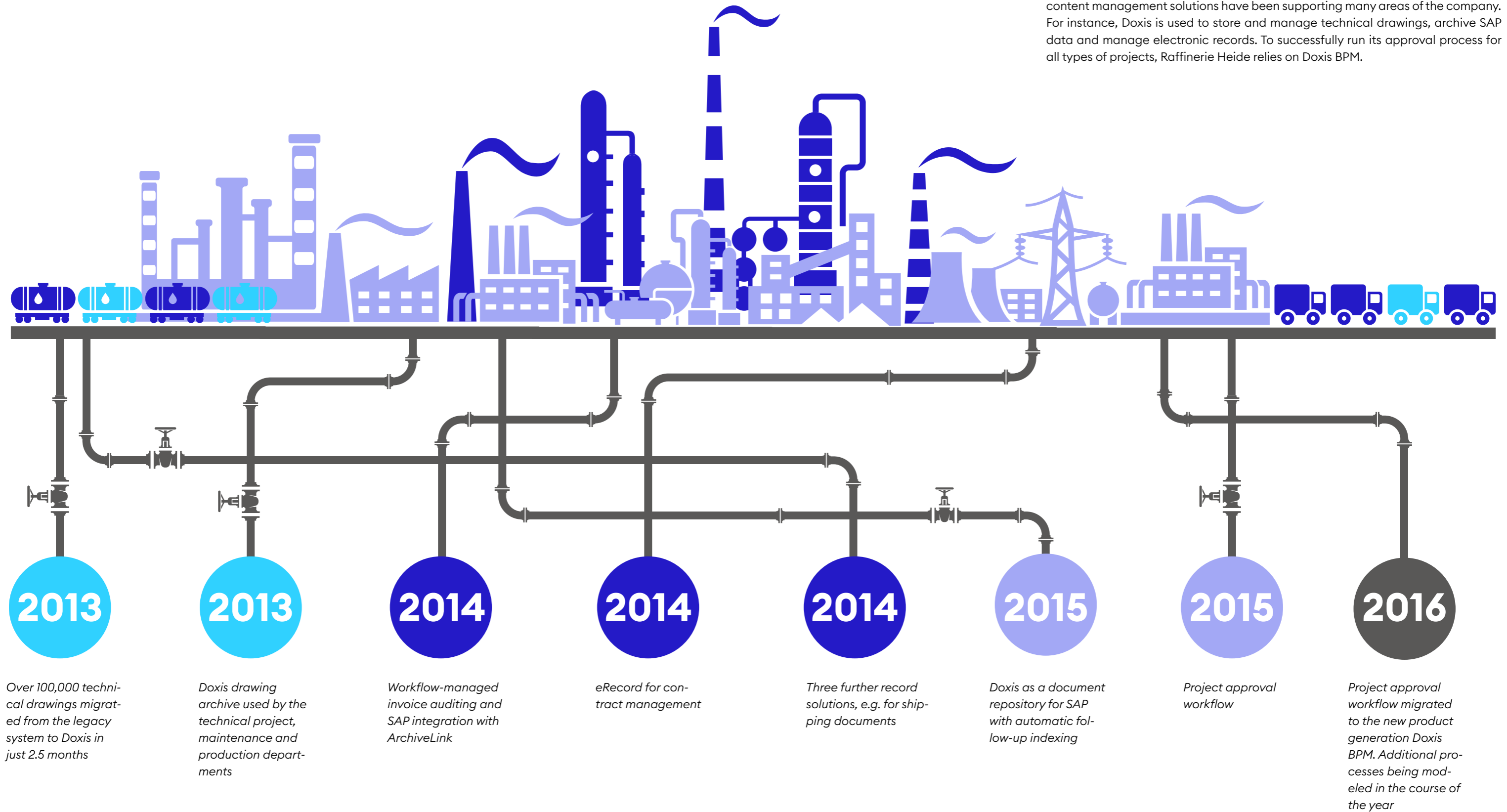
The project at a glance

TOPIC	Integrated ECM and BPM with Doxis
USERS	300
SOLUTIONS	The Doxis iECM suite integrated into SAP with modules
INTEGRATION	SAP via ArchiveLink and RFC, interface to the project budget planning system
DOKUMENT VOLUME	ECM: 100,000 drawings (migration of legacy data), approx. 500 eRecords, inbound invoices comprising some 15,000 process instances/year BPM: Transferring approx. 35,000 process instances (project approvals and invoice receipt audits) from the legacy system
HIGHLIGHTS	Secure management of the project approval process using Doxis BPM incl. notification by email (Outlook) of new tasks in workbasket to all project participants



Management summary

With its slogan "Full of energy for the north," Raffinerie Heide GmbH is the largest buyer and processor of German crude oil. Over the past 150 years, the oil refinery – based out of Hemmingstedt, Germany – has become a highly professional crude oil processor since it first discovered tar sands in 1856. Since 2013, SER's enterprise content management solutions have been supporting many areas of the company. For instance, Doxis is used to store and manage technical drawings, archive SAP data and manage electronic records. To successfully run its approval process for all types of projects, Raffinerie Heide relies on Doxis BPM.



Efficient information management thanks to ECM

“Successful transformation puts Raffinerie Heide on track for success,” ran the headline of the March 18, 2013 edition of the *Norddeutsche Rundschau* daily – in an article that attested to the refinery’s successful leap from group subsidiary to independent company. A huge effort was needed to separate the company from its former parent Shell and turn it from a production-only site for diesel, heating oil and aviation fuel into an independently operated company. Re-starting Raffinerie Heide as an independent member of the Klesch Group in 2010 involved a great deal of reorganization and restructuring, in addition to creating the company’s own IT system landscape with an SAP system and ECM solution. The aims were to make the new ECM solution more versatile and user-friendly than the

old system, enable easy access to the existing CAD drawings and their versions, and integrate it fully into SAP.

The requirements were clear: standardized, secure document management and archiving, and the creation of a platform for document-based business processes and electronic records. Raffinerie Heide decided in favor of the iECM suite Doxis from SER, and for good reason: Doxis combines both ECM and BPM on one technological platform. This allows all essential process-related information to be made available throughout the respective process. The hybrid Doxis BPM solution for task and process management gives Raffinerie Heide the flexibility to determine the precise level of standardization in its business

Administration building of Raffinerie Heide



processes and ensure a seamless transition between ad hoc tasks and processes right through to fully model-driven BPM. Doxis is user-friendly and its design-by-doing approach allows individual applications to be implemented rapidly.

High-performance drawing archive

In 2013, Raffinerie Heide took its first steps into enterprise content management with Doxis, starting with the creation of a high-performing, user-friendly electronic archive for technical drawings. This ultimately was to replace the legacy archive. Klaus Behrens, Head of IT at Raffinerie Heide GmbH, explains his key considerations regarding the new solution: “To make things easier for our colleagues, the aim was to make the new ECM solution more user-friendly and to enable easy access to the available CAD drawings and their versions. Doxis meets every single one of our criteria.” The project revolved around the migration of the legacy archive, which contained over 100,000 technical drawings. Even before the contract was awarded, SER proved that it was able to quickly and easily migrate the

legacy documents to Doxis within the tight schedule planned for phasing out the old systems. The whole process took just 2.5 months. All technical drawings in the legacy archive, which had been exported into a database along with their index files, were successfully transferred to the SER system. The Doxis drawing archive has around 180 users in the departments for technical projects, maintenance and production.



“It was important for us to be able to model well structured and ad hoc processes with only one technology. Doxis BPM gives us precisely this hybrid solution.”

Ralf Everding, Application Specialist, IT,
Raffinerie Heide

SAP archive, electronic records and invoice audit workflow

After relocating the drawing archive, the next step was to implement the first genuine ECM applications. The customer's specifications went beyond archiving documents securely and simple retrieval, instead making information available company-wide, and providing relevant data and documents to support processes across all departments. Electronic records were at the top of the wish list to significantly simplify work with documents and create greater transparency in existing documents. Doxis Records Management provides the technological basis for all types of eRecords, which can then be modified depending on the usage scenario. The first step was to introduce electronic contract management. This allows Raffinerie Heide to manage its contracts and all related data and documents using electronic records. A deadline management tool ensures that no notice periods are missed and that there is enough time left before contract extension deadlines to renegotiate terms, for instance. Further eRecord solutions, such as for shipping documents, are to follow.

For accounting, the aim was to optimize processes. Doxis for invoice processing provided the perfect solution. It uses workflows to make the review and approval of inbound invoices

considerably more efficient and less error-prone. All employees involved in the review and release process are saved in the predefined process. The result: Invoices are processed on a same-day basis and cash discount periods and payment terms are always met.

As an SAP data archive, Doxis improves the performance of existing SAP systems. Doxis was integrated into the SAP system following an SAP upgrade. Now, data from the FI and CO modules in SAP are transferred via ArchiveLink and the Doxis AutoIndexer to Doxis where they are archived in an audit-proof way. This substantially reduces the load on the SAP databases. Last, but not least, data is indexed by the Doxis Fulltext Service based on a text recognition performed by the Doxis Rendition Service.

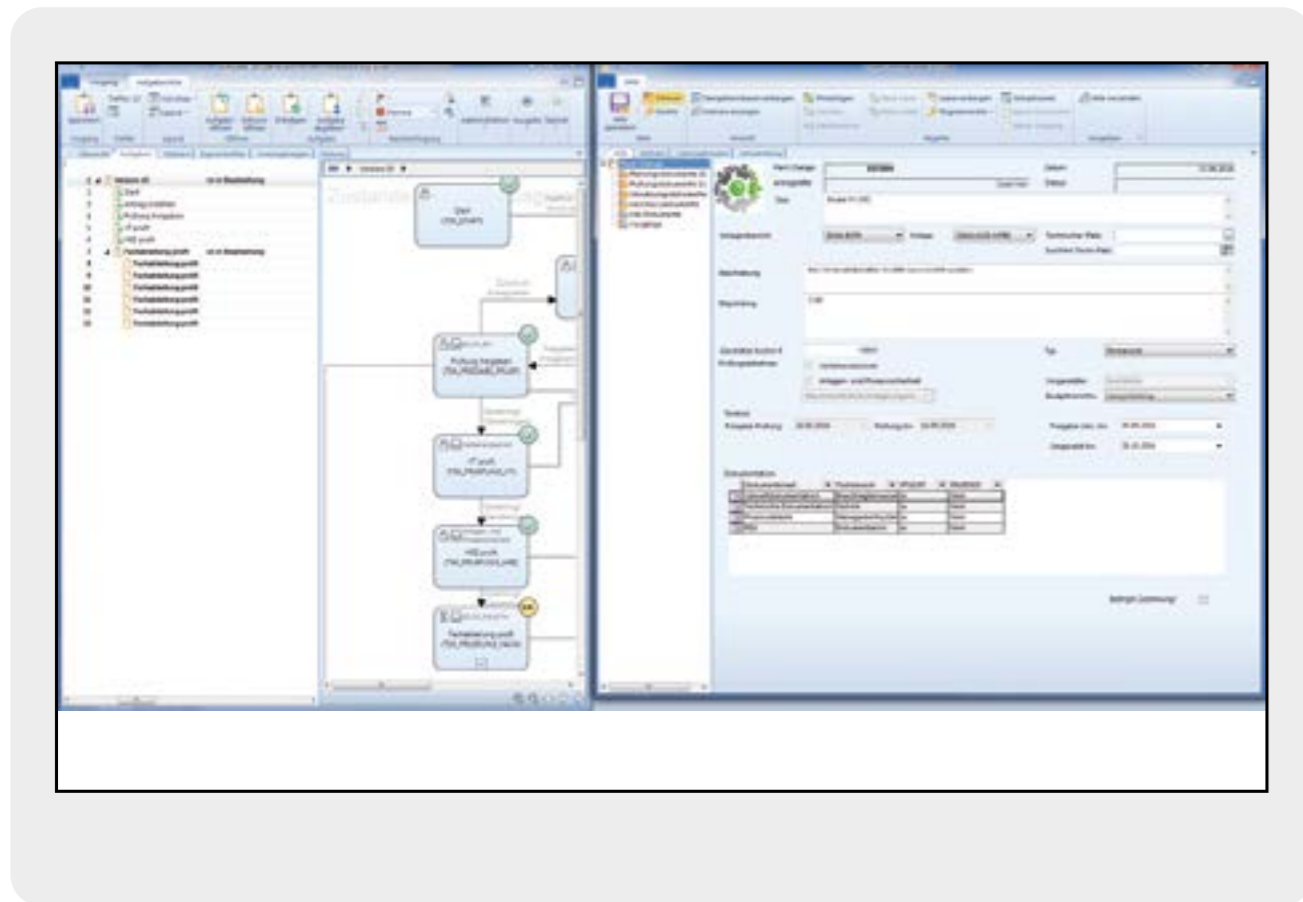
Some 300 employees working out of various departments at Raffinerie Heide now use Doxis. They quickly realized that the archived documents are always available in their daily work – even for multiple users simultaneously – and that the electronic records give a better overview. Employees are so impressed that they have stopped using personal archives and now rely fully on Doxis. They experience first-hand how documents can be found reliably and much more easily with search assistance such as the quick search function, e.g. directly from emails or other applications or with the full-text search function.

Secure process management thanks to BPM

After seeing substantial improvements in information management at Raffinerie Heide, the focus turned to optimizing processes. Doxis BPM by SER is an integrated software solution that allows Raffinerie Heide to map diverse processes. It can be used to model heavily structured processes with exactly fixed steps, yet is equally suited to handle ad hoc tasks or a combination of the two. Project approval processes at Raffinerie Heide follow a precisely defined pattern and can be mapped in a heavily structured workflow with fixed paths.

Project approval processes with Doxis BPM

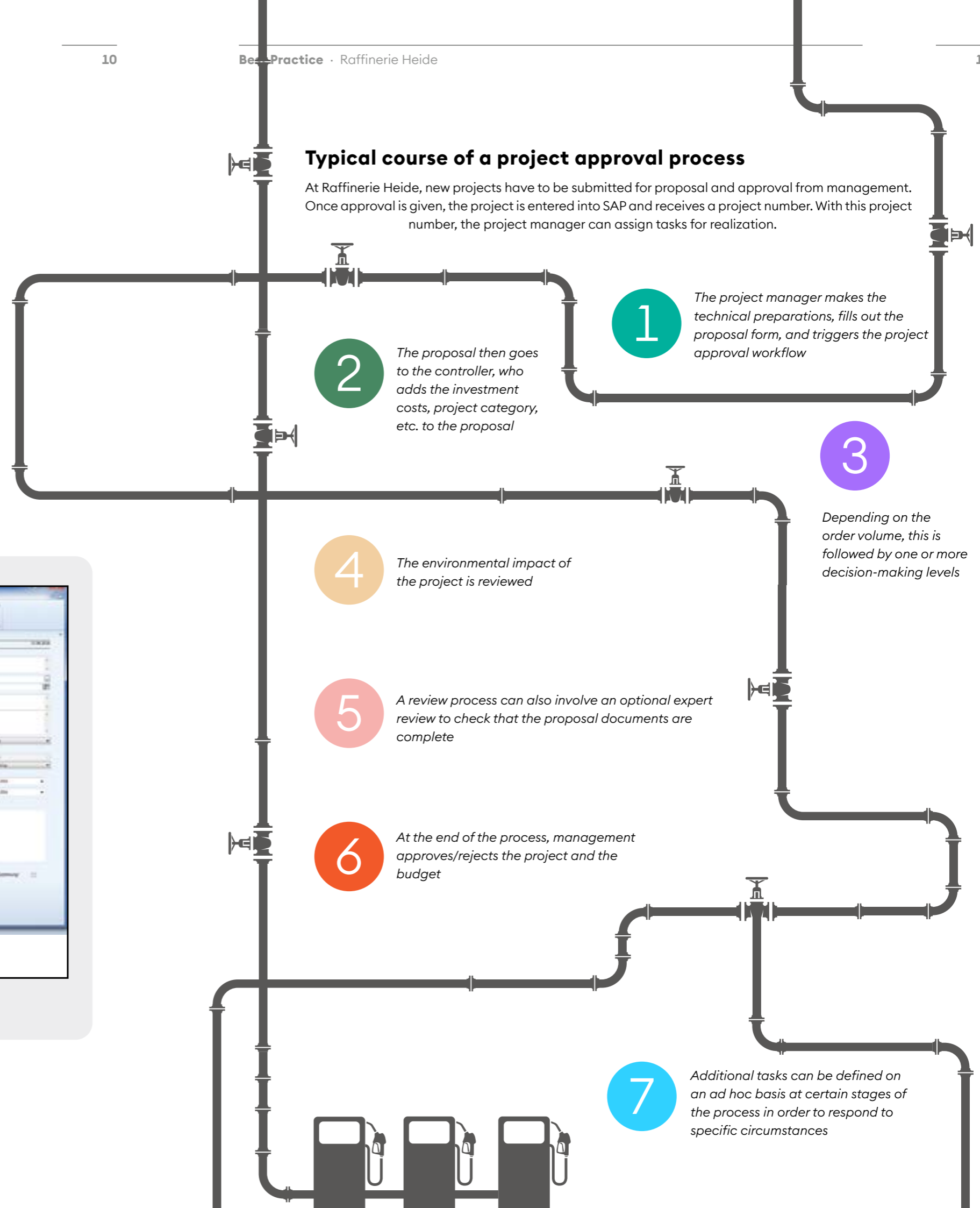
Raffinerie Heide conducts a diverse range of projects, for example rebuilding production facilities, construction projects, and software projects in the IT department. All proposal procedures for these projects follow specific paths and predefined decision levels. Depending on the order amount, there are various decision-making levels at Raffinerie Heide. Without a workflow support system, each project manager had to rely on a paper-based circulation procedure in the approval process. Some projects involved several departments of Raffinerie Heide. Depending on the project scope, the lead times and the associated waiting times were quite long – especially if follow-up work was necessary in the process.



The task lists and process models for the verification and approval process are predefined in the project approval workflow. The project record contains all related documents.

Typical course of a project approval process

At Raffinerie Heide, new projects have to be submitted for proposal and approval from management. Once approval is given, the project is entered into SAP and receives a project number. With this project number, the project manager can assign tasks for realization.



Since 2015, the project approval process has become more secure and effective. The goal was to be able to create, process and release all kinds of project proposals with a project approval workflow. The result: an integrated solution comprised of Doxis, SAP and a budget planning tool that was developed externally to digitally represent the entire project planning, approval and handling process.

With the Doxis project approval workflow, the entire approval process is now automatically and securely managed throughout all instances. "Defining the paths and decision-making steps in the company's approval process used to take a huge amount of effort, as they were different for each type of project. Today, it's all determined in our approval workflow," explains Ralf Everding, Application Specialist, Raffinerie Heide.

Since introducing the project approval workflow, proposals are created, handled and released electronically. A project approval process thus consists not only of review and approval elements for the individual participants, but also contains all documents required for completion. The supporting documents are attached to the proposal, e.g. cost estimates, offers, etc. That way, all information that is relevant to the decision is

available electronically and can be viewed by every project participant. The decisive reasons why the approval process became so much smoother? The proposals are in higher quality now – thanks to the standardization and definition of required information and the adherence to the proper sequence of tasks. "The workflow is even so smart that it recognizes if there is an amendment or new proposal, if the project is still within the budget and the available financing should be requested, or if the budget is being exceeded and additional financing is needed. If this is the case, the workflow initiates the next decision-making level," comments Ralf Everding. The parameters for project processing are set with specific maximum amounts in the workflow. This allows the project manager to request the available budget and start with the completion. It also means that the management of Raffinerie Heide no longer has to look at each case, which in turn streamlines and speeds up the processes.

"That's what makes electronic work so effective: The workflow system now handles the entire process. No steps are skipped and everyone involved is informed via email in Outlook if a new task is waiting for them," says Everding, describing the advantages of the current approach in Doxis. In the past, employees involved in the process could not work

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Ralf Everding, Raffinerie Heide



on proposals simultaneously. Thanks to BPM, processing times have now been cut drastically, from the proposal submission right through to the final decision. Delays and follow-up work now only occur in exceptional cases. Everyone is happy with the new system and plans are already in place to process some 500 projects in 2016 using the approval workflow.

Change management with adaptive BPM

In addition to the project approval process – which is heavily structured – other processes at Raffinerie Heide call for a greater degree of flexibility. Doxis BPM is capable of enabling a smooth transition between heavily structured and ad hoc workflows, or a combination of the two. It does this by allowing ad hoc tasks to be incorporated into predefined processes. This hybrid solution delivers highly flexible applications that can be used to map diverse processes – from the straightforward to the highly complex. Take compliance, for example. To ensure compliance with legal requirements, certain process steps must be set in stone. However, it is possible to add extra elements

within these predefined steps if necessary without jeopardizing the overall process.

This kind of adaptive business process management is of particular interest to Raffinerie Heide when it comes to mapping cardinal processes, also referred to as change management. Change management demands a versatile approach comprising both mandatory steps and flexible elements. The aim is to make the best use of employees' expertise. They know exactly what is required. They recognize when an extra step is needed in a particular process, such as when to bring another expert on board to ensure the project is executed successfully. Business-critical projects of this nature include the restructuring of existing facilities. If pipelines need to be laid from A to B, this can have an impact on plant safety. So for this extra step, the flexibility to add elements that supplement the standardized framework – comprising review, implementation, documentation, etc. – is essential. The first adaptive workflows at Raffinerie Heide are already being planned.

Doxis BPM ensures:

- Everyone adheres to decision-making regulations at all times
- Detailed project proposals
- Drastically reduced lead times for project approval proposals
- Real-time overview: The project manager always knows who is currently handling which part of the process step
- All project documents can be simultaneously viewed and accessed by every participant at any time
- Secure process management: No step is left out; every participant is notified per email (Outlook) when a task is waiting for them in their inbox
- More flexibility in process modeling: With Doxis BPM, predefined processes can be supplemented with ad hoc tasks



