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Assessing & Benchmarking Document Costs: *Developing a Future Document Strategy*

- Challenges
- Perception vs. Reality
- Document Trends & Issues
- Levels of Assessments
- Planning an Assessment
- Accurate and Cost-Effective Benchmarking

Presented by:
InfoTrends/CAP Ventures, Inc. &
ALL Associates Group

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Are You Asking Yourself…

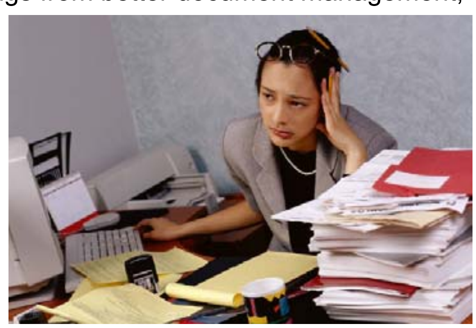
- How much am I really spending on desktop, workgroup, internal production print, and outside print services?
- How do our total document expenses compare to those of our key competitors?
- What factors contribute to these costs?
- How much money can we save and how?
- How much of an investment in time and money is needed to assess my document costs?
- Does this require a detailed on-site audit?

Challenges

- Getting to the true cost of documents across your organization
- Cost reductions
- Determining peer performance & benchmarking
- Developing an enterprise document strategy
- Increasing efficiency & optimization

Introduction & Objectives

The proliferation of output devices such as printers, copiers, fax machines, and scanners has significantly contributed to the dramatic increase in document output volume and cost over the years. While the majority of today's organizations acknowledge the potential savings from better document management, many still lack the understanding and expertise to address the problem. Third-party providers including office equipment manufacturers, document outsourcing firms, and independent service providers are offering assessment services that focus on identifying costs and inefficiencies around document output.



This white paper is designed to serve as a baseline tool for individuals within corporations that are tasked with assessing the current state of their enterprise document systems and developing a future document strategy.

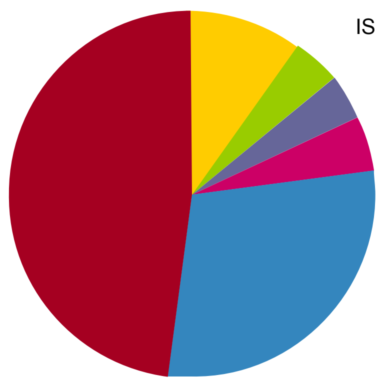
This white paper will discuss document trends, levels of assessments, benchmarking, processes, costs/potential savings, and corporate barriers. It will also identify elements that make up today's typical assessment services. Because many vendors use various terminologies for their respective assessment services, a user organization needs to be aware of common critical steps when embarking on an assessment project.

Perception vs. Reality

A recent InfoTrends/CAP Ventures Study indicated that organizations perceived that they spend an average of 3% of their annual revenues on copying, printing, and fax-related costs. In this case, the reality is twice as high as the perception. In fact, our analysis reveals that overall document expenditures (including hardware, supplies, and “people” costs) averaged 6% of annual revenues across all industries. This total burdened document cost varies widely by type of industry and size of the establishment.

Typically, only 10% of the office document burdened costs relate to equipment, supplies, and service expenses. For every $1 spent on equipment, supplies, and service, another $9 is spent on other burdened costs. These burdened costs include IT support and infrastructure, procurement and facility costs, end-user interaction time, and document management expense. These costs are fragmented in budgets and processes across the organization. Only about 10% of the real document costs are typically exposed by an assessment, which means that 90% of the actual costs are being ignored. In many cases, “Total Cost of Ownership” (TCO) is not even close to the real “Total” cost.

Total Burdened Costs Per Page Range From .52 - .70



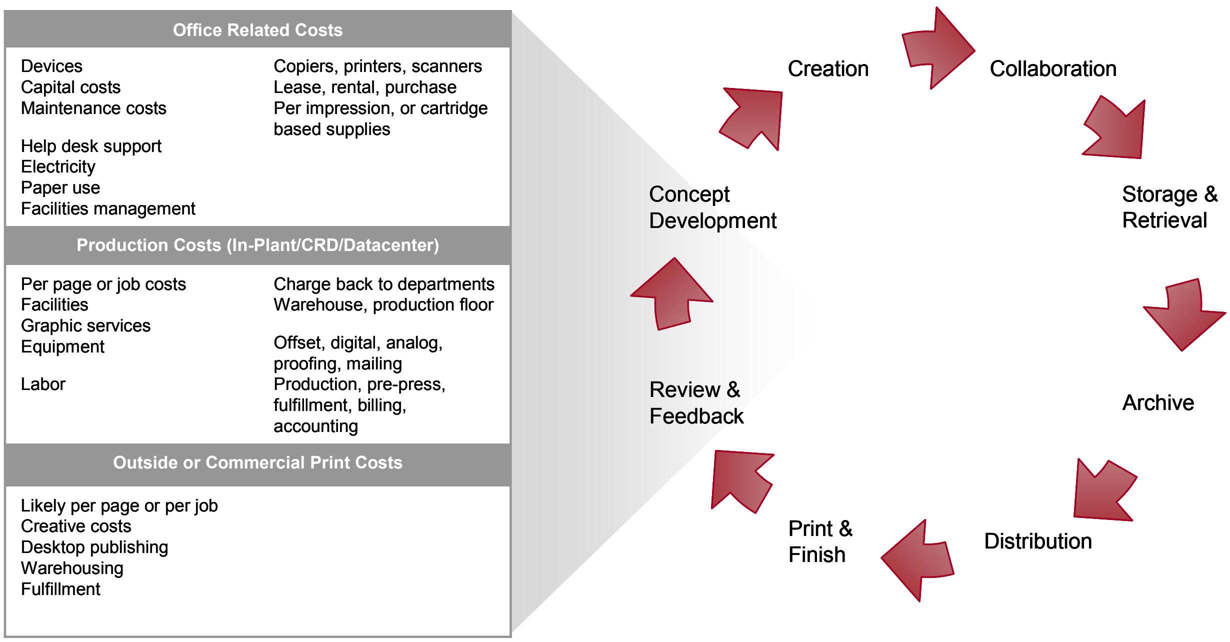
Organizations are often faced with conflicting requirements to cut costs, increase productivity, and improve client and employee relationships. These requirements have driven organizations to continuously evaluate their overall business processes, in the search for further cost savings and increased efficiency. One area that has been increasingly scrutinized of late is the unmanaged cost of document output in the office environment. The proliferation of output devices such as printers, copiers, fax machines, and scanners in the office has significantly contributed to the dramatic increase in document output volume, its clutter, and more importantly its cost over the years. Additionally, the shift from single-function printers and copiers to multifunctional copy/print networked devices, from black & white to color devices, and from the centralized “print & distribute” model to the de-centralized “distribute & print” model has triggered an opportunity for organizations to re-evaluate processes surrounding document output.

While there tend to be a number of figures used in the market today, the majority of organizations acknowledge the potential cost savings and efficiency that can come from the better management of office equipment and its output. At the same time, however, many overlook or are still having difficulties in realizing costs (direct and indirect) within a document lifecycle.

Office, In-House Production and Outside Commercial Print

The figure below illustrates the phases and processes that make up a document lifecycle, which involves activities such as creating, sharing, processing, and storing documents. These existing processes all contribute to costs that are largely unstructured, poorly defined, inefficient, wasteful, and unmanaged. When considering a document lifecycle, the scope can include costs outside the office, such as internal production printing (In-plants/Central Reproduction Departments or CRDs, and Datacenters) or outside printing such as Commercial print.

The Document Lifecycle

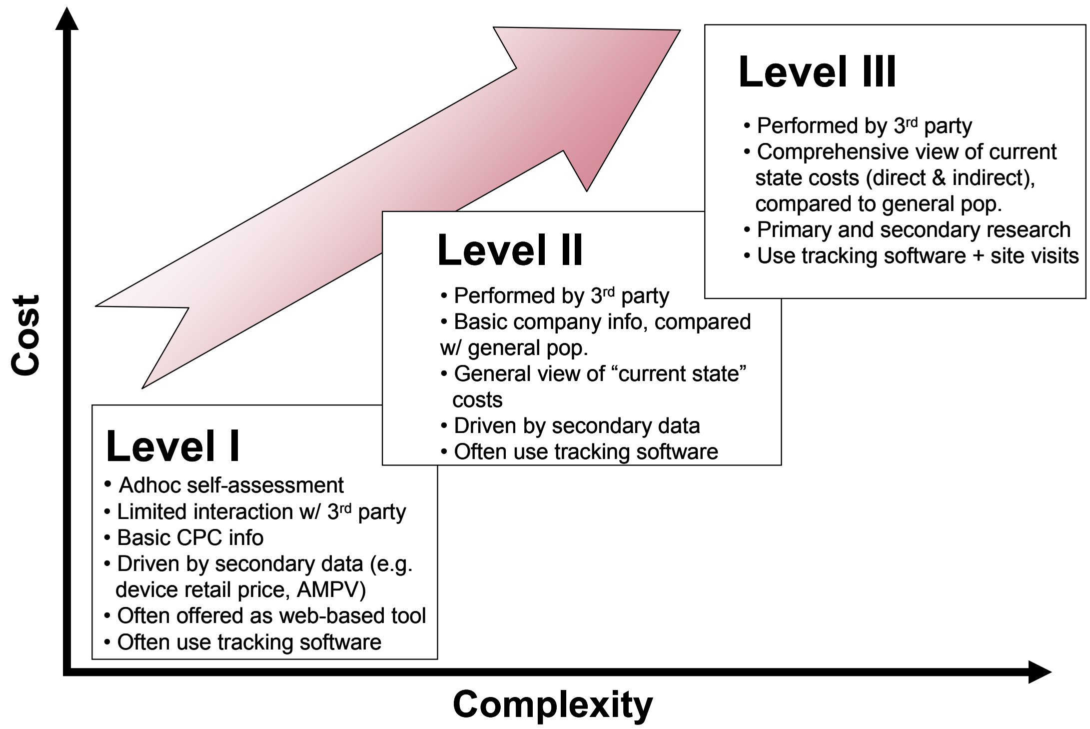


Traditional View: Levels of Document Assessments

While the majority of the respondents from our Document Tracking Study considered tracking, monitoring, and managing document output to be an important issue, less than half claimed to have some sort of document tracking solution. Additionally, less than half are familiar with document assessment services. Organizations lack the technology and process expertise to effectively assess and address the contributors to output-related costs, and many are turning to vendors like office equipment manufacturers, equipment dealers, document outsourcing firms, and other third-party service providers to obtain solutions and services for assessment. Today, we see vendors offering assessment services with varying degrees of complexity. Many have acknowledged document output assessment services as integral to the sales process and have focused on building these services into credible, discrete, and self-sustaining consulting practices.

Because vendors offer varying approaches and models to document assessment services, we have defined three levels of assessment categorized by complexity, level of detail, and cost.

Levels of Document Assessment Services



Level I

Assessments at this level are mostly conducted internally (self-assessment) with very limited scope and assistance from a third-party provider. The assessment offered by a third-party provider at this level is primarily viewed as a sales tool for showing end-users that a need exists within their organizations for devices, MFPs, or solutions. Some vendors even deploy this level of assessment service as a self-serve Web-based offering. The information gathered tends to be very basic, focusing on the total number and types of devices under consideration in an office, the supplies retail or street costs for those devices, as well as a speculative estimate of the total monthly volume of pages produced. Analysis on this level of data results in a preliminary understanding of the cost per page (CPC) that all considered devices generate based on specifications and usage.

Level II

While the Level I assessment is primarily made up of an ad-hoc self-assessment using manual or electronic tools for measuring output, or Web-based tools that customers use on their own, Level II assessments are made up of services performed by third-party providers. These third-party providers typically take basic company information combined with secondary research, and compare the information about the organization being considered with the general population of a similar specific business type or vertical industry. While this method provides substantially more granularity than a Level I assessment, including a more specific analysis of detailed criteria beyond the supplies costs of a given set of office equipment, it provides a generalized view on the costs that an organization is actually producing. In contrast to the more sophisticated Level III assessments, the information provided here is useful for more clearly understanding the nature and significance of output costs and how an organization generally compares against its peers in terms of operating efficiency. This type of assessment can benefit smaller customers that need to get an idea about the total cost/volume of their printing operations, and it can also provide medium-sized and large organizations with a clearer picture of document-related costs in the office while minimizing their initial investment to study this issue.

Level III

Based on our generalized criteria, this is the most involved and sophisticated level of document workflow assessment. This type of assessment typically takes anywhere from a couple of weeks to three months and involves a high level of collaboration between the user organization and the assessment provider. Depending on scope, some assessments might take place outside the office environment, in places like in-plants/CRDs or commercial print environments. Steps involved in this type of assessment may include:

1. Developing a map of the physical locations of devices and employees with access to those devices, including different types of offices and facilities that may vary by use and design (i.e. a large bank with 100,000 square feet of office space and 30 local branch offices, each with less than 5,000 sq. ft. of space).

2. Implementing document accounting and tracking software to get detailed reports on document output activity within the organization, costs incurred on an ongoing basis, and possibly costs on a user as well as a device level.

3. Targeting a long list of indirect as well as directly associated costs for general document output and use in an office, including costs associated with supplies management; storage, help desk, and other unmanaged maintenance costs; device overuse; electricity consumption; and long distance and monthly telephone service charges.

4. Competitive analysis of data gathered from the end-user organization against other organizations in the industry to understanding how it is performing in relation to its competition. For example, this could include SG&A and other operating costs comparisons with peer organizations that release detailed public financial data, or via government- or association-gathered statistics.

5. Future state recommendations for reducing document output-related costs through new device investment, solution implementation, and/or process adaptations and change (i.e. reducing or eliminating the use of fax machines in favor of MFP-based document routing solutions that support inbound and outbound network fax or scan-to-e-mail).

Each level of assessment serves a purpose in the market. Even the Level I assessment, beyond being used as a sales tool, can give organizations an idea (albeit a small one) of what they are spending on printing and print-related processes. This type of assessment may also give organizations the nudge to improve spending themselves through more sophisticated devices or software, or it could serve as a gateway and urge them to seek out a fuller assessment. Level II and Level III assessments offer more involved reporting on print costs for organizations. Overall, these assessments raise awareness of print costs throughout the market. A clearer understanding of what document-related processes actually cost elevates organizations' perceived needs for more advanced devices, such as MFPs and related-office document solutions. More importantly, it makes the document lifecycle an issue that organizations can no longer ignore.

Critical Components of an Assessment

Before diving into a discussion about what a document assessment entails, it should be noted that the service providers in the market use varied terminology for their respective assessment methodologies. Nevertheless, the underlying architecture of the process remains relatively constant. Regardless of terminology, this section outlines a few critical components that a user organization needs to be aware of when embarking on a document assessment project.

Planning the Assessment

A clear process needs to be in place when setting out to conduct a document assessment. In fact, many assessments fail because the user organization goes into the exercise without a clear-cut roadmap for success. These organizations begin the process with only an optimal outcome to guide them, without fully understanding the process steps necessary to get there. As with any project, a key individual must lead and drive the process from beginning to end, acting as an advocate and a leader.

Building an Organizational Support Structure

Before starting a document assessment process, the user organization needs to ensure that the appropriate support structure is in place internally. There should be a champion at the executive level that will back the project. Having a champion at the executive level is critical to the success of such a project. A C-level champion may be more adept at cutting through red tape and breaking barriers, but lower-level individuals may have trouble making headway or ensuing progress, especially for enterprise-wide initiatives. Project orders coming from the C-level will carry more weight than a request from someone in the IT department. Additionally, when there is a need for funds, the champion should have a better understanding of what funds are available for a project and what is appropriate for a document assessment given its strategic significance and long-term potential Return on Investment (ROI). In the planning stage, it is important to know what type of budget an organization is working with to better outline the entire project. Furthermore, the champion will have the authority to put together a “task force” team consisting of different constituents within the organization. The sole purpose of the task force is to execute the assessment project and/or provide a face to the user organization when collaborating with an outside provider. Typically, the task force team consists of mix of people from IT or affected functional departments. With regards to working with an outside provider, the champion is also responsible for maintaining the team’s interests throughout the project.

Scoping the Assessment

Once the internal support structure is in place, the user organization needs to understand why the assessment is important and worth pursuing. The document output-related processes are, for the most part, unmanaged. By its very nature, an unmanaged process is very likely to produce waste, but improvements can be made at a number of levels once they are defined. Possibly with the help of an assessment provider, organizations need to realize what type of value they can extract from an assessment.

To fully understand the true cost of documents, an organization would need to look beyond the more obvious direct document costs and understand the indirect costs within the lifecycle as well. Examples of these “obvious” costs include direct costs associated with toner usage, paper consumption, and device maintenance. By comparison, indirect costs refer to costs incurred when handling and processing documents, like when searching for or retrieving documents, distributing and filing documents, or when capturing and reusing portions of documents like data in forms. The actual costs associated with those processes can be attributed to labor costs, the impact of software costs (purchase price and maintenance fees), and general training costs. More subtle indirect costs include those associated with turnaround (wait) time, lack of convenient access, lost information, error correction, or duplication of information within a typical office document lifecycle.

Understanding of the big picture will help organizations to scope the assessment project and review the assessment provider’s capabilities. As discussed, there are varying levels of assessments that might cover areas outside the office workgroup, including production in-house printing (in-plants/CRD and datacenters) or outside print (commercial print). Deciding on the targeted scope of the document assessment project will help guide an organization’s decision, determine its commitment level to the project, and dictate how to allocate sufficient budgets to the project. A well-defined assessment plan with specific goals or priorities will ensure focus and timely execution of the project. It also properly sets the expectations of the different members involved in the project. When working with an assessment provider, a user organization needs to be mindful of the provider’s ability to offer an assessment plan up front, detailing objectives, key cost/performance indicators, deliverables expectations, and timetables.

Data Gathering

Once the planning phase is completed, the organization can begin gathering data. The purpose of this phase is to obtain information on the cost/performance of the organization's document lifecycle. While self-data gathering is possible, collaboration with an outside provider might be a better option. User organizations can take advantage of a provider's technology and best practices, reducing the amount of time required to gather the necessary data and increasing the chances of project success.

Most assessment providers approach data gathering by using document accounting or device-diagnostic software to assess the current utilization rates and patterns for output devices as well as the organization's day-to-day behavior concerning the output and management of documents. The use of software is usually complemented by primary research, which might include a site walkthrough, customer surveys, and/or in-depth employee interviews. A walkthrough of the user organization's facilities helps providers gain initial insights into the organization's document-related operations and existing workflows, whether defined or undefined. A walkthrough usually results in the creation of a map or floor plan that illustrates device location, the device-to-employee ratio, network connectivity, and other key indicators. Customer surveys or interviews attempt to identify end-user dissatisfaction with current capabilities or lack of access to additional capabilities and determine if it is at all linked to the user organization's document-related operations. Employee interviews are conducted to gain a better understanding of identified bottlenecks and lags, and to determine how documents are handled within organizations. These interviews are all meant to identify potential hidden problems that may not have been identified by diagnostic software or walkthrough observations.

In general, the data gathering phase may last from a couple weeks to a few months, depending on the scope of the initiative. The time period will enable the document accounting or tracking software to capture adequate data points to establish compressive usage patterns or average document volumes. In some businesses, seasonality may be a factor to consider when deciding on length and timing of the data gathering phase.

In addition to the ability to gather a broad range of key performance indicators over a specified time frame, a user organization needs to determine whether it will be satisfied with a vendor's "sampling" approach. The majority of vendors will take a representative sample for their data gathering purposes, including a sample of one floor in a building or a single building within an organization's campus if multiple buildings serve similar uses. The vendor will then extrapolate the data to obtain a better picture of the organization as a whole. Understanding the sampling techniques and assumptions used during an assessment is critical as an organization works to determine the current state of its document output.

"Current State" Assessment

The primary purpose of this phase is to gain an understanding about the current state of the user organization document lifecycle. This phase involves the compilation and analysis of gathered data. During this phase, workflow inefficiency, potential bottlenecks, sources of lag times, and technology obsolescence are typically identified.

To obtain an objective current state assessment, the result of the analyzed data should ideally be compared to results from similar organizations (i.e. direct competitors or organizations with similar size, revenue, and/or industry characteristics). An experienced assessment provider may be in a better position to make an objective current state assessment, because it can leverage past assessments as comparative data.

A current state report may include:

- Maps of physical locations of devices and employees with access to those devices
- A report on metrics monitored, which might include number of output devices, cost per page, user-to-device ratio, page/job volume, black & white/color split, toner coverage, or device utilization

- Qualitative analysis of identified issues/problems around the document lifecycle within the organizations
- Itemized direct and indirect costs of the document lifecycle. Depending on scope, the report might also include office, in-plant/CRD, and commercial document costs.
- Comparative analysis versus a set of peer companies

Deciding on "Future State"

Based on the current state assessment, most vendors will offer one or more possible scenarios for creating a future state that addresses the waste uncovered by the project. The scenarios will usually include a mix of recommendations regarding new office equipment hardware, software, and workflow processes (like migrating from pre-printed to electronic and on demand forms), as well as procurement options like an outsourcing or managed services engagement where the customer can shift the burden of ownership to a third party. The most common change, and among the simplest to implement, is a recommendation to reduce or optimize the existing output fleet size through the placement of a mix of new networked multifunctional and single-function devices, replacing existing analog and old standalone devices, freeing up space, and driving higher utilization of available capacity.

Generally speaking, any future state recommendation will likely yield a certain cost savings or ROI. This is the point where the user organization's commitment level is put to the test. An understanding of current state and "attainable" future state is needed before moving to implementation. Regardless of preferences toward a certain cost level, technology, or equipment vendor(s), the user organization will need to review whether the cost savings are realistic and sustainable in the long run, and it must understand the impact on the organization in terms of culture and personnel. Furthermore, with the addition of enabled software solutions, user organizations may decide to quickly eliminate potential suppliers that lack the portfolio required to meet the company's office needs.

Additionally, the user organization will need to consider a proposed implementation or migration path to the future state. The ideal migration path will be cost-effective, minimally disruptive, and mindful toward legacy and future technology needs. If some existing equipment is currently under contract for a period of more than 6 months, the customer may need to work with a supplier to structure a plan that incorporates existing equipment with new equipment in the future state recommendation. This could also include a phased implementation plan over a period of time so expenses are managed to the greatest benefit while still providing balanced and consistent upgrades to the entire organization. Furthermore, the user organization will need to be mindful of the necessary investment on a control mechanism. The simplest form of control might be through the installation of tracking technology that will remain online indefinitely or performing another assessment exercise after a certain period has passed (i.e. 6 months or a year). The control mechanism will ensure that the proposed future state is achieved and will help impose a culture of continuous improvements.

Benchmarking

More and more organizations are being measured in terms of how they compare to their competitors and the industry's best practices. A major area that is being targeted is the cost of documents across organizations. As we have explained throughout this report, true document-related costs expand beyond the traditional narrow lens of visible costs such as copiers and printers, taking into account the total burdened cost of the entire document lifecycle within the enterprise.

Understanding your organization's overall enterprise document costs is a challenge, but this information is necessary to develop a future document strategy. The ability to take the data that you gather through assessments and compare it to that of your major competitors or other companies in your industry is key.

Assessing and benchmarking true document costs helps:

- Improve financial results
- Decrease costs by eliminating duplicate or inefficient document processes
- Create competitive advantages
- Increase optimization and develop best practices
- Locate business process advantages
- Leverage corporate knowledge and communications resources

Conclusion

There is a general confusion when it comes to estimating true document output costs, and this is driving the interest in assessment services. Most general approximations tend to overestimate the associated costs for copying, printing, and faxing as a share of an organization's revenue or operating budgets. At the same time, however, internal/self assessment projects tend to underestimate the total costs associated with documents, particularly document output in the office as a share of an organization's revenue or operating budget. As a result, many organizations have ignored the costs savings opportunity of document assessments due to the limited incentives associated with implementing such a project.

Through a range of solutions and services, service providers and customers can obtain detailed data based on approaches that utilize common best practices to assess and sufficiently justify required changes that will reduce certain defined output costs, while also expanding worker productivity and further reducing an organization's total document costs.

Organizations are increasingly aware of and receptive to assessment services. Vendors' ability to demonstrate a tangible ROI has certainly helped to increase demand. In a situation requiring a request for proposal (RFP), for example, more and more user organizations are beginning to include assessment services as a prerequisite for proposal submission. In a nutshell, vendors will eventually need to offer these services just to be invited to the party. Furthermore, as more organizations address document-related costs, the gap between those who are utilizing efficient processes and those who are not will widen, creating core competitive advantages in operating efficiency.

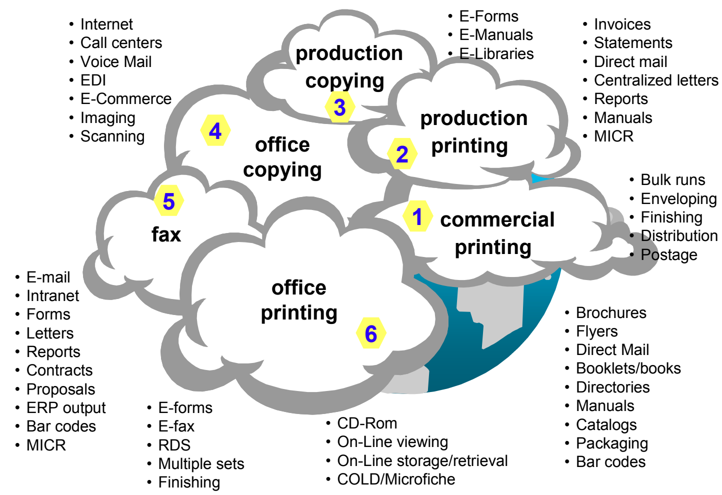
Finally, organizations that are looking to work with an outside provider for their assessment needs should remember that not all assessment services are created equal. One needs to be mindful of the scope and methodology employed by vendors. As discussed, some vendors will only leverage software and secondary data, while others apply software and on-site research during the data gathering period. The ideal vendor will understand the complexity of the document requirements within your business (or vertical) environment, and will be able to provide a detailed summary of an organization's current state as well as a cost-effective, minimally disruptive migration path to a predefined and more desirable future state. At the end of day, success is all about meeting the proposed ROI and instilling a culture of continuous process improvement.

Accurate and Cost-Effective Enterprise Document Assessments

This white paper described several levels of assessments with varying complexities, level of details, and costs of services offered. Initial assessments do not always require on-site activities, which can be costly, time consuming, and difficult to push through the organization to gain executive approval.

Despite the importance of documents, few companies or organizations have a truly holistic understanding of their own document system or how they compare to their major industry competitors. The components are fragmented and managed in sub-silos.

Overall Converging Document System



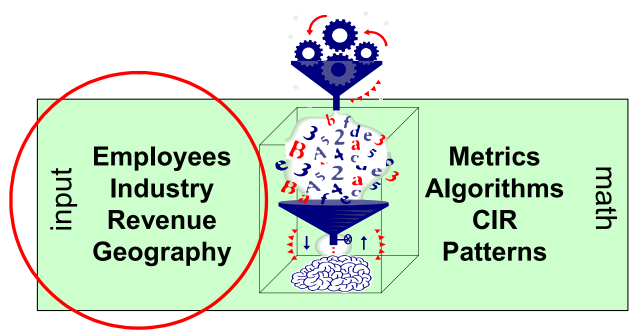
InfoTrends/CAP Ventures' assessment and benchmarking services offer organizations choices and the ability to approach enterprise document assessment through a range of Predictive Models and services designed to meet your specific requirements. In fact, our Predictive Models can quickly and cost-effectively assess the "size of the prize" before you even consider more detailed projects.

Our approach is based on blending our own extensive databases, research, and knowledge sets with the statistical and modeling capabilities of ALL Associates Group's EDAM (Enterprise Document Assessment Methodology) Expert System.

EDAM's approach to complex documents environments illuminates the entire document system and the interactions between the various parts. Once understood, a world-class document system can be envisioned. This aids decisions on where to conduct in-depth assessments and ultimately how to implement the right document technologies to connect people and processes, creating exceptional business efficiencies and a competitive advantage.

EDAM uses a range of economic frameworks, depending on the requirements of the individual client. It can extend over office, in-house production, and outside commercial document environments and cover basic costs, such as equipment supplies and maintenance and all of the fully burdened costs associated with the entire document lifecycle.

These costs are compiled to generate reports that are based on the profiles of 390 industry types, over 700 job definitions, country-by-country economic data, and over 1,000 interrelated document cost chains. This is matched to your own company's data, such as total number of employees, industry classifications, and key financials (i.e. gross revenues or total expenses). EDAM is the result of 10 years of work on document-centric statistical analysis and modeling and is rapidly becoming the de facto standard in predictive modeling for document systems.



The benefits of Predictive Modeling are simple:

- Cost
- Time and resources

- Accuracy
- Enterprise-wide view
- Ability to benchmark

From Predictive Theory to Action

By removing barriers and taking a view of the whole, the potential synergies can be identified and quantified. This would deliver currently untapped savings. More importantly, it can drive business process improvements, enhanced productivity, and enhanced brand equity.

EDAM has been used by organizations such as Bank of America, DuPont, CA Insurance, Motorola Corporation, Caterpillar, Aventis Pharmaceuticals, Sprint, Bristol-Myers Squibb, Ford Motor Company, MBNA, Internal Revenue Service, United States Postal Service, Toys "R" Us, Morgan Stanley, Allstate Insurance, Wachovia Bank, and BASF.

> *"There was no cost centre for office documents. We were wasting millions of pounds a year on print of one sort or another, and that doesn't include the downstream cost of documents such as storage and distribution. If you keep all your costs in separate jam jars, you're not able to see where you're spending your money. The EDAM models were confirmed following a detailed analysis…without EDAM, the issue would have remained invisible."*
>
> *David McCormack, former Head of Document Solutions National Westminster Bank (Royal Bank of Scotland)*

Contact Us Today to Request Information

If you are interested in learning more about our enterprise document assessment and benchmarking capabilities or would like to have an open discussion with one of our consultants, please contact Scott Phinney at scott_phinney@capv.com.

About InfoTrends/CAP Ventures

InfoTrends/CAP Ventures is the leading worldwide market research and strategic consulting firm for the digital imaging and document solutions industry. InfoTrends/CAP Ventures provides research, assessments, analysis, and re-engineering initiatives that have resulted in significant efficiencies and savings through organizational redesign, streamlined operations, and the use of appropriate technology resources. InfoTrends also offers advice to help clients understand market trends, identify opportunities, and develop strategies to grow their businesses. Additional information about InfoTrends/CAP Ventures is available on the Web at www.capv.com.

About ALL Associates Group, Inc.

ALL Associates Group is a document-centric analyst firm that develops and maintains robust statistical modeling tools and techniques for the document solutions industry. ALL Associates Group created EDAM (Enterprise Document Assessment Methodology) Expert System using extensive data sets, systems thinking techniques, statistical science, experience, and case histories. EDAM helps clients to rapidly understand the true costs of documents and enhance their decision-making processes. By statistically determining the volumes, costs, and environmental impacts associated with office, production, and commercial documents, ALL Associates Group provides data by individual company, industry sector, or geographic area. ALL Associates' approach is to collaborate with clients and partners to augment their own processes, helping them to release untapped value and increase profits. Additional information about ALL Associates Group is available on the Web at www.allassociates.com.

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