Die Mobiliar Insurance Company AG, Switzerland

Adaptability and Agile Business Practices

Nominated by ISIS Papyrus Software

1. EXECUTIVE SUMMARY / ABSTRACT

The Swiss insurance company *Die Mobiliar* is the oldest private insurance organization in Switzerland. As a multiline insurer, offering a full range of insurance and pension products and services, *Die Mobiliar* needs to handle a huge amount of documents, exchanged with approximately 1.7 million customers. Therefore, the "Mobiliar Korrespondenz System" MKS (Mobiliar Correspondence System) for ad hoc generation of well-designed and rich content documents is vital for *Die Mobiliar*.

Each insurance document is designed and delivered in high quality by the document generation processes executed in a huge and manifold working environment. Documents are composed from building blocks following insurance regulations. Moreover, the data filled into a certain document is retrieved on the fly from diverse data sources. These complex business processes are handled in a quick and exact way by the MKS built on the Papyrus Platform and its ACM (Adaptive Case Management) and BPM (Business Process Management) capabilities. The combination of these two technologies enables flexibility from design time to run time of the document generation process.

The MKS system enables the design and content administration of documents by business staff without IT involvement. Furthermore, the system manages the whole document generation lifecycle from design over execution until delivery to customers in a highly flexible way. The capability of MKS to edit process templates any time when new business requirements demand for it, supports *Die Mobiliar* to define new documents and process templates within the boundaries imposed by predefined processes.

2. OVERVIEW

With annual mailing volumes exceeding 6.3 million envelopes, *Die Mobiliar* requires a system producing a huge amount of high quality documents in a short time. The system is production critical as being vital for the daily customer communication of the company offering a full range of insurance and pension products and services to nearly 1.7 million customers. To satisfy such requirements, the MKS project aims to provide a centralized system that facilitates document generation processes operated by business users without IT involvement.

MKS is logically separated into document design and production stages in which the key roles of users are reasonably assigned. In the document design phase, template administrators create document templates in combination with document process templates and maintain the template collection. As a centralized

system, MKS manages the template collection effectively and successfully reduces the maintenance effort. The lifecycle of a document and its related processes from design over test until production is controlled by an integrated delivery management that is flexible and adaptive for the correspondence document generation. Therefore, MKS can shortly deliver new document templates responding to new demands of the insurance market. Clerks create documents instantiated from the templates and deliver them to customers via different delivery channels. Several complex processes are operated underneath of the system to provide productive services to business users. In a few steps, business users can operate complicated tasks easily that needed a lot of time and effort in the previous system.

MKS minimizes IT involvement by adaptable processes and intuitive user interfaces allowing productive interactions of business users. Providing easy-to-use functions for the definition and editing of business processes, MKS allows business users to change processes by themselves without complex technical concerns. The compliance and consistency of the processes is ensured by the integrated delivery management. No classical program code demanding for IT skills is created during the template design stage in the production environment of MKS.

MKS supports clerks with an easy way to send documents to customers not only as print but also through different e-delivery channels like e-mail, FAX or SMS. Moreover, the transparent data exchanged between MKS and other business applications used in *Die Mobiliar* frees business users from data concerns compared to the previous system. With the support from MKS, business users can fully focus on the customer needs, thus making customer experience a key factor for business success.

3. BUSINESS CONTEXT

The initial situation at *Die Mobiliar* was only partly able to fulfill the wide range of needs. An insurance document issued by *Die Mobiliar* is not only a piece of paper; it serves as a business card, representing the company to their customers in different languages, mainly German, English and French. Moreover, *Die Mobiliar* considers well-designed and rich content documents as an opportunity to communicate and build a strong relationship with customers in different languages and different countries, especially in Europe. In the rapidly changing insurance industry, seizing opportunities and reacting quickly is one of the key factors to have success. Therefore, *Die Mobiliar* pays special attention to the process of generating and delivering high quality documents to customers.

Document template administrators struggling with the distributed system

The insurance documents published by *Die Mobiliar* have a specific style and format representing the company. To produce such documents, *Die Mobiliar* dedicates a skilled team to create and maintain a collection of hundreds of document templates serving different insurance use cases. In the initial system, these templates are designed manually with MS Word and stored in three language versions. When a template is edited, its copies on several file servers are updated by template administrators. The data exchanged between the tools used in the MS Word based system are manually handled by business users. Although reserving high-skilled employees from the IT department for support requests, the administrator team still puts a lot of effort into the management of hundreds of templates used by more than 4000 end users, i.e. insurance clerks, creating thousands of documents during daily work.

Clerks manually executing document delivery

When customer documents are requested, clerks search on the servers for suitable document templates and copy them to their local machines. With MS Word, documents are filled in with data and might be formatted by clerks, which can lead to deviations from a corporate style. Further, clerks tend to save on local machines private versions of document templates giving rise to a nearly uncontrollable growth of template versions. Completed documents are sent to customers via e-mail, fax, or post. The delivery is accomplished manually by using independent tools, such as e-mail applications or fax machines. Since the delivery channels are not integrated, a considerable amount of time is required for sending documents to customers. Moreover, the completed documents need to be manually attached to insurance cases which are managed in other business applications used by *Die Mobiliar*.

Enhancement needed

To reduce the involved efforts for a consistent document management as well as supporting daily production with mature document processes including a document archive, the following requirements need to be considered:

- The document and related processes should be managed by a specialized system fully taking care for the document design, maintenance and production
- The time to market for documents should be reduced so that new insurance products can be released short term
- Business staff should be able to handle the document design and process definitions with minimal or no IT personnel involvement (no "coding")
- Customers should be able to receive their documents as soon as possible after the documents were created by the clerks
- Various delivery channels should be integrated and addressed from a single definition of the new system
- Data that need to be exchanged between existent business applications should be managed automatically by the new system

4. THE KEY INNOVATIONS

The implementation of the MKS has a positive impact on several aspects of the daily insurance business, which are described in the following.

4.1 Business

Quickly respond to business needs

Compared to the previous system MKS supports business users with special features of creating and delivering document templates in a facilitative way. Documents created by MKS have a consistent style and format by using building blocks, which were quality assured by the integrated delivery process. In particular, a document is composed of several building blocks that are arranged in a particular order by template administrators. All templates are stored and managed in a central repository.

MKS has an integrated delivery process in order to optimize the lifecycle of a document from design time until production. Statistics from *Die Mobiliar* show that the amount of documents produced every day increased up to 20 times. With such daily document volumes, *Die Mobiliar* can respond better to business needs and seize opportunities in the rapidly changing insurance industry.

Clerks can communicate interactively with customers

MKS supports clerks with an interactive way to communicate with customers. As shown in Figure 1, Clerks select their preferred user interface language (e.g. German) but write each document independently in the correspondence language that meets the preferences of the recipient(s) (e.g. English). The system is integrated with several delivery channels and business applications used in *Die Mobiliar*, such as CRM or claims management systems. Sending documents to customers is easily done by the process step "Select delivery channels" of the document generation process. The connection to delivery channels and the delivery processes are transparent for users. In addition, MKS provides all of the needed language variants so that a document can be consistently produced in several languages. Moreover, the generated data can be automatically transferred to the related business applications integrating with MKS. By providing such an integrated way to handle customer data, MKS assists business users to focus on customer needs and to strengthen the relationship with customers.
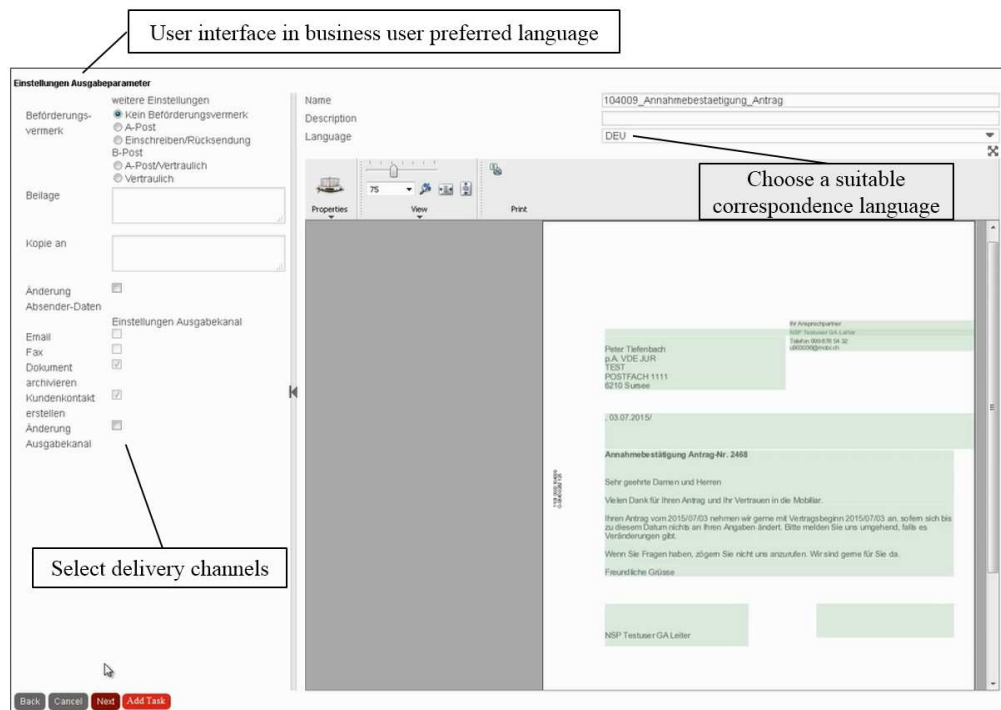
Figure 1: Select delivery channels and correspondence languages

4.2 Case Handling

The overall system architecture of the initial system

The architecture of the MS Word based system is briefly described in Figure 2. Template administrators create document templates with MS Word. These templates are stored in document storages distributed over several severs. A supervisor approves templates before they are delivered to clerks. Documents are edited in MS Word and can be printed on local printers. In case the documents are triggered by other business applications, the data exchange has to be done manually

by the clerks. In such a system, multiple platforms with different software tools are used by clerks to generate documents without any clearly defined business processes. The resulting complexity causes high costs and administration efforts.
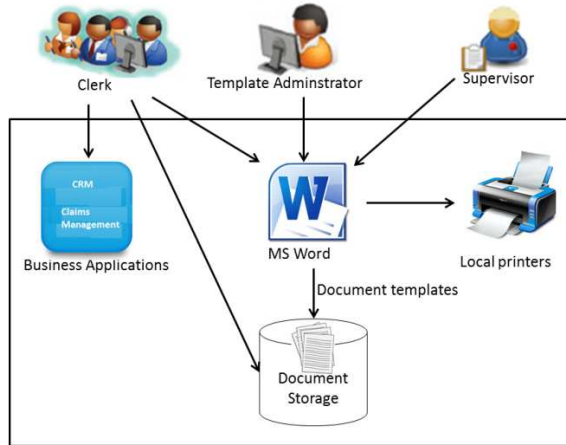

Figure 2: The initial MS Word-based document generation system
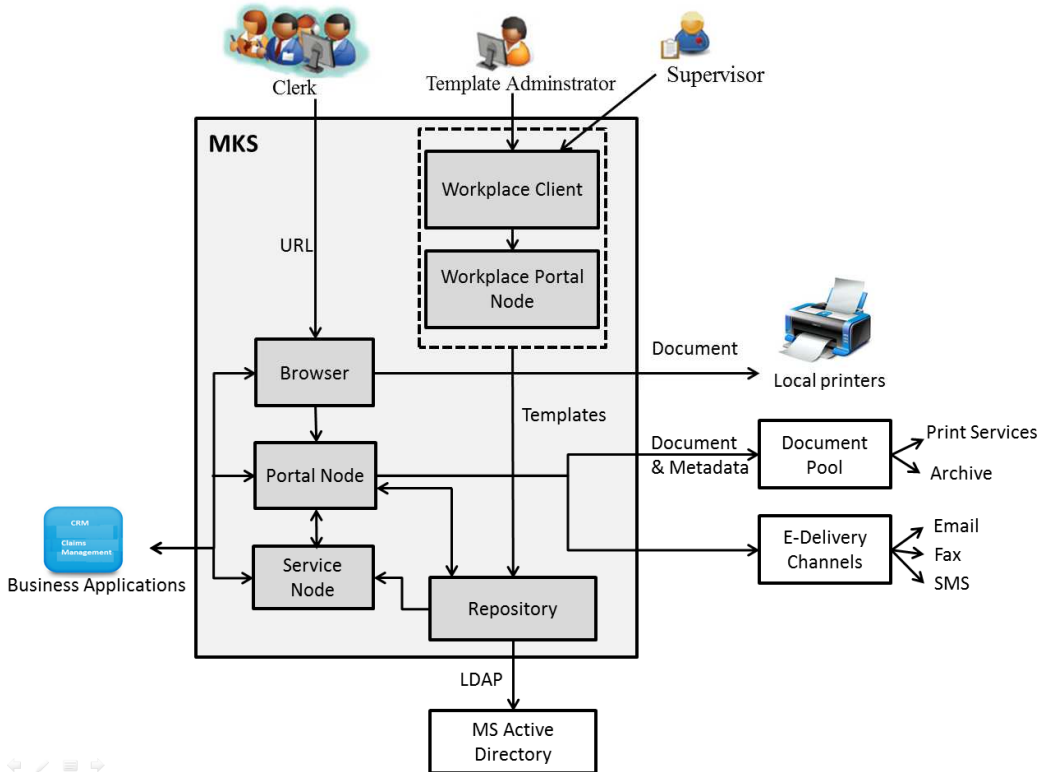
The system architecture of MKS

Figure 3: MKS System Architecture

To achieve greater efficiency and standardization, *Die Mobiliar* consolidates all business documents on one platform to simplify and standardize the template design (corporate identity) and its involved processes (Figure 3). Template administrators create document templates in a workplace providing a specialized user interface integrating all means for document and process design. All templates are stored in a versioned central repository and approved by supervisors before released into production for use by clerks. The solution supports a thin client browser architecture, i.e. clerks are able to access MKS independently from their office locations. The interaction between Portal Nodes, Service Nodes and the repository allows clerks to instantiate document processes from templates, exchange data with business applications, archive and print documents with local printers or by print services, and send them to customers via selectable delivery channels. MKS is supporting business goal orientation with full transparency to clerks about involved processes which are designed for an optimum balance between automation of the system operation and customer case specific manual decisions by clerks. Therefore, users of MKS can avoid the complexity of the previous distributed system and put less effort to operate their daily business work.

Assigning key roles in MKS

To improve the lifecycle of a document template, MKS has an integrated delivery management in the production environment supporting a logical separation between the document design and production stages (Figure 4).
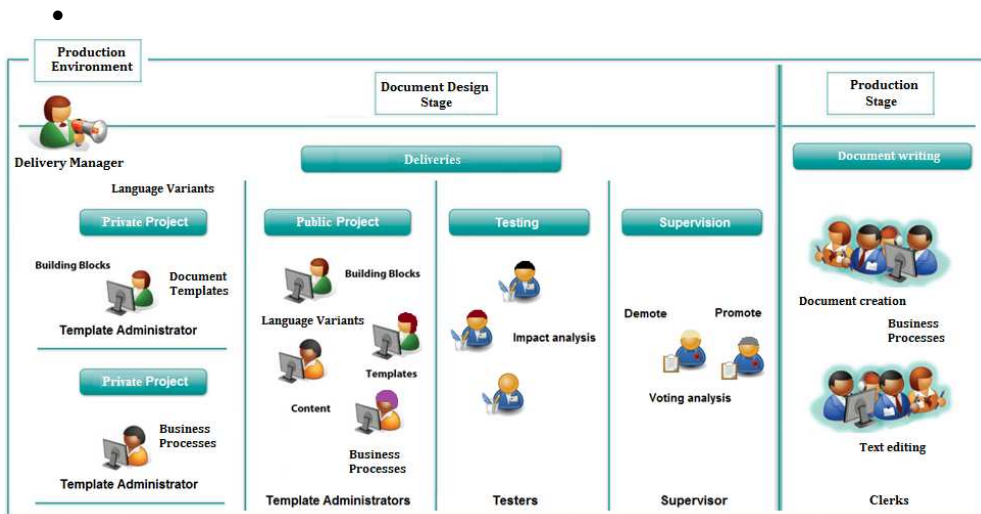

Figure 4: Delivery management principle

Each stage has the following key roles assigned:

- **Delivery managers** manage the document design stage where document and process templates are created, modified and approved.
- **Template administrators** have private design projects where the elements of documents, such as building blocks and processes are stored. Later, when individual administrators have finished their work the private projects are joined into a public delivery project where an entire

document template and process is composed from elements contributed from different administrators.

- **Delivery testers** ensure the quality and compliance of documents and processes by executing tests in several iterations which at the end are approved by **supervisors**.

- The **delivery manager** coordinates the testing and fixing of reported problems until a delivery can be released into production.

In production, **clerks** create documents by using the delivered templates. Moreover, clerks can freely edit the content of building blocks where access rights are granted.

Document template creation

MKS provides an intuitive graphical user interface in the preferred language of the business user for designing document and process templates (Figure 5). A document template is composed from several building blocks in different languages defined by language variants, so that customer preferences can be seamlessly addressed. MKS supports the author in creating and editing the content and formatting the building blocks.
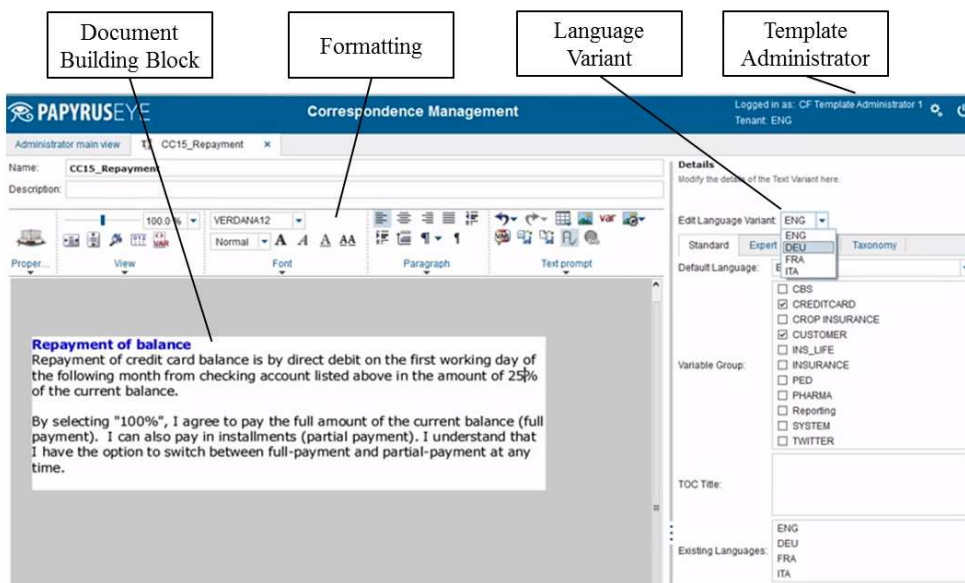

Figure 5: Template administrator creating/editing building block variants

Document instances created by clerks are driven by business processes which are also prepared by template administrators. The process assembles a document dynamically from building block templates depending on the business data for the case. Each step of a process is represented with a form allowing clerks to interact and enter case-specific data and the transitions between next process steps. In case there can be more than one step following the current step, conditions can be defined in the form of "If … Go to …" expressions, as shown in Figure

6 (see under "Transactions & Actions"). Moreover, each step can contain several actions defining the building blocks used in the step.
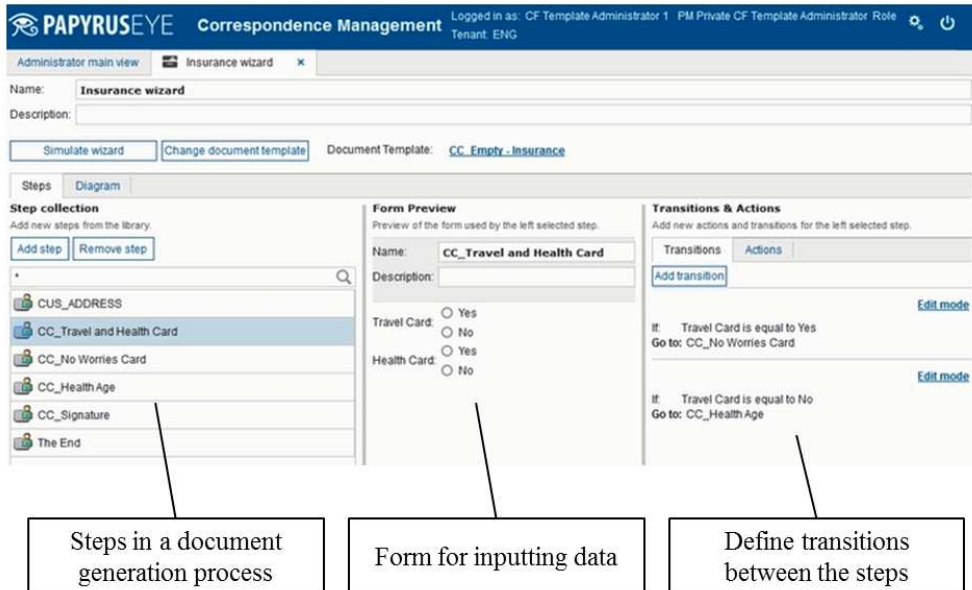

Figure 6: Template administrator creating/editing a document business process

In a process diagram view (see Figure 7), business processes can be optionally visualized with BPM notations.
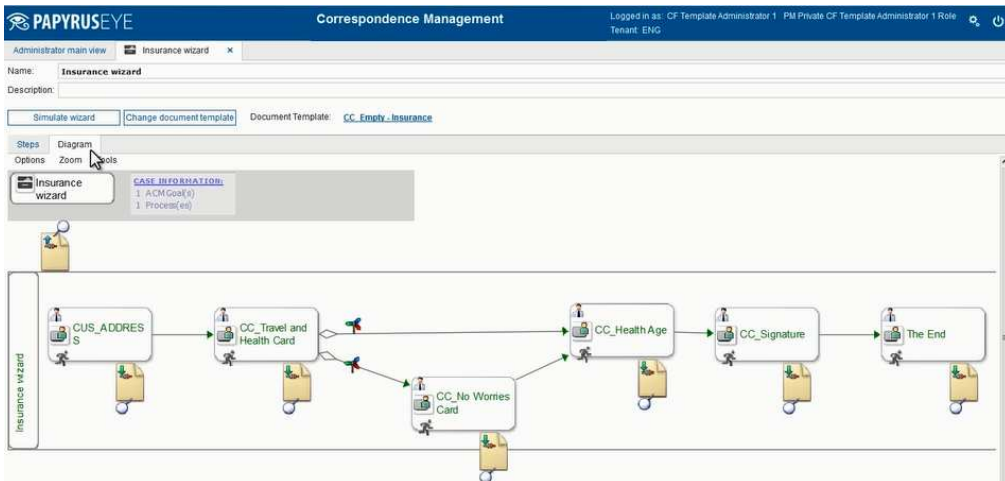

Figure 7: The defined document generation process as BPMN model

Delivery process

The template delivery is controlled by the delivery process (Figure 8). As explained in Figure 4, all templates that are created or modified by template administrators are assigned to a specific delivery which is coordinated by the delivery manager. Voting tasks are used to handle the process flexibly. Testers and supervisors issue voting results that allow the process to proceed to the next stage or return to the previous.
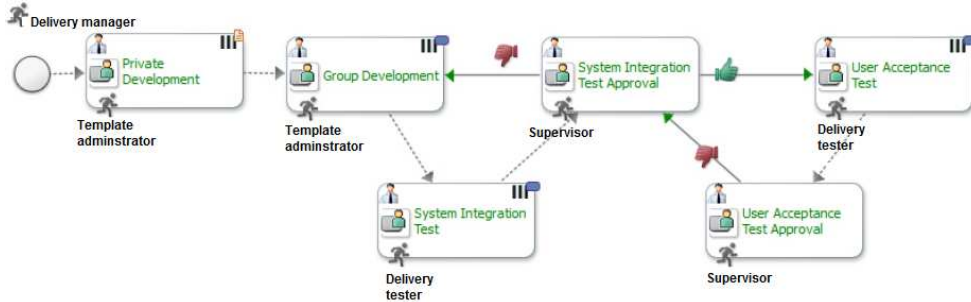
Figure 8: Document Template delivery process

Documents created by clerks

When templates are released, insurance clerks create documents based on these templates. MKS provides a set of document templates organized in a well-organized structure so that clerks can easily find a suitable template for a certain business situation (Figure 9). Each template has a preview to support clerks in choosing a suitable document.
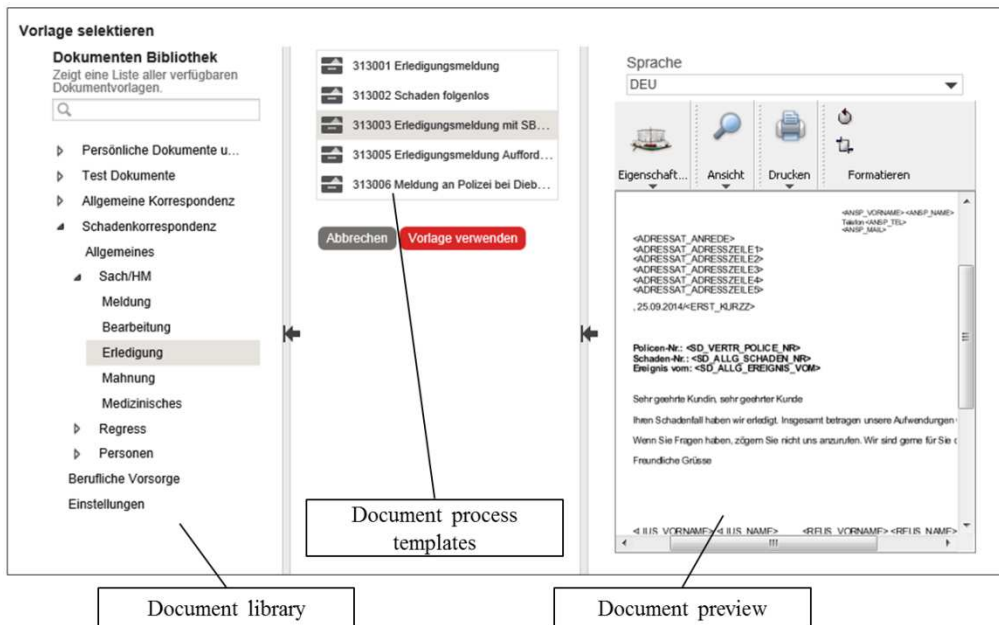

Figure 9: Document Template selection by clerks

To generate a document, clerks follow the process defined in the template which required typically the execution of several steps to specify the key information (Figure 10). Service tasks are triggered in the background to retrieve data from business applications based on the entered information to complete the filling of

the document with business data. Such backend service processes are hidden from the clerks except steps that need decisions from users.
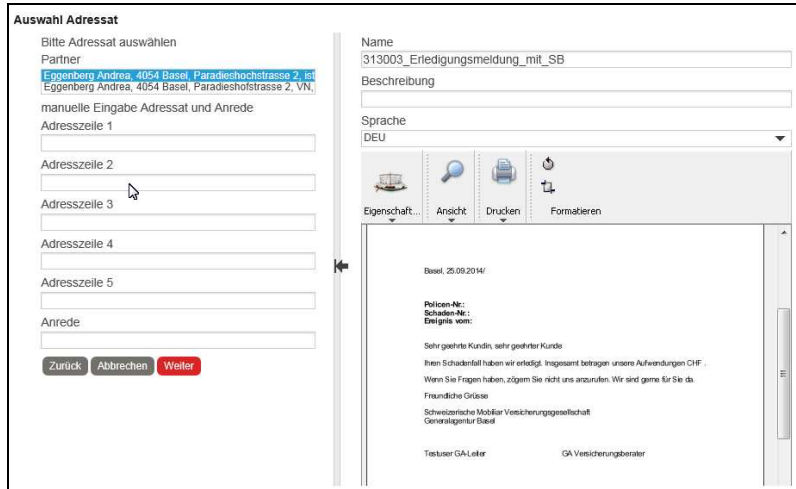

Figure 10: Execution of a process step in the document generation process

When the document process is finished, the clerk can edit building block contents where access rights allow for it (Figure 11).
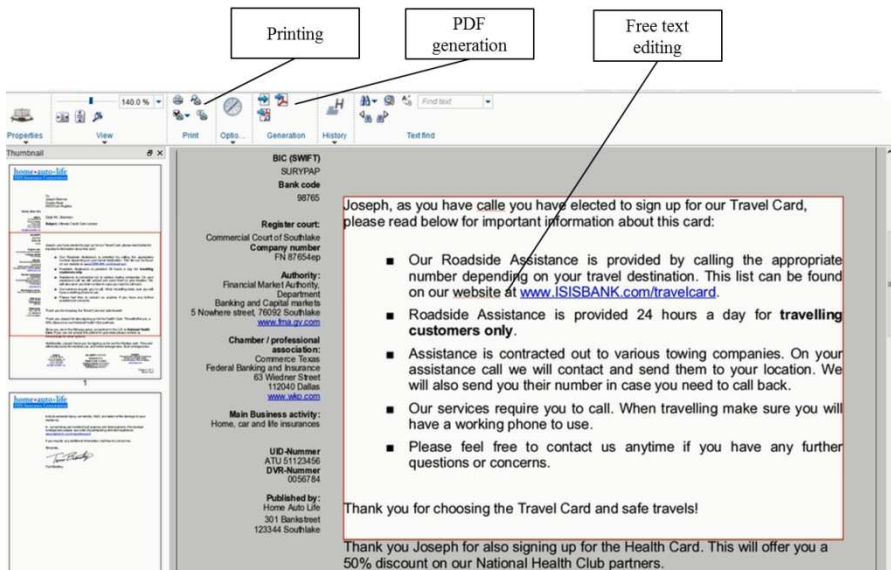

Figure 11: Content editing mode

After the document is finished, it can be locally printed, exported as PDF or sent to customers in different ways such as e-mail and fax as defined by the output channel selection step of the process.

In addition, MKS has interfaces with several business applications used in *Die Mobiliar* so that documents are automatically exchanged as needed.

4.3 Organization & Social

Reduce the number of template administrators

MKS has a significant impact on the working life of employees in *Die Mobiliar*. The number of template administrators could be reduced 4 times, thus these skilled employees could be moved into other specialized business responsibilities. In the initial system, template administrators had struggled to maintain the template collection in the distributed system like copying language variants of document templates into every location with manually controlled standard file management tools. The maintenance of hundreds of templates in three languages costs a lot of time and effort, which is saved now for high value work.

Clerks can focus on customer experience

MKS changes the business operation in *Die Mobiliar* from weak process support to dynamic process enactment, from manual local work to centralized work. Steered by flexible business processes, MKS facilitates the daily work of *Die Mobiliar* with automatic and transparent business functions. Clerks do not have to waste time by manually updating different systems but utilize the centralized MKS repository to access document and process templates as needed for specific business cases. Thus, clerks do not spend time anymore on technical activities and can fully focus on the customers who are vital for the business success of *Die Mobiliar*. Any increased customer experience is the highly appreciated consequence.

5. HURDLES OVERCOME

5.1 Management

The benefits gained from MKS are quite recognizable for *Die Mobiliar*. However, the adoption of the new system has to happen at a pace that is in alignment with the company culture. Employees were used to the former system with long-term developed habits for daily work. Changing to the new system is a paradigm change and requires the employees to accept and adapt to new activities, giving up historically grown routines. Therefore, the management of *Die Mobiliar* is much engaged in persuading team leads in the promotion of the new way of working, educating people about the benefits of MKS as accepting it as a reliable and productive system for their daily work.

5.2 Business

A huge amount of templates created by MS Word in the previous system has to be migrated to MKS. Due to the historically grown number of templates and personal variants this cannot be automated. A true consolidation requires a new set of clean templates. Thus, each document template includes not only the content but an individual process for the execution by the clerks. Although essential text snippets can be migrated seamlessly into MKS, each process needs to be tested which is supported in MKS by running documents in simulation mode. Therefore, the migration from the previous system to MKS consumes one time efforts for template administrators.

5.3 Organization Adoption

Die Mobiliar provides internal trainings and tutorial videos for all employees to introduce and demonstrate MKS in a way that can be easily followed. In addition, the benefits gained from MKS are communicated to all employees. Since go-live in

2014, MKS did not have any downtime, which helps building trust into the new system for their employees.

6. BENEFITS

6.1 Cost Savings / Time Reductions

- The number of template administrators for creating and maintenance of the template collection is reduced 4 times.
- The number of documents produced per day has increased 20 times.
- MKS is integrated into several business applications used in *Die Mobiliar*. The transparent data exchanged between services and systems frees business users from the concern about data quality and synchronicity.
- MKS can be accessed both online and offline in the same platforms.

6.2 Increased Revenues

In the first phase of the project, the revenues cannot be estimated.

6.3 Quality Improvements

MKS provides a common and fully-featured platform for all business documents. Therefore, the quality of documents created by MKS has improved due to its consistent style, well-designed format and rich content. Moreover, e-delivery channels can produce documents in color for online presentation.

7. BEST PRACTICES, LEARNING POINTS AND PITFALLS

7.1 Best Practices and Learning Points

- ✓ *A centralized document architecture reduces efforts for maintenance of the template collection.*
- ✓ *Building blocks help to avoid redundancies of document templates when reused throughout different templates.*
- ✓ *Language variants of building blocks make language handling seamless and worry free. Based on a flag in the customer database defining the preferred language, the system dynamically includes the appropriate language variant into each customer document and generates separate copies for each desired language.*
- ✓ *Daily work is better organized through the dynamically selectable process templates, supporting consistent documents and automatic services for document generation*
- ✓ *Integration with various business applications and services enables a single point of access through a commonly available and fully-featured document management and process platform.*
- ✓ *E-delivery options facilitate the delivery of documents to channels preferred by the customers*

7.2 Pitfalls

- ✗ *It is very important to involve business users at an early stage of the project, when the requirements of MKS are analyzed. This was not sufficiently done and caused acceptance discussions when users where exposed to not only new user interfaces but also to changed processes.*
- ✗ *Business users shall be responsible for the definition of user stories (Who/What/Why) for all document processes.*
- ✗ *The specification of the most important business definitions (document templates, layout, content and languages, user interface with its functions and processes) must be signed off by business user representatives. By this*

way, business user requirements are fully considered in first place so that involved people get familiar with the new system and accept it easily.

8. COMPETITIVE ADVANTAGES

With MKS, a huge amount of high quality documents can be produced in a short time. The business processes executed in MKS can be edited by business users without IT involvement. The centralized system containing release management can optimize the lifecycle of document templates. Thus, new templates can be released quickly to meet the business needs. MKS ensures the high quality documents produced quickly to catch the business needs in the insurance industry. Moreover, MKS brings relief from technical operations so that business users can focus on customer experience.

9. TECHNOLOGY

Die Mobiliar uses the Papyrus Communication and Process Platform[1] as basis for their customized "Mobiliar Korrespondenz System" (MKS, Mobiliar Correspondence System), with full functionality for online interactive business document production and archiving. MKS is built on Papyrus WebRepository utilizing the Papyrus Adaptive Case Management (ACM) Solution and the Papyrus Business Correspondence Solution. While the correspondence solution handles the design and content of documents, the ACM solution manages the processes for the document generation with its integrated BPM capabilities.

10. THE TECHNOLOGY AND SERVICE PROVIDERS

The MKS implementation was done solely by ISIS Papyrus Europe AG and its consultancy services handling the customization of the standard platform solution. ISIS Papyrus offers a consolidated, end-to-end solution for inbound and outbound business communication and process management, based on standard software components and solution frameworks:

- Papyrus WebRepository
- Papyrus ACM Solution
- Papyrus Business Correspondance Solution
- Papyrus Postprocessing/PrintPool
- Papyrus Server

ISIS Papyrus - Communication and Process Platform: https://www.isis-papyrus.com/

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[1]   http://www.isis-papyrus.com/e15/pages/software/platform-concept.html