

# Next Generation Knowledge Management for Europe Based Life Insurer: An End-To-End Solution to Assist Insurance Platform Modernization and Ongoing Efficiency Improvement

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**Abstract:** Purpose of this paper is to showcase the advantages and benefits of positioning a Tool driven approach to create and manage knowledge in an enterprise. As Organizations traverse thru multiple platform and technology changes to drive transformation, the processes & the documents associated to these solutions also need to change and the employees who operate on the processes on day-to-day basis need to be trained/re-trained accordingly. Ability of an organization to manage the process documents in an effective way and drive large scale changes in a systematic manner acts as a key factor in how successful these platform/technology changes are. A technology solution/tool driven approach to manage the process documents, enabling mass changes to the existing knowledge and creating new knowledge at a rapid pace can be the answer for the challenges organizations are facing with respect to Process documents/knowledge articles. The implementation and usage of the solution is aligned to the Knowledge Centred Service (KCS) methodology.

**Keywords:** Knowledge artefact lifecycle, Knowledge centered service, KM technology, Knowledge process, SOP, Process documents, Rapid creation, Knowledge transformation

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## 1. Business Scenario

A leading global insurer based out of Europe had various challenges that were impacting their customer growth and experience. As part of the customer experience transformation program, their core Insurance platform was modernized. This impacted ALL the knowledge artefacts - Standard Operating Procedures (SOPs) that were being used by their back office and contact center teams while serving the end customers. The Insurer lacked the capability to achieve the objectives as their current process involve manual SOP creating involving multiple stake holders and documents stored in multiple repositories without much of control measures. It also impacted the pace at which the Insurer can roll out the new Core Insurance platform for their customers as the internal teams are not ready to leverage the platform without the relevant SOPs created at the same pace. To minimize this platform, change impact on their customers and to bring the SOPs up to date, the Insurer was looking for a next gen Knowledge Management Platform that can streamline, govern, and speed up the knowledge creation process.

TCS participated in a competitive bid against various market products and had won the deal to implement their knowledge management platform (TCS Adaptive Knowledge Bank – AKB). The out of the box functionalities driven by two+ decades of domain led operations experience and the state-of-the-art architecture enabling the self-serve features with utmost flexibility helped in achieving the same. TCS solution was successfully implemented within 16 weeks and helped the knowledge authoring team to create and govern the knowledge artefacts with speed and accuracy. The following sections provide an overview of the TCS solution, and the benefits provided to the Insurer.

## 2. Methodology and Solution Details

### 2.1 Methodology

TCS Adaptive Knowledge Bank (AKB) solution delivers features which are in line with Knowledge Centered Service (KCS) methodology. AKB helps organizations to solve the Knowledge management challenges thru

- Capturing the existing knowledge
- Arranging them in meaningful way thru metadata and other features
- Increase the use of the knowledge and enhance it thru collaboration

Solution also helped the enterprise to evolve with respect to knowledge management practices through

- Reports/Dashboards and Insights on Knowledge and User participation

- Integrating with multiple Knowledge repositories and processes
- Ability to provide process evaluations as needed

Overall AKB aligns to the methodology of Knowledge centered Service and delivers the right capabilities to the organization in managing and enhancing their knowledge.

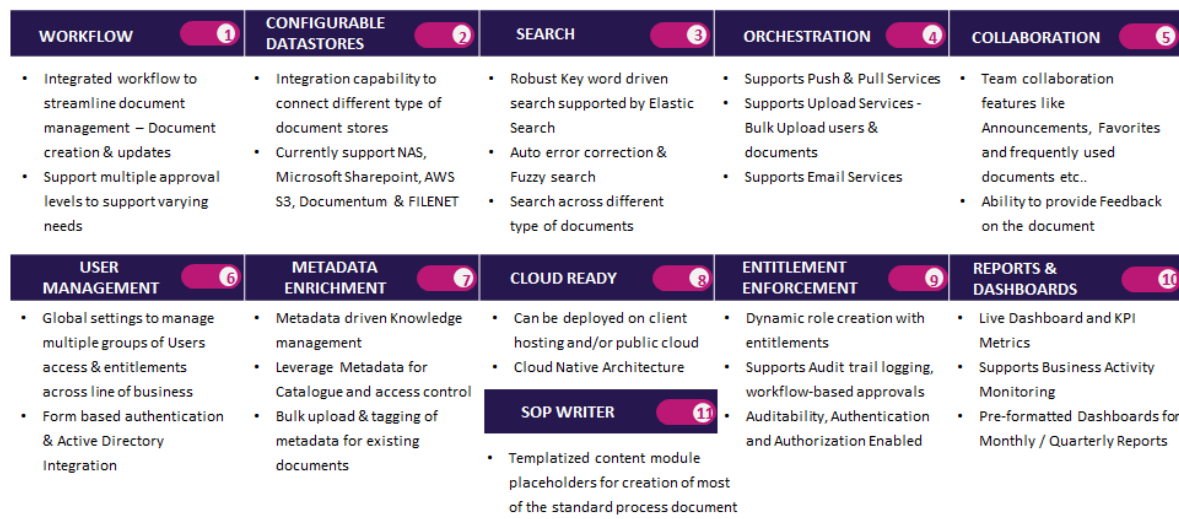
## 2.2 Solution Details

**TCS Adaptive Knowledge Bank® (AKB)**, a TCS Intellectual Property (IP) solution for end-to-end knowledge management (covering knowledge creation, governance, and search), was implemented to meet the business needs of the platform modernization team and back-office teams to expedite the SOP creation and manage the existing SOP documents in efficient manner. Its template driven, collaborative SOP creation process helped the modernization team to create new SOPs in short duration and with high quality. Its easy-to-use feature-rich web interface and advanced cognitive search capabilities enabled agents to quickly retrieve relevant information to process the service requests. This has helped the back-office team to reduce the Average Handling Time and manage their SOPs efficiently for on going changes.

Key objectives of the implementation were:

- SOP Writer module roll out – Enable the new platform team to leverage the module of AKB with in built word editor to create new SOPs. Worklist based assignment and edit capabilities to help the team to create sections in parallel and reduce the overall creation time
- Enable content driven search and retrieval of relevant information quickly without the need to manually navigate knowledge sources
- Aggregate, baseline and organize the knowledge artefacts across the sources
- Help business manage content effectively and maximize benefits
- Increase team efficiency with the collaboration features in addition to knowledge management capabilities

The below picture (Figure 1) depicts the key features of the solution that helped in achieving the objectives of the project,



**Figure1: Key Features of AKB Solution**

Please Note: The brochure about TCS Adaptive Knowledge Bank is available on <https://www.tcs.com/knowledge-management-solution-improved-cx>

## 3. The Infrastructure

### 3.1 Solution Implementation

The solution is implemented as On-premise setup within customer Infrastructure. To enable the smooth adoption and value delivery, AKB has been rolled out in multiple phases. The Initial Phase is rolled out to the new platform team, who is focused on creating new SOPs and the subsequent phases AKB rolled out to the rest of the back-office team.

The Initial implementation and roll out to new platform team successfully completed in 4 months. This has helped the new platform team of 200+ users to create relevant SOPs in a quick and collaborative manner. Back-office rollout has been taken as Phase 2 with additional SOP repositories and 400+ users leveraging AKB for their day-to-day business operations.

Key activities involved in the implementation are:

- Establishing the collaborative process in creation new SOPs
- Role based access definitions to enable quick creation and approvals for SOPs
- AKB to own the File server repository for new SOPs to expedite the roll out of the solution
- Identification of relevant Metadata, approval setup and Reports etc.
- Unique way of requirement analysis with the help of user stories and iterative demos
- Solution design, installation, setup and base configuration – with extensibility to multiple tenants
- Customized and iterative implementation of the user requirements– agile deployment within and across the tenants
- User training and user acceptance testing – multi level user testing to ensure zero business disruption
- Production Go Live in a phased manner

### **3.2 Technology Stack**

The TCS solution is pre-built using .Net core on top of Elastic search with metadata in MS SQL Server. While the solution can integrate with different storage sources like NAS (Network Attached Storage), SharePoint, document management systems, cloud services etc., NAS was the preferred option for this implementation. A load balancer is used to route and manage the traffic to the various tenants.

Key technical building blocks used in this implementation are:

- AKB Portal – an intuitive interface for knowledge authors, users, approvers, administrators etc. to use the features of the application
- SOP Writer – Module to collaboratively create end to end SOP document using in-built word editor. Module also support template driven creation and Worklist capabilities
- API driven services – APIs for intra-module and inter-application communication
  - Auth Services – Integrated with customers' AD for seamless authentication into the application
  - NEST API – Used for supporting ingestion of documents and metadata into the solution during the initial onboarding and for indexing and querying the documents supporting the searches
  - Document API - Add/Version/Delete documents by the authors/reviewers
  - Search Services/API – To support search interface of the portal by retrieving relevant information based on search terms
  - AKB Internal API – To orchestrate with incoming and outgoing traffic and capture the activities in the log database
  - Notification API – To send email alert to users with FYI
- Workflow – The configurable Low Code/ No Code (LCNC) workflow module is used to define/refine the document intake/update/approval process.
- Administration – As part of the initial setup, administrative users were created for each tenant. Administrators used this module further to manage users, roles, entitlements, metadata, preferences, etc.
- Reporting and Dashboard – Usage metrics configured as per the requirements
- Collaboration – Enabling continuous enrichment of knowledge and keeping information up to date
  - Access favorites and provide feedback on the document
  - View announcements, glossary and recent searches

## **4. The Challenges**

### **4.1 Risks and Mitigation**

The following are the key risks that were envisaged/faced and mitigated timely during the implementation

| Challenges                                                                                                                         | Solutions                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Creation of new SOPs in parallel to new platform rollout accommodating the dynamic changes as per the platform capabilities</b> | AKB helped with Worklist based SOP creation process, where multiple stakeholders can work on their sections in parallel and configurable approval levels, which enables the right amount of control measures. Together with these features AKB was able to expedite the SOP creation process and kept up to speed on dynamic changes         |
| <b>Ambiguity in the target state requirements for the solution from business perspective</b>                                       | The AKB team used EPIC/User story driven requirements gathering and finalization approach keeping the business users need in perspective. This helped the business team to understand the must-have features for the day-to-day operations against the nice to have features                                                                 |
| <b>User adoption to the structured solution-based approach compared to the current state of manual processing</b>                  | The AKB team provided an agile based implementation approach where the users were given opportunities to get a good handle on the solution before the production migration. This helped the team to understand the solution features and how the target state process will work                                                              |
| <b>Risk of knowledge documentation becoming stale</b>                                                                              | During the implementation of the solution, there were major upgrades to the core platform which impacted the SOPs (making some of them possibly obsolete). To ensure that the documentation is up to date, knowledge governance team was established with SOP writer module rolled out first to support SOP creation/upgrade/versioning etc. |
| <b>Document proliferation and organizing</b>                                                                                       | As the no. of users and documents were increasing over a period, document organization was getting difficult for the teams. The team introduced the Hierarchy feature that helped to organize the documents as needed.                                                                                                                       |

## 5. How the Initiative was Received by the Users or Participants

AKB solution was received well by the Operations team. With the functional and configuration capabilities, business ops teams were able to create SOP documents in line with their planned timeline.

From the start date of implementation, Ops team was able to get the solution in production in 16 weeks and start the creation of SOPs. AKB helped the team to create SOPs to reduce their SOP creation time by 40 to 50%.

In a quick timeframe, Business Ops team was able to create 100+ SOPs associated to the new insurance platform, which helped the team keep up their pace with larger organization schedule.

As the teams leveraging the solution for new SOPs, they have extended the capabilities to the existing back-office setup to support their day to day need in accessing and managing the existing SOPs. In this journey AKB was able to create great value in the form of productivity improvement.

Listed below are some of feedback received from the users

*"I just wanted to take this opportunity to say what a great experience this project has been. I've had the opportunity to work on several projects during my years with several outside vendors and working with TCS has been one of the best experiences I've had. Team continues to be very responsive. I'm excited to see more and more business areas begin to use AKB" – Senior Business Unit Manager*

*"I want to take this opportunity to say thank you to the entire team for helping us build AKB. Features are very user friendly, and I think the all the Users will love it. Product team has been super easy to work with and very patient and respectful with answering our questions and supporting us with our needs. I truly appreciate the time, expertise, and help"– Back-Office Operations Lead*

## 6. The Learning Outcomes

Post implementation, contact center agents have better access to information, thus reducing AHT and increasing the first call resolution. Benefits are calculated using the handle time/unit time for each user, business team and process to establish a base line of their activity processing prior to AKBs implementation and their support overhead (referral volume, unit time and drivers) to understand the drop out for each month. The same metrics were used post implementation to assess whether the timings/referrals have reduced, which colleagues have reduced and use a combination of AKB search reports and AKB download reports to validate what information users are looking for.

We also worked with business teams to drive a reduction in referrals through promotion of AKB material that can help colleagues self-serve and monitor search volumes vs referrals to establish if certain colleagues are utilising the system more which is causing them to need less support.

The following (Figure 2) are the key highlights of outcomes from the solution.

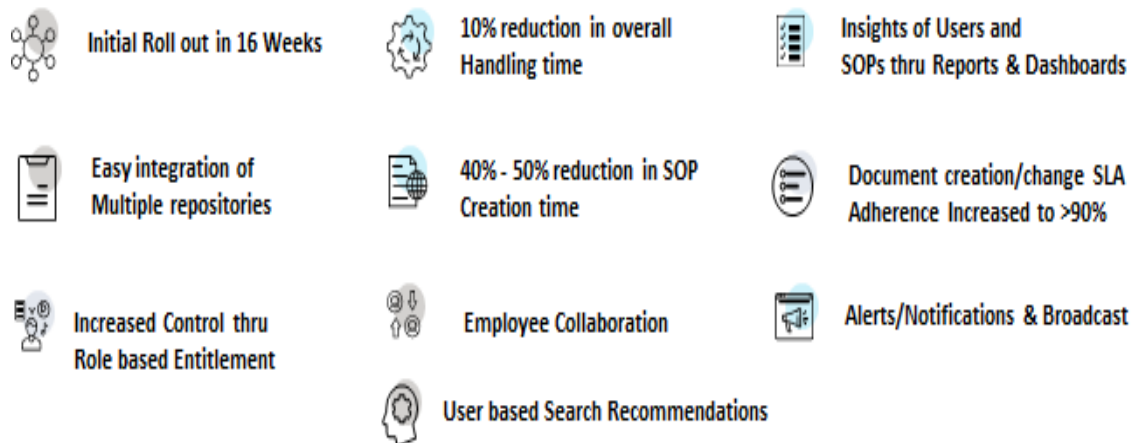


Figure 2: Key Highlights of the Implementation

## 7. Plans to further Develop the Initiative

TCS continues to invest in the evolution of this solution based on the industry, geo market and technology changes. This ensures that the solution remains relevant for customers and creates a win-win situation from both the solution and business delivery standpoint. The following (Figure 3) are some of the key feature enhancements that are part of high-level roadmap of AKB:

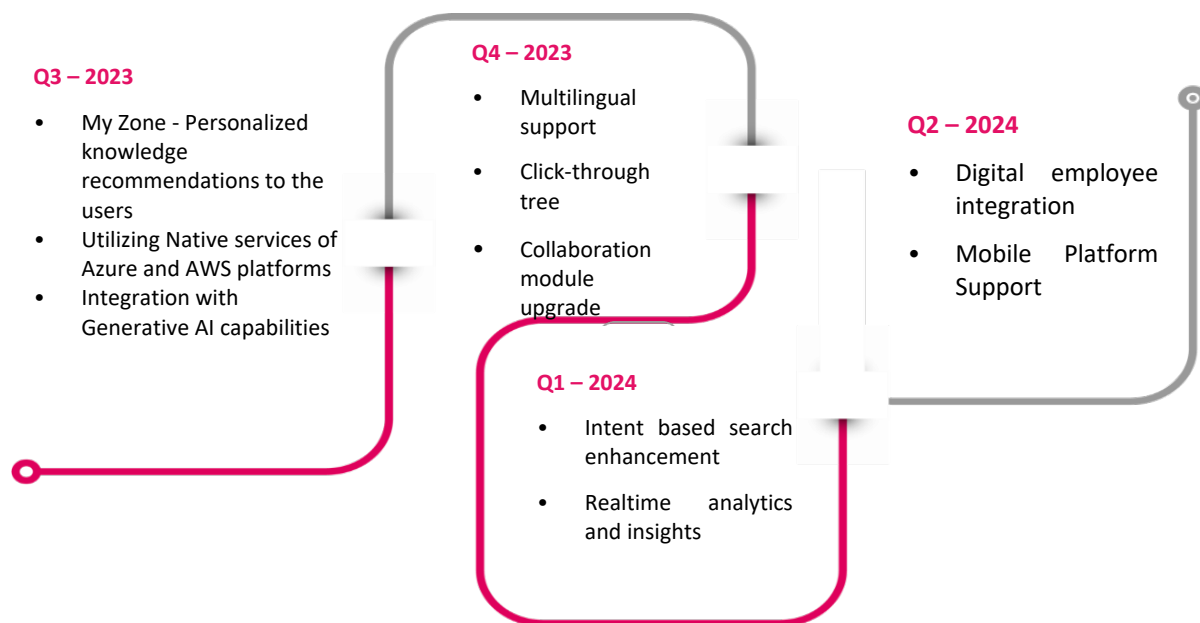


Figure3: AKB Solution Roadmap Ahead

## **8. Conclusion**

TCS Adaptive Knowledge Bank (AKB), as an end-to-end knowledge management solution, has transformed the way Business operations team was able to streamline knowledge management lifecycle with flexible and templatised way to create new SOPs, manage the existing knowledge artefacts and deliver better value to the organization and to the end customer. With collaborative features, control measures, AI/ML driven search, metadata driven knowledge management and extensive Reports and dashboards, AKB was able to give all the critical capabilities needed for the Business Ops team to deliver better knowledge and in turn better experience to the end customers. This extremely flexible, governed and easy to replicate solution has been deployed at multiple other customers providing great benefits at each implementation.