Imaging: 10 Keys to Success

A successful imaging system doesn't "simply" turn paper documents into electronic files. Properly realized, an imaging system improves productivity by helping automate the flow of work throughout an organization. Rather than merely electronically recreating an existing paper process, an imaging system is an opportunity to rationalize and improve existing business processes while automating them. I remember the first time I looked at a paper-based system with the task of transforming that process with an imaging system. I felt the weight of the imaging world crashing down on my shoulders. Where do I start? What do I need to know? What do I do? Of course, each daunting task is an opportunity to excel (and whatever doesn't kill you makes you stronger), provided that you arm yourself with the requisite knowledge. After all, as they say in the G.I. Joe cartoon, "…knowing is half the battle."

1. Know your paper/records. An imaging system doesn't operate in a vacuum. Your imaging system must fully support your records management strategies involving the creation, maintenance, and destruction of your organization's records. File cabinets, desk drawers, off-site storage, daily mail, periodic reporting, departmental correspondence, microfiche/ film (not to mention email, Web transactions, instant messages)-records are everywhere! Find them, and plan how they will be handled by your imaging system. Where does paper enter your organization? Start at your mailroom and follow where the work flows. Where is paper generated in your organization? Word documents, spreadsheets, reports, letters; wherever "work" happens, workflow exists. Remember too, that a "record" is comprised of more than just paper. Every piece of paper is not a record, and a record is comprised of information other than paper. A record is any information that serves as evidence of your organizations business activities. Identify appropriate records for input into the imaging system by surveying all records produced within your organization as well as identifying the business activities through which these records are created. Redundancy and inefficiency in information management and records creation can then be eliminated through business process reengineering.

2. Know your industry. Develop relationships. Who are the people in your neighborhood? Similar organizations that have, or are undergoing, the same paper-to-imaging challenges facing you are an excellent source of knowledge and experience already customized to your needs. Reach out and network, pick the brains of those who have been there before, learn from their mistakes, and benefit from their successes. Once you have identified potential software vendors and/or business partners to assist with your development, ask for customer references within your industry and pick up that phone. Better yet, plan a road trip for a site visit, if possible. Seeing a successful system in operation, from the scan stations through the workflow and right on through to the infrastructure can help paint that mental picture you will need when you are blending your organization's business processes into a stable and efficient imaging/workflow system. Sharing is good.

3. Know your customers. End users require simplistic and easy-to-use interfaces that increase their productivity. This helps them to serve their customers, makes end users' supervisors and managers happy, and ultimately, validates the financial faith invested in your current and future projects by your project stakeholders, typically the directors or board members (who have the power to enable your future growth). Spend quality time with the end-users in the planning phase, and at every step along the way through to implementation and future enhancements. Let them know that the system you will be creating will bear their fingerprints as it incorporates their expertise into a system that will also be their legacy to future users. Share the knowledge you gain of the business practices at your stakeholder meetings by visual representations of your understanding, and your immediate and future development plans.

4. Know your software. Selecting the right software for the task at hand seems daunting, but if you break it down based upon your particular organizational priorities, it really is simple. Know what you need, what you WILL need, and any organizational "sensitivities."

First, you need to identify what kind of imaging system you need. Is it simply a storage and retrieval system wherein you want to scan paper, archive it, and view it later? Do you need a complex workflow? Web integration? Legacy system integration? Backfile conversion?

Consider the totality of the cost of the system over the development and implementation process. Initial software purchase, licensing structures, maintenance, upgrade schedules, and fees must all be factored into the total cost of your imaging software. Also know your business process needs and include those here as well. Thick client? Thin client? A mixture of both? Which system has what you want and can get you where you want to go today, and five to ten years in the future?

5. Know your business partner.
If your organization doesn't have its own team of in-house developers, then you may find yourself seeking the services of an outside consultancy to assist with your development. It is imperative that you seek the services of a business partner who is not only highly competent, but who understands and conforms to the strictures of your industry. For example, non-profit organizations have unique budgetary, billing, and delivery requirements. Seek out a business partner who has worked with your industry peers successfully.

6. Know your infrastructure.
Get what you need, need what you get. Depending upon the size of the system you are implementing, the infrastructure requirements can become extensive. Scanners, workstations, database servers, file servers, Web servers, optical storage, magnetic tape-it's a broad list. The important thing is to make sure that you have the right equipment for the job, and that it functions optimally. As a self-appointed techno-geek, I often fantasize about the infrastructure of my dreams, but realistically, within my current industry (or any industry, really), dollars must be spent responsibly. Keep in mind that your infrastructure of today has a limited life-span and you need to make sure that you will realize the value of your cost outlay within that projected lifespan. In as much as your workflows and business processes must be flexible to change over time, so too must your infrastructure. Buy what you NEED for today and the next few years. You can always get the gizmo with the whiz-bang gadget that makes your coffee and filters the spam from your email with the next growth iteration.

Some examples:

- Scanners: There are scanners out there that can do everything from dual-sided scanning, barcode recognition, color, OCR…you name it, you can buy it. But do you need it TODAY? If you are just starting out with your initial implementation, your focus is likely to be on backfile conversions, paper-processing speed, clarity of images for old vellum documents, and the like. If you have an established imaging system that you are looking to enhance, your scanning preferences might tend toward OCR and bar-coding. The point here is that the scanner you buy today will most likely not be the scanner you will be working with five years from now.

- Servers: What kind and how many? Check with your imaging solution provider. Be careful when purchasing the "minimum requirements" options. Minimal requirements often mean minimal performance, and the cost differential for the next step up is offset by the productivity gains. What server software, if any, is required by your imaging provider?

- Storage: Magnetic, optical, tape, SAN, data warehousing; the options for data storage are as vast as their cost structures. Whichever you choose, make sure you incorporate plans for redundancy, disaster recovery, and business continuity.

7. Know your limits.
You may need to roll out imaging for the entire, or most of, the organization from the beginning. In that case, infrastructure issues can really get you down. Back- ups, infrastructure storage space, disaster recovery, business continuity, security, redundancy…obtaining all of those things straight out of the imaging gate can be an overwhelming task, but it doesn't have to be. Consider outsourcing services for all, or even part, of your infrastructure needs. Depending on the situation, temporary or long-term outsourcing can be a cost- saving and efficiency-producing option. On the other end of the scale, you many not want to eat the whole imaging workflow apple in one bite. Break your workflow(s) down into smaller, digestible chunks. Start small, be flexible, plan for growth. Choose a single requirement, like setting up your scanning/indexing operation and your storage and retrieval application. Expand to include a single workflow, like "claims processing" or "accounts payable." Then extend into integration with legacy systems, enhance reporting via solid workflow tracking tables, and/or integration with Web services for external customers and vendors.

8. Know your laws.
Various aspects of the public sector are subject to the letter, and/or the spirit, of a range of legislations. HIPAA, SOX, SEC, local/state government, organizational standards, compliance guidelines, and internal records retention policies should be investigated for their impact and incorporation into your imaging strategy. Knowing the guidelines and laws you are subject to in advance can save countless restructuring dollars and redevelopment hours later.

9. Know your business process needs and workflow(s). Follow every record in its paper-trek through your organization. Every change of hand (inter-department as well as cross-department), modification, and copy made-get it all. Lay it all out in a visual workflow of your current business practices. Apply any applicable laws or business objectives to that diagram and demonstrate your understanding of their current workflow to the user, manager, and any other individual visually represented in your diagrams. Work with your business partner and/or software developer team to translate that paper workflow into a cohesive electronic workflow. The objective is not to build a system that replicates the paper workflow, but to optimize the business practices. Visually present the "new" workflow to your organization, with your original diagrams of their paper workflows alongside. Demonstrate how you plan to capture every process identified within the new workflow.

Communicate continually. I cannot stress enough how important it is to make sure everyone in your organization understands not just what your imaging system can do today, but where it can go tomorrow. Based upon your software selection, what other value-added objectives do you plan to incorporate, either now, or in the future? Consider reporting, multi-level monitoring, and integration with existing legacy systems, Web portals...backfile conversion (paper, tape, and fiche) Remember to sell the idea to senior management that this is the starting point and not the finish line.

10. Know your potential. A successful imaging system is never "complete." Each successful implementation should spawn the next wave of system enhancements. Business processes, legal considerations, and technology opportunities are ever-changing, and you have to keep on top of those changes, incorporating the ones that make sense over time. This is important because if you leave a system stagnant, no matter how successful it was on implementation day, the cost to update years later is greater than mini-upgrades as you go. Organizationally, lay out a path demonstrating your vision of imaging in three years, five years, and ten years that will take in your starting point and the system enhancements, infrastructure growth, functionality additions, as well as additional workflow expansion.

Every success is an investment in your future growth. In building a successful imaging system you must use as your foundation the knowledge of your organizations needs and limitations, the confidence of your customers, your ever increasing knowledge of the industry, and your continued successes along the way. Establish relationships with your users, your vendors, your business partners, and your stakeholders, as they are your primary tools in implementing a successful system. Keep an eager eye to the future, plan to grow, and make sure you share that vision with every level of your customer base, from the end user to the boardroom. What you stand to gain in streamlined business processes, increased productivity, interoperability, and all-around customer satisfaction can make the difference in turning this seemingly daunting challenge into a succession of imaging achievements.

Kathy Goerdt (kathy.goerdt@gmail.com) is a business analyst, Imaging/Workflow for the Illinois Municipal Retirement Fund, Oakbrook, IL. She also serves as Communications Chairwoman for the Chicago Chapter of AIIM and on the Editorial Advisory Council for this magazine.