The proposed solution utilizes Microsoft SharePoint as the foundation platform. Microsoft SharePoint is a powerful portal solution that provides a single point of access to people, teams, knowledge, and applications. KnowledgeLake Imaging provides seven components that turn the SharePoint repository into a fully-functional document management system. KnowledgeLake Capture allows end-users to scan and index documents then release them into the appropriate SharePoint repository. These three components provide all of the features needed to meet the requirements of ECM.
The list below indicates which proposed product contains the requirement below. Please review the specific product sections for an in-depth analysis.

- **Document Imaging**
  - Scanning process (High Volume) – KnowledgeLake Capture
  - Scanning process (Remote Capture) – KnowledgeLake Branch Capture Services
  - Scanning process (Capture Workflow) – KnowledgeLake Capture Server
  - OCR/Zonal OCR – KnowledgeLake Capture
  - De-speckle and auto straighten – KnowledgeLake Capture
  - Multi paper sizes – KnowledgeLake Capture
  - Capacity – Determined by model of scanner
  - Indexing process – KnowledgeLake Imaging Index
  - Image Markup and annotation – KnowledgeLake Imaging View

- **Document management**
  - Check-in / Check-out – Microsoft SharePoint
  - Version control – Microsoft SharePoint
  - Indexing – Microsoft SharePoint with KnowledgeLake Imaging Index
  - Search and retrieval – KnowledgeLake Imaging Search
  - Item Level Security – Microsoft SharePoint 2007
  - Office Document Saving (w/ Metadata Enforcement) – Microsoft Office 2007
  - Non-Office Document Saving (w/ Metadata Enforcement) – KnowledgeLake Connect 2007

- **Workflow**
  - Creation of workflows – Microsoft SharePoint Designer or Visual Studio
  - Route documents – Microsoft SharePoint
  - Document tracking – Microsoft SharePoint
  - Review and approve electronically – SharePoint 2007
  - Scanned Document Review and Approval – KnowledgeLake Imaging View

- **Document Retention**
  - Records management – Microsoft SharePoint 2007
  - Archiving – Microsoft SharePoint 2007
  - Information Policy Management – Microsoft SharePoint 2007
KnowledgeLake Imaging software eliminates paper and the associated costs and business process limitations it commands. KnowledgeLake Imaging software is built on Microsoft SharePoint and consists of a series of components including Search Web-Part, Search Results Web Part, Zero-Footprint Viewer and Enterprise Index Schema designed to broaden the Microsoft SharePoint core document management capabilities.

**KnowledgeLake Search**
The KnowledgeLake Imaging search interface *(See Right)* is a Web Part that is deployed in a SharePoint site that allows users to perform exact relevance searches for documents utilizing any combination of index values. Searches can be pre-configured and saved so that users can simply enter the appropriate index values and search across multiple SharePoint sites and document libraries. The search results are then returned in the KnowledgeLake Search Results web part. This web part is completely customizable to display the required document and associated index columns in either list or column mode.

**KnowledgeLake View**
KnowledgeLake Imaging’s browser-based zero footprint viewer allows end-users to view images *(TIF, JPG and PNG files)* on literally any computer without the need for special software or downloads. Users can view thumbnails, rotate and zoom, print and email an image directly from the web browser. In addition end-users can view and/or edit the SharePoint properties while viewing the document. The ability to annotate documents from the browser is also available. Available annotations include text and image stamps, highlights, line drawing sticky notes, and bookmarks. The Office 2007 like user interface is developed using AJAX technologies in order to provide a dynamic user experience. Since it operates with any browser with no JAVA downloads or Active X controls, you can optionally extend image access to your customers and suppliers.

**Workflow**
If a document has a workflow task assigned, a user can process work from within the viewer application.
Page Select – The page can be selected from a dropdown box.

Zoom – A slider bar controls the “zoom in” and “zoom out” capabilities. This happens in real time without reloading the entire page. Users can also use the “Fit Page”, “Fit Width”, “Fit Length”, or the magnifying lenses (plus and minus) to control zoom.

Rotate – The image can be rotated in 90 degree increments to the left or right.

Thumbnail View – A user can select the size of the thumbnails being displayed, as well as select the page to be displayed from a thumbnail image.

Annotating Documents

Text – Text can be typed anywhere on the document and stored within the image.

Highlight – A highlighter tool is available to highlight information within the viewer.

Rectangle – A rectangle tool, either filled or unfilled, can be used to draw rectangles on the documents and redact text.

Line – The line tool is used to draw straight lines within the document.

Freehand – The freehand draw allows a user to draw lines with the mouse within the document.

Sticky Note – Sticky notes can be placed on the documents.

Stamp – Documents can be stamped with the current date and time, “Approved”, “Pending”, or “Rejected”. Users can also use their own text for the stamp tool.
KnowledgeLake Index

KnowledgeLake Imaging includes an enterprise wide indexing schema. This component allows customers to configure document repositories, content types, index values, database validations, and database lookups all from a central location inside of SharePoint.

This indexing schema integrates with all KnowledgeLake components for a consistent indexing interface. It allows all KnowledgeLake products to be configured centrally inside of SharePoint, but store the configurations locally for enhanced performance.

KnowledgeLake index provides configuration facility allows you to integrate indexes from SharePoint to external database systems for look-up lists (i.e. vendors from accounting), auto population of indexes from external systems and index validation. The benefits you receive are speed of indexing, eliminate duplication of data and provide compliant and controlled index management. This index management/configuration becomes immediately available to all content capture sources including scanning, electronic document indexing and property edits in SharePoint.

KnowledgeLake Import / Export

KnowledgeLake Imaging’s Import/Export will allow users to import or export documents from one or many Document Libraries directly from the SharePoint user interface. The Export WebPart is an easy addition to any SharePoint page. Export will meet a user requirement to send documents with their associated metadata to external users.

KnowledgeLake Print

KnowledgeLake Imaging Print gives print functionality to users directly from within SharePoint. Compatible file formats include Tiff, PDF, XPS and MS Office documents. A Web Service is also available for integration to custom or third party applications.

KnowledgeLake Scan

KnowledgeLake Imaging Scan allows users to scan directly from within a SharePoint Document Library. It is compliant with WIA and TWAIN scanners and will display the scanned images right inside of SharePoint. Users can then View the images directly within the KnowledgeLake Scan window and index with KnowledgeLake Imaging Index prior to final save.
The KnowledgeLake Capture Suite 2007 provides organizations with the ability to capture, index, and release documents to Microsoft SharePoint. The KnowledgeLake Capture Suite provides solutions for any Capture scenario including:

- High-volume, production scanning
- Remote office scanning
- Multi-function device integration
- Fax server integration
- Web-based indexing
- Zero footprint remote scanning
- Electronic document capture
- Email capture

These scenarios are addressed through one or more of the following products in the KnowledgeLake Capture Suite 2007:

- KnowledgeLake Capture 2007
- KnowledgeLake Capture Server 2007
- KnowledgeLake Branch Capture Server 2007
- KnowledgeLake Connect 2007
KnowledgeLake Capture is a production level scanning solution that allows large departments or enterprises to capture paper and release those documents to the SharePoint document repository as tif, pdf, or xps formats. Production level features include Image clean-up, barcode and patch code recognition, zonal OCR, index validation, and document email.

Documents can be captured from any WIA, TWAIN or Kofax compliant scanner, any watched network folder, or screen shots. Once the documents are captured, the software provides for image processing such as black border removal, line removal, de-speckle, and character repair. Pages can be separated using barcodes or patch-codes. Indexing documents can be automated using bar-code recognition, full-text or zonal OCR, rubber-band indexing, or automated database lookups. Once the documents are indexed they are automatically added to SharePoint using KnowledgeLake’s web-service or FPRPC release that enables document libraries to scale to tens of millions of documents.

KnowledgeLake Capture is architected to completely integrate with KnowledgeLake Imaging Index and is configurable from inside of SharePoint interface.

**Product Highlights**

KnowledgeLake Capture offers all of the functionality that you need and expect from an enterprise image capture solution including:

- High volume scanning capability
- High volume release to SharePoint 2003 and 2007
- Production batch management
- Indexing automation features
- Image enhancement capability
- Bar code and patch code recognition
- Full-text and Zonal OCR
- Web Integration to SharePoint
- No “pay-per-click” charges. Unlimited volume per scanner.
- Licensed per scanner.
- Compatible with all major scanners including Fujitsu, Bell & Howell, Kodak, Canon, etc.
KnowledgeLake Capture Server is the powerful batch management serving software that meets these requirements while running on a light-duty server. KnowledgeLake Capture Server provides all the benefits of the KnowledgeLake Capture product suite, including a full audit trail and metrics-gathering for captured content from any KnowledgeLake capture product.

With KnowledgeLake Capture Server, you can:

- Add powerful server-based batch management capabilities to KnowledgeLake Connect and KnowledgeLake Capture
- Allow all users to easily and securely index documents via a web browser
- Provide server-side batch processing workflows for tasks like OCR, image processing and document rendering.
- Ensure that document metadata can easily be auto-filled and validated by easily connecting KnowledgeLake Capture Server to your organization’s existing database systems
- Adhere to corporate IT standards for desktop PC security and software
- Manage scanning infrastructure from a single central location

Key document capture features

- Support for any capture device that can save image files to a shared network folder
- Fully documented Software Development Kit (SDK) for easy extensibility
- Ability to save to TIFF, PDF and XPS file formats
- Ability to index documents using a web browser
- Batch import plug-ins—one for comma delimited files, one for watching network directories—and the ability to create custom plug-ins
- Ability to completely modify Document Classes, including external database lookups and validations for any field
When users in remote offices need to scan documents, limited or unreliable connectivity to the home office can make that difficult. KnowledgeLake Branch Capture Server provides content aggregation, scheduling and throttling services that make it easy and cost-effective for all these users to securely and reliably release documents to a centralized KnowledgeLake Capture Server.

Designed to run on a workstation or light-duty server, KnowledgeLake Branch Capture Server is built on the same code base as KnowledgeLake Capture Server, but the branch capture version does not allow for advanced image processing or scripting batch workflow processes.

With KnowledgeLake Branch Capture Server, you can:

- Use a “caching” mechanism, so that documents can be captured at full scanner speed in remote locations
- Schedule the time of day that your branch offices release scanned documents to your centralized KnowledgeLake Capture server
- Define a maximum bandwidth allocation, so that document committal does not consume all available branch office bandwidth
- Create an audit trail—which is delivered and consolidated at the home office—for each document scanned in the branch office
- “Aggregate” all branch office scanning into one secure, reliable and audited document delivery process
- Architect a capture strategy for your organization that makes best use of your company’s network bandwidth

Key features

- Tight integration with KnowledgeLake Connect, KnowledgeLake Capture and KnowledgeLake Capture Server
- Batch capture at remote offices can be transferred to a central KnowledgeLake Capture Server via the WAN
- Ability to configure batch import jobs to support multi-function devices
- Ability to accept batches from KnowledgeLake Connect, from KnowledgeLake Capture and through batch import Batch Import before submitting them to Capture Server for file format conversion, release to SharePoint and other processing
KnowledgeLake Connect is a configurable desktop application that enables users to easily index, store and retrieve any document, within any desktop application to SharePoint. KnowledgeLake Connect eliminates the conventional multi-step, manual process that standard SharePoint constructs require, replacing it with a fully integrated and automated solution.

Any windows-based application that has a “Save” feature can leverage KnowledgeLake Connect. KnowledgeLake Connect provides a start up wizard to easily allow end-users to set up the application. It integrates with KnowledgeLake Imaging Index, SharePoint 2003, and SharePoint 2007. Once setup is completed, you can access SharePoint Connect by saving the document or group of documents to the “My SharePoint” folder or by simply right clicking and clicking on the “Send to My SharePoint” menu option. Once invoked, the system automatically searches for and exposes all of the available libraries and their associated index values within the designated SharePoint site. The user populates the document index data and is then automatically saved within the appropriate SharePoint library. Indexing the document is simplified by providing the ability to do database lookups, provide drop-downs and data validations. KnowledgeLake Connect simplifies document saving by integrating seamlessly with KnowledgeLake Imaging Index to allow users to save documents into SharePoint based on DocClass without regard for the site, document library, content type, or folder.

Product Highlights

- Creates an interactive connection to/from SharePoint to any desktop application
- Right click and send to/My SharePoint option for any document or group of documents
- Connect to a SharePoint Site using Multiple Credentials
- Simplified SharePoint Library browsing
- Fully integrated with Outlook (A native button within the toolbar)
- Local Caching of SharePoint documents at user definable periods
- All Document types (Automated Store and retrieval)