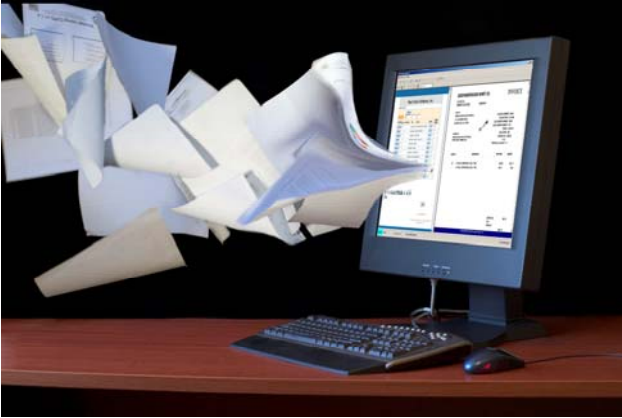




Real Vision Imaging In An ECM World



The purpose of this document is to position the Real Vision Imaging (RVI) solution in an industry commonly referred to as Enterprise Content Management (ECM). The ECM marketplace is very fragmented comprised of hundreds of vendors offering niche solutions which address selected portions of the overall ECM architecture. As such, your choice of the right systems integrator is critical to properly define the scope and bring together the right mix of solutions to address your customized project requirements.

1. What business problems does ECM solve?

Industry studies have determined that fewer than 20% of company documents are available electronically. Organizations are buried in mountains of paperwork with thousands of new pages and reports adding to the clutter on a daily basis. Often, these files are scattered and stored haphazardly in over-stuffed file rooms.

Time-consuming paper hunts often reveal that key business documents are missing or temporarily lost. Wasted productivity and long delays are the end result while you are trying to deliver immediate and excellent customer service. As these files continue to grow, they consume even more office space and present additional management challenges.



Some of the many problems that result from a paper based records retention process are as follows:

- ✓ Document retrievals are slow
- ✓ Shared access is difficult
- ✓ Manual paper handling processes are inefficient
- ✓ Customers expect immediate answers / service
- ✓ File cabinets consume valuable floor-space
- ✓ Clerical costs (labor and supplies) are rising
- ✓ Paper does not preserve sensitive records
- ✓ Security and disaster recovery exposures result
- ✓ There are penalties for poor document management

Information has an associated “float time”. It exists, but how “findable” is it? Can the right people get to the right information when they need it? Do these retrieval delays cost money or erode your customer’s satisfaction or confidence in your abilities? Are you constantly searching for more storage space for your information? Could changing the way you handle records retention enhance your ability to respond to your customers?

These are problem areas that ECM solutions address.



2. How does ECM change this environment?

ECM solutions enable you to digitize information (content) that has traditionally been retained in paper form (or microfilm). Paper documents are scanned, PC files / e-mails / faxes are imported, reports and spool file output are captured, microfilmed documents are converted and so forth. The digitized content can then be securely archived where it is now available for later retrieval (such as viewing, printing, e-mailing, faxing, accessing over the web or even burning to a CD).

Digitized content can be moved electronically and shared concurrently by multiple users from multiple departments at multiple locations. Automating workflow / routing capabilities can eliminate steps, reduce bureaucracy and compress processing cycle times even further. This enables you to optimize your business processes or to establish the consistent enforcement of your operating procedures.

Once you have achieved the internal efficiencies of an ECM solution, web enablement can further extend the benefits. The internet has completely revolutionized information delivery. Individuals remote to your organization expect immediate access to data on a 24x7x365 basis and the technology to deliver that is quite affordable. An ECM solution can permit remote access to your records center (in a secured manner) which provides key customers, suppliers or workers access to files previously unavailable to them.



An ECM solution offers an opportunity to fight back against paperwork chaos. Random pieces of paper can be transformed into organized files of information. Specifically, an ECM solution will:

- ✓ Help you stop producing more paper (or microfilm / microfiche).
- ✓ Minimize instances of “lost” or “non-available” files / documents.
- ✓ Improve the management, organization and control of your records center.
- ✓ Increase worker productivity, efficiency, and effectiveness.
- ✓ Enhance customer service capabilities with faster access to documents.
- ✓ Extend your reach (via 24x7x365 internet access) to remote workers, suppliers, or customers.
- ✓ Allow multiple people to share files / process work simultaneously.
- ✓ Automate business processes that have established work procedures.
- ✓ Recapture significant amounts of valuable floor space.
- ✓ Reduce the administrative overhead and cost of labor / supplies for your records center.
- ✓ Eliminate transportation / courier costs associated with information delivery.
- ✓ Provide disaster recovery / security controls which do not exist today.
- ✓ Offer a more permanent document preservation strategy.
- ✓ Improve your work distribution, auditing, and tracking capabilities.
- ✓ Enable you to establish better regulatory compliance procedures.
- ✓ Help enhance your professionalism and deliver a better quality of work.

The bottom line is that ECM solutions can save you time, money and aggravation and help you establish a more efficient and profitable records center operation.



3. How do users evaluate ECM purchases?

For over 65 years, the Association for Image and Information Management (www.AIIM.org) has been the leading non-profit organization focused on helping users understand the challenges associated with managing documents, content, records, and business processes. AIIM represents the entire ECM industry (including users, vendors and suppliers) and offers education, research, and other activities. AIIM is a neutral and unbiased source of information serving the needs of its member community.

Over the years, AIIM has conducted numerous studies that provide insight into ECM justification drivers. In the 2008 State of the ECM Industry report, AIIM summarized the responses of over **1,200 mid-sized companies** who were surveyed across a range of topics related to the acquisition of ECM systems. While each company has its own unique evaluation factors, some of the key findings from this report were:

- ✓ **50%** characterized their organization's experience with document and records management as very limited (from no plans in place to some department level experience).
- ✓ **54%** rated the overall effectiveness of their organization's ability to manage, control, and use electronic information as a 5 or less on a scale ranging from 1 (being terrible) to 10 (being excellent).
- ✓ When asked how long it would take to gather all the information related to a party involved in litigation with their organization, **68%** indicated they would require anywhere from one week and two months.
- ✓ Only **49%** were confident that, if challenged, their organization could successfully demonstrate that their electronic information is accurate, accessible, and trustworthy.
- ✓ **74%** responded that justifying document and records management initiatives was either somewhat or very important to their organization. When asked for the ONE most significant business driver, the following reasons were stated (% indicates what portion of the group considered it an important factor):
 - 32% Increase the efficiency and productivity of key workers
 - 28% Demonstrate regulatory / audit compliance (fewer lost / missing documents)
 - 12% Protect information and ensure business continuity / disaster recovery capability
 - 7% Provide better customer service
 - 7% Reduce operational costs (clerical labor / overhead / storage space)
 - 6% Provide faster turn-around times. Accelerate ability to respond to service requests
 - 5% Increase profits / improve business performance / improve records retention process
 - 3% Establish leadership position / competitive advantage
- ✓ **73%** of those surveyed with prior ECM experience indicated that the ROI / payback as compared with other significant technology investments is at least the same or better.
- ✓ When asked for two primary obstacles to ECM initiatives, **39%** cited confusion or lack of knowledge of vendor solutions and **28%** cited the need for training or better understanding of business requirements. These are clearly expertise areas that a knowledgeable ECM system integrator can provide.

4. What are some characteristics of the ECM

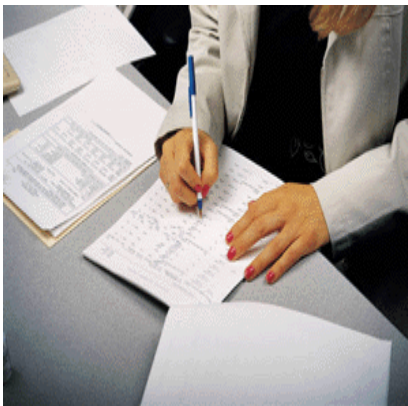
While the “**paperless office**” has been projected for decades, the amount of paper supporting business processes continues to grow at alarming rates. A greater percentage of this information is considered to be “business critical” and must get distributed to many places and people inside, and external to, the organization. Competition requires this extended reach, technology advances have made it possible and compliance mandates require that it is done properly.

From a technology perspective, the affordability / availability of PC’s, storage and bandwidth have driven the explosive growth of using the **internet** for e-business. Yet the paperwork keeps coming in and piling up. Most of the recent IT investments in web application development have focused on the “front-end” of the e-business process while largely ignoring the “back-office” operations. Most electronic transactions still generate paperwork and these files / records must then be archived for later access. The end result is that e-business has actually increased, and not reduced, our reliance on paperwork. ECM solutions offer the ability to implement better and more innovative approaches in dealing with records retention.

The ECM marketplace is an evolving one and encompasses much more than the ability to scan paper documents. There are many types of software solutions to consider as well as supporting hardware alternatives. But technology alone is not the ECM solution. The strategy and planning aspects are just as critical to your project success as the products that are selected.

The following are some general characteristics that apply to the ECM marketplace:

a) There are LOTS of ECM product choices / tradeoffs.



The ECM marketplace is very fragmented comprised of hundreds of vendors offering niche solutions which address selected portions of the overall ECM architecture. Most ECM vendors offer PC based software which enables them to generalize their solution across all hardware platforms. In this component based industry, there are niche solutions for document imaging, COLD (spool file capture), facsimile delivery, workflow, forms processing, OCR technologies, document management, digital asset management and e-mail archival just to mention a few. And your choices don’t just stop at software selection. There are scanners, storage options and other peripherals that must be configured. And there are technical services to consider for the design, installation, or even specialty work efforts such as backfile conversions

b) The options for a System i based ECM solution are limited.

It is always the preferred approach to select an ECM solution that runs on the same platform and operating environment as your core business applications. While the initial project might involve only one department or be limited to a stand-alone system, a tighter integration between your ECM system and core business applications is inevitable. This effort is far simpler when these applications reside in the same operating environment.

ECM solutions have traditionally focused on the needs of the high volume / high-end production environment. These operations can be quite complex requiring extensive design reviews and technical assessments resulting in costly services. This does not represent, or is it acceptable to, a typical company that uses an IBM System i server. These organizations:

- ✓ More commonly operate a small or medium sized business.
- ✓ Are very specific regarding business requirements and budget allowances.
- ✓ Run application software (in-house or purchased) that delivers their core workflow needs.
- ✓ Seek simple and cost effective solutions that require a minimal amount of ongoing IT support.

For a company that runs an IBM System i server, an integrated approach (versus a PC server based design) will be far easier to install, implement and maintain. It can also easily scale up from the initial pilot project to an enterprise-wide solution. The list of ECM vendors offering a native System i based solution is quite limited but is exactly where the RVI solution fits.

c) There are no “off-the-shelf” ECM solutions.

Because capture requirements, application integration, workflow capabilities, industry drivers, document delivery needs and much more are unique to each organization, ECM tends to be a custom solution business. Records retention processes may appear similar on the surface, but the underlying details are what makes them different. Most organizations do not retain the knowledge and expertise on staff to develop and support these systems. Therefore, professional services are almost always part of the overall solution and include tasks for the design, installation, implementation, and training aspects of an ECM project. Choosing the right systems integrator who can properly define the scope and bring together the right mix of ECM components to address your customized project needs is a very important first step.

d) Capturing content presents operational challenges.



The most notable operational challenge to address with an ECM solution is the content capture process (scanning, importing and indexing). What is the volume of work to be captured? What type of content is it and where does it come from? Are there any unique document characteristics? Will capture take place at a central site (local) or from distributed locations (remote)? Is a back-file conversion of existing documents necessary and will a specialty conversion firm be contracted to complete this task?

Recognition technologies, such as forms recognition, bar-code recognition or OCR (Optical Character Recognition), can facilitate the content capture process by reducing the number of keystrokes required. Specialized capabilities, such as Automatic Redaction or Signature Stamping, may be required. Potentially interfacing to unique capture devices, such as MFD's (Multi-Function Devices), digital cameras, tablets or signature pads, may need to be factored into the scope of the ECM project.

Addressing these requirements will determine what type of capture equipment is required along with what type of process should be implemented for capturing business content.



e) **ECM is a long term retention business.**

One of the distinguishing characteristics of an ECM project is the requirement for long term document retention. This can vary considerably from as little as a few months to years, decades or even a lifetime in some cases! In contrast, technology continues to advance at a remarkable rate. Established standards and architectures can help insulate the impact that technology changes have on your business. An ECM vendor's track record of keeping pace with the industry is a very important consideration.

The RVI architecture uses non-proprietary industry standard storage formats throughout the entire system. The current version of RVI even allows image and spool file documents to be delivered in PDF format which enables viewing by a standard Adobe Acrobat viewer (in place of using an RVI viewer). This greatly simplifies document distribution and makes exchanges even more portable. RVI index information is maintained in a native System i database.

In terms of archival hardware options, the RVI architecture is flexible to accommodate the various needs of your business applications. RVI can utilize the IBM System i IFS/DASD for storage or a Network Attached Storage device. If Write Once Read Many (WORM) storage retention is preferred, RVI supports a variety of archival options including Ultra Density Optical (UDO) libraries and Archive Appliance devices, Blu-ray disc technology or RDX (Removable Disk) technology from ProStor Systems.



5. What are the key components of an ECM solution?

Different terminologies are frequently used to describe the primary components of an ECM solution. There are lots of choices / tradeoffs to make such that your strategy and planning decisions become as critical as the actual technology components you select.

The Association for Image and Information Management (www.AIIM.org) defines ECM as “the technologies used to capture, manage, store, preserve and deliver content and documents related to the organizational processes.” A successful ECM architecture results in the management of content from its creation through its long-term preservation or eventual destruction.

The scope of an ECM solution can be quite broad as the requirements of a full scale enterprise solution will vary considerably. An initial project that is too narrow in scope may not consider the expandability or long-term cost of ownership factors of a full enterprise-wide deployment. It is extremely important not to ignore these aspects when evaluating ECM requirements.

Some of the key components of an ECM solution include (at a minimum):

Document Imaging

Document imaging is the process of capturing, indexing, storing and retrieving documents regardless of their original format. This includes traditional black & white documents (or forms), color photographs (digital or scanned), externally generated PC files (e.g. word processing or spreadsheets), incoming faxes / e-mails and even audio / visual data. Document mark-up, annotations, redactions, notes, versions, audits and much more should be provided as standard features of a document imaging system.



COLD (Computer Output to Laser Disk)

COLD is also referred to as report capture, spool file capture or Enterprise Report Management (ERM). It involves the process of capturing and archiving computer generated output (such as reports, invoices, statements, listings or other types of printouts) resulting from the daily use of your core business applications. Once stored, these reports can be distributed, viewed, printed, faxed, e-mailed, burned to CD, searched or even converted and downloaded to PC applications (such as word processing or spreadsheet programs). Search engines, forms overlays, report distribution, auditing capabilities and much more should be provided as standard features of a COLD system.

Internet Enablement

An ECM solution should offer a browser based option that permits the capture / distribution of documents and other business content over the internet. Web enablement provides 24x7x365 secured access by remote employees, clients, or business partners / suppliers who cannot access this information today.



Workflow

Workflow is also referred to as Process Redesign or Business Process Management (BPM). Workflow is the automation of business processes through the establishment of pre-defined rules and procedures that route, track and enforce how documents logically flow through their entire work cycle. Automating workflow enables you to optimize, redesign or enforce key business processes resulting in improved operational efficiency and effectiveness.

Recognition Technologies

The ability to recognize and extract data from paper forms is a complementary extension of ECM technology. The simplest example of recognition would be the reading of a bar-code label. Optical Mark Recognition (OMR) senses when a mark is present (such as with a filled-in bubble prompt). More sophisticated techniques are available using software engines that can interpret individual characters (OCR or Optical Character Recognition), all keywords within a document (OCR Full Text Recognition), or even the interpretation of hand-written printed / scripted data (ICR or Intelligent Character Recognition).

Wrap-up

The RVI Complete solution provides very comprehensive features which incorporate most of the above ECM capabilities. In some instances (such as forms creation, facsimile processing or OCR functions), RVI can interface to another vendor solution to deliver the functionality. However, the above capabilities should at least be considered when planning for your ECM implementation.

It is very easy to get lost in product to product feature comparisons which is a very common mistake made when evaluating ECM vendors. It is extremely important that you focus on your complete business needs (both present and future) along with your technology preferences. Once the specific requirements have been clarified and documented, they can then be mapped against ECM solution capabilities.





6. What is Real Vision Imaging?

Real Vision Imaging (RVI) is a document imaging and report / spool file capture solution designed specifically for the IBM System i server. RVI enables you to electronically capture, archive, secure, interface, deliver and manage your key business information / content. Three RVI systems are available:

- ✓ RVI Spool File is a capture system for reports and other spool file output such as statements, invoices, or listings. It is upgradeable to the RVI Complete system.
- ✓ RVI Basic is an entry level document imaging system that provides the functions necessary to capture black & white documents or import PC files. It is also upgradeable to the RVI Complete system.
- ✓ RVI Complete offers all the functionality of both the RVI Spool File and Basic systems plus additional features such as advanced workflow, color capture, the ability to incorporate OCR and much more.



7. What makes RVI unique?

Specific comparisons between RVI and other ECM products are not provided as they are subject to frequent changes. The RVI marketing literature offers an entire matrix of product capabilities that can be used for making such functional comparisons. Some of the unique strengths of the RVI solution include:

a) RVI is a native IBM System i solution.

RVI was developed specifically for the IBM System i platform so you have the assurance that it offers the reliability, scalability, security and ease of operation you have come to expect from your IBM System i processor. And since RVI runs on the same platform as your key business applications, it can be quickly and easily interfaced in your environment. Studies have consistently demonstrated that the IBM System i family offers the lowest Total Cost of Ownership (TCO) as compared to environments requiring multiple servers with additional hardware costs and systems administrative overhead. Keeping ECM on your System i allows you to maximize your current investment.

b) RVI offers flexible interface options.

RVI can be implemented as a stand-alone system or easily interfaced to business applications with minimal (or no) programming effort. The intent is to make the end user transition from within their business application to the RVI system (Sub-file list) as simple and seamless as possible.

Because RVI operates in the same environment as your key System i applications, it is easily interfaced to i-based green screen applications or those "modernized" with IBM Websphere or Seagull J-Walk. There are two RVI internet options (Traditional or Frames) to interface with your web programs. And RVI provides a "PC screen scrape" tool which can be used to interface with PC applications. RVI can even interface to applications running on other servers such as IBM "Z-series" mainframes or UNIX / LINUX environments. RVI provides flexible interface options to accommodate your varied needs.





c) RVI supports a wide variety of content types.

Information comes in a wide variety of formats. RVI is versatile and can handle just about any type of content your business creates or preserves. This includes black & white documents, forms, color documents, digital photos, incoming faxes, e-mails, externally generated PC documents (like word processing, spreadsheet files, reports and more), spool file / report output, intelligent print data streams (like IBM's Advanced Function Printing) and even audio / visual files.



d) RVI is a very expandable ECM solution.

RVI incorporates many additional ECM requirements that go beyond the scope of traditional document imaging or spool file capabilities (as discussed in item #5). Advanced workflow, internet / portals support, PDF document delivery, annotations / mark-ups, automatic redaction and forms recognition are all standard features of the RVI Complete system. Bar-code recognition, OCR, Full Text Recognition and Automatic SSN Redaction are easy capabilities to include. Multiple RVI viewers are provided to offer flexibility in meeting the various preferences of your end users.

In comparison, these capabilities may involve costly add-ons with other ECM solutions. This "one complete product" approach is very consistent with the overall design philosophy of the IBM System i platform. While most start-up projects will not require all of these capabilities, they are reasonable requirements to expect beyond your initial project scope. This needs to be factored into your overall cost assessment when evaluating ECM software vendors.

e) RVI is an extremely affordable ECM solution.

In an industry where user based pricing and add-on modules are common, RVI's pricing structure is unique. The RVI license fee is based entirely on your System i model. There are NO user based fees or add-on modules to purchase making expansion very cost effective. A capture system is provided so there are NO additional charges for scanning / indexing functions or any threshold restrictions as to how many documents can be processed. The annual maintenance charge of 15% entitles you to future RVI software releases.

RVI permits you to set-up as many as 65 different systems (or file-rooms) on your System i which can each have up to 99 unique indexes. (Note: there is an additional support fee for each LPAR required). Your licensing agreement permits you to have a development license and / or a hot-site back-up license for no additional license fee.

With RVI, you pay ONE price and you pay ONE time. There are no hidden fees to evaluate which greatly simplifies your long term budgeting plans.



f) **RVI provides flexibility and choices.**

The RVI system offers a comprehensive, versatile and affordable ECM enterprise solution for the IBM System i platform. Within each functional ECM category, RVI provides flexibility and choices which can be tailored according to your specific preferences and needs.

- Capture** RVI supports a very broad range of Kofax certified scanners providing enormous flexibility in scanner selection. While RVI recommends scanners that are equipped with Kofax VRS (Virtual Re-Scan), lower-end TWAIN scanners are also supported as well as Multi-Function Devices (MFD's) and Topaz signature pads for even more scanning options.
- Archive** RVI's architecture is flexible and can accommodate multiple storage options based on your application needs. RVI can utilize the IBM System i IFS/DASD for storage or a Network Attached Storage device. If Write Once Read Many (WORM) retention is preferred, RVI supports a variety of archival options including Ultra Density Optical (UDO) libraries and Archive Appliance devices, Blu-ray disc technology or Removable Disk (RDX) technology from ProStor Systems.
- Secure** RVI provides multiple security levels to control which users can access what content. Access can be secured by User ID, by RVI System Code, by Index Level within each system, by Document Type, and even by what RVI options are made available within an individual viewer. The RVI Document Tabbing feature can provide different views of folder content based on who has initiated the request.
- Interface** RVI offers flexible interface options to make user transition from business applications to RVI as seamless as possible and to accomplish this with minimal programming effort. RVI can be implemented as a stand-alone system, though direct source code interface or using a screen-scrape profile approach. The RVI interface (or Sub-file List) can be presented as a green screen, with a modernized view (IBM Websphere or Seagull J-Walk) or with a browser look (Traditional Internet or Internet Frame).
- Delivery** The RVI Complete system provides seven different viewers for content delivery to local or remote users. The Standard PC Viewer (Windows based) is used to interface with green screen applications. Two Internet Viewers (Traditional and Internet Frame looks) are available. The RVI Spool File system offers two viewer options (Advanced Green Screen and GUI). There is a PC Inquiry viewer. And the final option would be Adobe Acrobat as RVI can deliver documents in PDF format.
- Manage** The RVI Complete system provides a rich set of workflow features to establish routes, rules, priorities, notifications, reminders, packages, signature stamping and many other workbasket and approval features. The GUI Workflow Builder is provided for designing work processes. Audit logs and workload statistics are maintained for tracking work-in-process items.



8. About Real Vision Software

Real Vision Software is an Advanced Level IBM Business Partner and is the developer and support provider of the RVI solution which is the only product we offer. Real Vision Software is a privately held company headquartered in Alexandria, LA and has been in business since 1988 (the same year IBM introduced the AS/400 processor). The RVI solution has been exclusively marketed through certified business partners since 1992.

RVI is a cross industry solution implemented and used across many different application areas and interfaced with many different types of core software packages. There are presently over 1,000 companies using the RVI product. A customer contact / reference list is maintained which can be provided on request. We invite you to call our installed clients to verify that:

- ✓ the RVI software provides a quality ECM solution,
- ✓ it was implemented in a timely and quality manner,
- ✓ installation / technical support has been excellent, and
- ✓ they would recommend using RVI for your ECM needs.

It would be our pleasure to help you “**Take the Paper Out of Your Paperwork**”! Maybe you are in the early planning stages and would like some additional product information. Perhaps you would be interested in seeing a demonstration of the RVI solution. You may be ready to speak with one of our certified business partners to clarify your project scope and requirements.

For more information on RVI product capabilities, please visit our company web site at www.realvisionsoftware.com or contact us with any additional questions you may have:

David Woodring, Vice President
318-449-4579 or davew@realvisionsoftware.com

Len Knudsen, Certified Document Image Architect (CDIA)
904-230-2834 or len@realvisionsoftware.com

Terry Brogan, Certified Document Image Architect (CDIA)
336-245-9151 or terryb@realvisionsoftware.com

