



NathCorp Project Approach

Sun Life
Intelligent Document Processing RFP

1. Purpose / Background

This Proposal sets out the tasks, responsibilities, work scope and other items applicable for the deployment of a new cloud-based Intelligent Document Processing solution (“IDP”) to Sun Life Assurance Company of Canada, (“Sun Life”).

Sun Life is looking for an Intelligent Document Processing solution to replace their current document processing systems with the goal to increase the overall accuracy for extracting data from documents in addition to reducing the amount of time “human in the loop” effort required in validation or correction based on their current processes today. The overall goal is to reduce costs, save time, increase productivity, protect your confidential information and to provide improved document processing services to their various Business Units in Canada and globally. Inbound documents go through various document capture systems and content sources with an annual volume of rate of approximately 45 million documents. Today, Sun Life’s current document processing system provides 20% extraction including classification and separation while 80% of the remaining documents are classified and separated with no extraction. The solution must be able to meet the current demand as well as accurately classifying, extracting, and validating documents to meet Sun Life’s requirements with the goal of increasing the ratio of document extraction over time.

Sun Life’s goal is to take advantage of a centralized architecture leveraging Artificial Intelligence (AI) to improve efficiency in processing inbound documents while minimizing the amount of customization with a low code no code implementation improving their business unit’s processes within the new Intelligent Document Processing (IDP) platform. The end state vision will be a centralized intelligent document management repository integrated with Sun Life’s existing security system and will support their current capture services and Enterprise Content Management Platform FileNet.

2. Proposed Intelligent Document Processing Solution Architecture

NathCorp is proposing a cloud-based solution utilizing Sun Life’s existing Microsoft Azure Tenant to build a complete end-to-end solution in order to meet Sun Life’s requirements. Utilizing the Microsoft Cloud Platform, NathCorp’s proposed solution will implement all components in Azure providing high availability, achieving 99.9% availability as well as providing geo-redundancy across multiple cloud data centers in the Canada or appropriate geographic location. There are no Virtual Machines (VMs) in our proposed architecture therefore reducing additional overhead in IT resources associated with managing, maintaining, and problem resolution with a VM implementation. Our solution will integration with Sun Life’s key content sources utilizing out of the box connectors from Kofax to move files from the capture system to Azure as well as utilizing FileNet’s connectors to Azure giving the IDP solution the ability to send files that have been processed to FileNet. The proposed solution is focused on Microsoft’s

latest features of Applied Artificial Intelligence services using Forms Recognizer and Cognitive Services Vision leveraging built in OCR together with Text Analytics for handling Sun Life's document processing needs. Forms Recognizer and the components of our solution are low code / no code implementation that incorporates the following AI capabilities to be performed on documents:

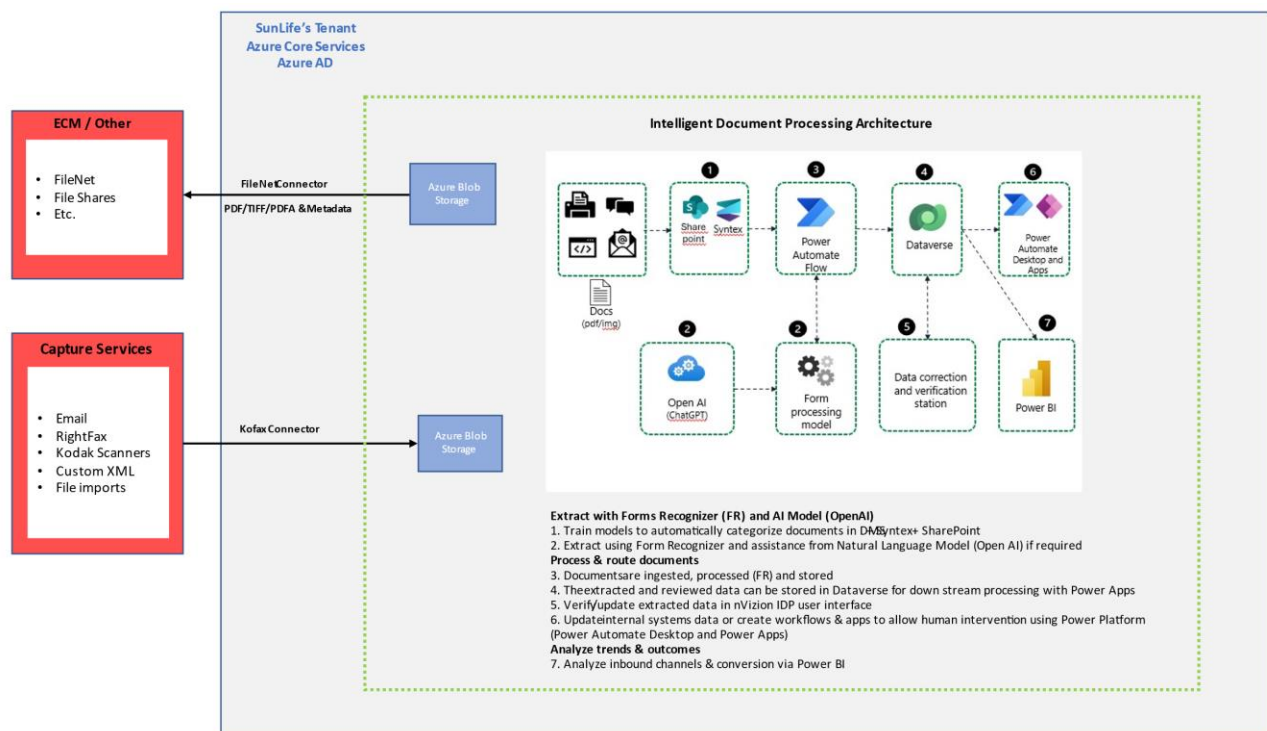
- Ability to quickly train and differentiate documents and classify them to apply specific rules, conditions, and routing for handling and processing needs based on the requirements,
- Split large documents into multiple documents.
- Identify and extract text, key/value pairs, selection marks, tables, and structure from your documents.
- Process documents that contain barcodes such as QR codes other barcode formats
- Detect specific font types to be able to make decisions upon the types of fonts embedded within a document.
- Support multiple languages including English, Spanish / Latin , French and many other Asian languages and will have the ability to extract multi-lingual text within documents.
- Overall document training / extraction can achieve 90% and higher accuracy, minimizing the HIL effort required in the processing cycle.
- Utilize Power Automate / Power Applications low code, no code services to handle Human in the Loop processing requirements and workflows.
- Ingest, interpret and process very high peak loads of as much as 80,000 pages per hour.

The foundation of NathCorp's proposed IDP architecture (diagram below) uses nVizion's platform with standard Microsoft Azure components to deliver the required cloud-based functionality; additionally, we have included the following suite of Microsoft cloud-based products to ensure our response represents a complete end-to-end solution based upon the requirements set out in the RFP. These components are all industry standard, off the shelf components, highly rated in their technology category by Gartner and other key rating agencies.

nVizion is an Intelligent Document Processing Platform that provides a web-based solution built on using Microsoft tools and technologies. Utilizing Artificial Intelligence and Machine Learning, helps us deliver a best-in-class solution to classify, extract and process data from various document formats. Key features and technologies include:

- Classification and extraction models: SharePoint Syntex, Form Recognizer
- Data extraction: Form Recognizer, AI Builder, Open AI
- Natural language-based queries and for unstructured content: Open AI
- Verification and validation: May need customization depending on Sun Life's rules.
- Reporting and Monitoring: PowerBI, Power Automate, and potential customizations if needed based on requirements.

- Workflow and Human in the loop – Power Automate, Power Apps, .NET based custom apps if specific requirements need customizations.
- Azure Logic Apps manage data cleanup and metadata validations and hand it off to power automate and power apps for HIL workflows.
- Azure Dataverse – to store document definitions, metadata, and IDP statistical data
- Azure Blob Storage / Azure Storage – to be used as the integration points for receiving files from Kofax and for delivering the final clean files processed in the IDP to FileNet.
- PowerBI– as the reporting platform and will include PowerBI Copilot giving power users the ability to create intuitive reports without having PBI expertise.
- Microsoft Azure AD – for security and identity management fully integetarted with Sun Life’s existing Active Directory implementation to manage authentication and authorization.
- Microsoft Azure AI Monitoring – to monitor the overall health of the solution of the IDP system



3. Project Approach

This Proposal focuses on the services required to design, build, and deploy a cloud-based Intelligent Document Processing solution based on Microsoft Azure Technologies to address the key features and functionality set out in Sun Life's RFP. Our approach is to implement an end-to-end document processing solution using Nvision as the core platform to perform the following:

1. Ingest files from Sun Life's current capture system "Kofax."
2. Perform intelligent document processing per business rules for exaction and processing data from each document type.
3. Invoke "Human in the Loop" workflows where documents need attention. A user friendly interface is provided to review, validate and approve data extraction results. At this stage the solution can be customized to bring other data elements from external systems to process business rules. It then passes through customized business rules that are defined by the user based on your business needs.
4. Capture relevant data during processing for reporting and trend analysis of the overall system is performing.
5. Send processed or final clean documents to Sun Life's current Enterprise Content Management system "FileNet".
6. Provide proactive monitoring throughout the end-to-end IDP processing, monitoring Nvision and the associated Azure Services overall heath throughout the day.

Most of the IDP Architecture components will utilize a low code no code implementation. We feel that the majority of Sun Life's documents - the 25% structured and 65% semi-structured documents, will need little customization if any and can be processed with Nvision's tool configurations. The majority of customizations could be with the 10% remaining unstructured documents based on the rules for extracting and processing the data which will be determined during the project.

The end state solution for Phase 1 release will be a complete cloud only production ready IDP system built on modeling a subset (up to 50) of the document types from structured, semi structured, and unstructured data and to incorporate 2 of the 18 HIL workflows to a have fully capable solution in place at time of production. The remaining documents and HIL workflows that have not been converted in Phase1 will leverage the production systems capabilities to be converted over time using monthly iteration release cycles. Our goal is to quickly get to a production ready implementation and then to iterate the remainder documents and HIL processes over time. Sun Life will have the option to take ownership of the post production iteration cycles once they are ready to support remaining conversions or NathCorp can continue to assist with the conversion until all documents and HIL processes have been completed.

The scope of work is provided, below, in multiple Tasks in which some will run in parallel to accelerate the build phase with the goal to target a Q4 2023, start date:

- Task #1 – Discovery and Planning
- Task #2 – Build Phase
 - Intelligent Document Processing
 - Human in the Loop Workflows
 - Kofax Integration
 - FileNet Integration
 - Data and Reporting
 - Azure Monitoring
- Task #3 – Stabilize / UAT
- Task #4 – Production Implementation / Ongoing support
- Task #5 – Program Management

This Proposal covers the expected services for the (5) Tasks as described above. Delivery of services for subsequent Phases will be covered in separate SOW(s).

3.1 Tasks and Activities will Include:

Task 1 - Discovery and Planning

NathCorp to staff a program manager and a team of Architects with expertise in SharePoint, Syntex, FileNet / Platform Integration, and Security to drive the overall solution requirements and proposed architecture in preparation to build the Intelligent Document Processing Solution per Sun Life's requirements.

In Scope

1. Discovery Phase

- Assess current Sun Life's current environment including current Azure AD implementation, Kofax capture services connections and FileNet connect types.
- Perform analysis of the various document types – structured, semi-structured, and unstructured.
- Understand Human in the Loop processes and workflows. Agree on 2 workflows that can be implemented with the new production environment.
- Confirm use cases and requirements for the proposed IDP solution and overall security requirements.
- Confirm document types , classification, separation, and meta data extraction for OCR / Intelligent document processing. 650 Structured Document Types, 1500 Unstructured Document Types plus understand future growth. Agree on a subset of the documents to be processed with the new implementation.
- Put together conceptual architecture for the proposed solution along with high-level migration approach.
- Get agreement on Minimum Viable Product that the solution needs to meet.

- Collect and document security requirements.

2. Planning Phase

- Put together a design to support the proposed IDP solution components which include:
 - i. Nvision together with Azure Services to support the IDP design including SharePoint / Syntex, Forms Recognizer, Cognitive Services, Dataverse Services, Azure Logic Apps and other App Functions.
 - ii. Human in the Loop Workflow Automation design using nVizion
 - iii. PowerBI Reporting
 - iv. Integration to existing Capture Services and FileNet ECM systems.
 - v. Monitoring goals for the IDP implementation
- Create a detailed master project plan to support the subsequent phases for the below Tasks.
- Identify and track potential risks associated with the proposed architecture and migration.

Assumptions

1. Sun Life will make available required resources and provide necessary knowledge and access to systems in scope to support the discovery and planning phase.

Task 2 –Build Phase

The build phase describes the various services provided to configure, customize, and implement the IDP solution within a test environment based on the requirements design produced in the discovery and planning phase. The goal is to have the workstreams run in parallel in order to accelerate the timeline for completion.

Intelligent Document Processing

The IDP Build Phase focuses on the configuration and customization of all the Microsoft Azure Services needed to support the solution which include Nvision, SharePoint / Syntex, Forms Recognizer, Azure Cognitive Vision, Azure Dataverse, Power Platform, and Azure Logic Apps. .

In Scope

1. Establish test environment with required cloud components necessary to validate the design.
2. Use nVizion as modeling tool to extract the specific text and information from documents into metadata and to categorize the documents. For each document type in scope, ingest and train the system to extract the proper fields into metadata utilizing ML models. Confirm accuracy for each document type.

3. Implement other core function to perform specific document processing needs including File Analysis, File Split, Data Validation and Data Redaction.
4. Configure the system to orchestration and sequence the intelligent document process flows from ingestion of received files to processing the files and to deliver the clean files to FileNet.
5. Test and validate that the IDP solution meets the requirements for this specific Task.

Assumptions

1. All build work will be performed in Sun Life's Test Environment
2. A subset of documents and forms from Structured, Semi-Structured, and Unstructured documents up to 50 documents will be in scope during this phase for document extraction for the first production release.

Human in the Loop Workflows

NathCorp understands that requirements for HIL workflows and processes have not been provided for the current 18 workflows in place today, and we have not factored complete effort to convert all current processes as part of our solution. We are taking the approach to include two workflows to convert into our IDP solution so that the all the key components of the architecture are in place during production allowing the remaining workflows to be implemented overtime after production readiness. The two workflows to be implemented will be agreed upon by both parties during the project and are included in the current budget.

In Scope

1. Confirm use cases to support each workflow.
2. Configure Nvizion built-in capabilities and User Interface to support HIL manual validation steps and processes to correct and update data accordingly.
3. Implement any custom Azure Functions deemed necessary to complete the HIL process to be determined during the project.
4. Capture and log changes to metadata for audit purposes.
5. Complete final document processing steps and place document to Azure Blob Storage to be delivered to FileNet.
6. Test and validate end to end HIL workflows.
7. Validate the accuracy of updates to the data.

Assumptions

1. Up to two HIL workflows will be implemented and agreed upon by both parties.
2. Type of Workflows in scope will be focused on corrections flagged that need manual attention.

Kofax Integration

For this proposal, NathCorp will use Sun Life's existing capture system to receive files targeted for Intelligent Document Processing. NathCorp will work with Kofax resources to implement a file replication solution taking files processed through the Kofax capture system and to send the files directly to Azure Blob Storage designated are. The IDP system will listen for each inbound file sent to Azure Blob Storage and immediately initiate the steps to begin processing the file. The goal is to use either out of the box connectors between Kofax and Azure or to implement a built-in replication service to send files to Azure.

In Scope

1. Confirm connection type to be implemented between Kofax and Azure.
2. Build connection type and implement security required to ensure a secure connection is established between both environments.
3. Configure the IDP listeners to move files into and targeted for IDP processing.
4. Work with Kofax resources to configure Kofax to place out all outbound files target for IDP processing to the correct location in Azure.
5. Test and validate that all document types are correctly sent to the desired location and picked up by the IDP for processing.
6. Determine if any performance bottlenecks and peak throughput levels achieved through the connection.

Assumptions

1. Sun Life to ensure that network throughput between clouds and on-prem are sufficient to carry the load.
2. Sun Life to make available Kofax implementation in a test environment

FileNet Integration

Sun Life's current enterprise content management system is FileNet. All documents that will be processed through NathCorp IDP solution will need to end up in FileNet as the final destiny. Being able to integrate seamlessly with FileNet is key to the architecture and with Sun Life's current version of FileNet integration will be achieved through built-in connectors. NathCorp is proposing to use FileNet's built in connector "Advance Storage Area" to define Azure Blob Storage as an extended device in FileNet's network. With this solution, no development will be required using FileNet's connector, documents processed through the IDP will be placed in the same Azure Blob Storage location that the FileNet connector will be configured to use. All traffic between FileNet and Azure Blob Storage will be secure using HTTPS between the two endpoints. FileNet policies can be configured to handle and move the files as they appear in Blob Storage to the library or folder in FileNet.

In Scope

1. Define Azure Blob Storage that will be the location for final documents processed through the IDP.
2. Work with Sun Life' FileNet team to create Advance Storage Area device for Azure Blob Storage
3. Configure and implement required certificates to support a secure connection between both parties.
4. Working with the FileNet team, determine and implement required policies to move files from the Advanced Storage Area "Azure Blob Storage" to FileNet
5. Test and validate end to end movement of files from Azure Blob Storage to FileNet.

Assumptions

1. Sun Life to make available resources from the FileNet team to perform required configurations to FileNet to support the solution.
2. Sun Life to ensure that network throughput between clouds and on-prem are sufficient to carry the load.

Data and Reporting

Sun Life would like to be able to produce custom reports on the document types that are processed through the IDP system. In addition, other data such as audit / statistical data tied to the Intelligent Document Processing solution can be included for reporting purposes to show trends on how the overall IDP is performing. NathCorp will utilized Azure Dataverse to support Sun Life's reporting requirements and will be integrated with Azure AD Security enabling tight controls on who can view the data.

With this implementation, Sun Life will be able to take advantage of utilizing PowerBI Copilot that will enable power users to produce their own Power BI reports using large language models to extract the specific data without having in-depth knowledge or understanding the interworking's in creating PowerBI reports. Basically, power users will be able to generate reports on the fly by using words or phrases to create Power BI reports without having expertise with PowerBI.

In Scope

1. Confirm data requirements and KPI's needed for reporting.
2. Ensure Azure Dataverse has the proper data fields in place for reporting.
3. Configure necessary security groups to control access to Azure Dataverse.
4. Implement ingestion process from the Intelligent Document Processing solution to update the Dataverse with required data.
5. Create PowerBI reports based on up to 5 reports agreed upon during the project.
6. Test and validate the data and accuracy of the reports and make corrections.
7. Validate the accuracy of updates to the data in the reports

Assumptions

1. Sun Life resources to work with NathCorp to determine types of reports and data need to be implemented for production readiness.

Azure Monitoring

Azure Monitoring for the Intelligent Document Processing solution will be implemented to monitor and alert on the health of Nvision and the associated Azure Services included with the IDP system. In addition, statical information will be logged from the services to the audit log. Information from the log files will be sent to the data warehouse for further reporting needs.

In Scope

1. Confirm key metrics of the architecture for monitoring.
2. Configure Azure Monitoring where need to track the status and health of the IDP services.
3. Determine and configure Alerts on specific services against health and performance thresholds.
4. Test and validate monitoring and alerting.

Task 3 – Stabilization / UAT

After the last Sprint development/testing activities concludes, the configuration and developments will be baselined and ready for UAT validation. NathCorp will perform end-to-end testing of the complete solution based on the features and functionality agreed for the MVP and to ensure that the IDP implementation is stable and ready for handover. During UAT, NathCorp will work with Sun Life UAT team to correct and remediate issues identified and incorporate changes for final testing. At UAT Sign off, NathCorp will proceed to package and prepare for deployment of the IDP solution into Sun Life's production environment.

In Scope

1. Perform end to end solution validation test to confirm MVP features against the test cases and remediate issues identified.
2. Conduct performance testing and produce performance reports based on the metrics that the IDP solution needs to meet.
3. Sun Life security team performs validation of security requirement and provides approval.
4. Initiate formal UAT validation and remediate identified issues with the goal to get UAT Signoff confirming that the solution meets the MVP requirements.
5. Work with Sun Life teams on the deployment plan and communication plans in preparation for production deployment.

Assumptions

1. NathCorp and Sun Life to agree on final test cases to support UAT exercise and signoff.
2. Sun Life to provide NathCorp resources proper access in production to deploy and support the IDP solution.
3. Sun Life and NathCorp to jointly work together on the communications plan.

Task 4 – Production Implementation / Ongoing Conversion Support

After UAT approval and signoff that the solution meets the objectives of this project, NathCorp will package and deploy the IDP solution into Sun Life's production Azure Tenant. NathCorp will work with FileNet and Kofax resources to ensure production implementation of the connectors is in place and ready. With this implementation, a subset of the document types and 2 HIL workflows will be ready for use by the Sun Life team. NathCorp has not factored effort in this proposal to continue with conversion of the remaining document types and completion of the remaining HIL workflows. We are leaving this as optional in case Sun Life would like to perform the remaining conversions. NathCorp is willing to continue with the remaining or a portion of the document conversions as a T&M approach if Sun Life elects NathCorp to continue on the project otherwise NathCorp will provide knowledge transfer and transition the remaining work to Sun Life or jointly work together.

In Scope

1. Finalize communication plan.
2. Prepare production environment and deploy IDP solution into Sun Life's Azure Tenant.
3. Confirm security settings are in place to control access to IDP and related components of the architect based on Sun Life's requirements.
4. Validate end to end functionality and production readiness.
5. Continue with subsequent phases or monthly production releases to complete the remaining conversion of document types and HIL workflows over time under a T&M model until Sun Life's team takes over the remaining conversion tasks.

Assumptions

1. Deploy a production ready IDP solution with 50 documents and 2 workflows
2. Continue with document conversion for the remaining documents and HIL workflows as subsequent monthly production releases.
3. Nathcorp is estimating approximately 100 conversion documents per month and up to 2 workflows per month per monthly iteration. These are just estimates and will be updated during the project.

Task 5 – Program Management

NathCorp to staff multiple project managers in order run the above services Tasks in parallel. The lead project manager or program manager will work jointly as a “Leadership Team” with the assigned Sun Life Product Owner and IT Project Manager, to deliver the overall Intelligent Document Processing Solution and related NathCorp resources will create and manage the following artifacts:

In Scope

1. Program Manager Responsibilities
 - a. Primary point of contact for the Sun Life team
 - b. Responsible for managing and coordinating the overall project delivery working with the assigned Sun Life Project Manager
 - c. Coordinates and communicates with Sun Life PM to facilitate workshops, meetings, etc.
 - d. Develops and owns the detailed master project plan.
 - e. Owns status reporting, tracking issues and risks; conducts weekly status meetings.
 - f. Contributes to communications with Sun Life stakeholders; conducts monthly stakeholder meetings.
 - g. Responsible for resource allocation, risk management, project priorities, and identifying resource needs.
 - h. Collaboratively works with NathCorp project managers to other Tasks in the project to align with the master project plan, schedule, etc.

Assumptions

1. Sun Life to provide a project manager who will be responsible for allocating required Sun Life resources needed for this project.
2. Sun Life to make available technical resources as needed for each Task throughout the project.

3.2 Project Deliverables

The following Deliverables will be produced during the project.

1. Requirement Documents and conceptual architecture
2. Design that includes architecture and diagrams of the proposed solution
3. Detailed project plans
4. Configuration documents and “As Built”
5. Deployment Guide that provides the steps to install and configure the production environment.
6. Updated Azure Costing Models
7. Provide ongoing knowledge transfer to the Sun Life team.

3.3 General Project Assumptions

Services will be delivered based upon the following assumptions:

1. Sun Life will provide a project manager to work with the NathCorp Program Manager. The Sun Life project manager will own the internal Sun Life communication plan and coordination of Sun Life resources required during the project.
2. Sun Life will make available required resources and subject matter experts needed throughout the project in a timely manner.
3. Sun Life will provide proper credentials and access to required systems in their environment to NathCorp resources.
4. The network connectivity / utilization between Sun Life on-premises infrastructure and Azure are sufficient to support the transaction volumes.
5. Security (Authentication and Authorization) are already in place; NathCorp solution will utilize Sun Life existing Azure AD
6. Sun Life systems and applications will provide the necessary data feeds and performance to ensure the NathCorp IDP solution can perform to the required SLAs.
7. Only the English Language will be supported for this first release.

3.4 Project Out-of-Scope

The following items are specifically excluded from the services set out in this Proposal.

1. Configuration of third-party applications and Devices / Network Devices (firewalls, switches, port rules, etc.)
2. Customizations or development to any Sun Life Applications or Systems – only interfaces to specific systems identified in this Proposal will be developed.
3. Work on any Sun Life environment issues
4. Analysis or changes to any applications; implement or configure applications within Sun Life's environment.
5. Purchase of any software licenses or services not specifically identified as included in this RFP response.
6. Formal Training

3.5 Proposed Estimated Timeline

NathCorp believes that this will be approximately 6 month to have a fully capable production ready system in place supporting up to 50 document types and 2 HIL workflows based on the requirements outlined in Sun Life's RFP. Continuation on the project will be optional if Sun Life requests NathCorp services to continue with the remaining conversions and HIL workflows. Below are the proposed estimated timelines for each Task based on the information provided in Sun Life's RFP. Although this approach and duration span multiple years, we believe it is a prudent approach that will substantially reduce overall project risk, ensure minimal to no production impact, and create the best opportunity for project success and cost management.

Throughout the project, NathCorp will look for opportunities to run many Tasks in parallel to help expedite the delivery to production. Once NathCorp has a better understanding of Sun Life's environment and has confirmed detailed requirements and success criteria after Task #1 Discovery and Planning phase, changes may be made to the estimated timeline.

