

ENTERPRISE DOCUMENT MANAGEMENT

A HOLISTIC VIEW OF ENTERPRISE PRINTING HELPS CUT COST AND IMPROVE BUSINESS PERFORMANCE

**BY KEVIN CRAINE
CRAINE COMMUNICATIONS GROUP
FOR STANDARD REGISTER**

Documents are at the heart of every business process. No matter the market or the industry, documents drive the business functions that make any company run. Marketing, accounting, customer service, human resources, research, manufacturing, and shipping – these are just a few essential business functions that depend on documents as crucial components of the process. Imagine your organization without documents...how would you survive?

In spite of their importance, however, documents can be an expensive, wasteful and time-consuming proposition. Most organizations lack a complete understanding of the total amount they spend to print and manage documents. The reason for this is that companies tend to view document management in a highly fragmented way, concentrating only on specific areas of printing, rather than attending to the entire enterprise print environment. As a result, opportunity for cost containment and process improvement is overlooked.

A holistic view that includes all aspects of the enterprise “print supply chain” is needed in order for organizations to get control of the cost of their documents. Since documents have a direct influence on the performance of key aspects of business operation, it makes sense that enterprise document management receive the same strategic importance and focus given other essential systems. By examining the entire enterprise print environment, companies can make substantial work process improvements and significantly reduce document-related expense.

DISCONNECTED VIEW OF DOCUMENTS

For most large organizations, printing occurs in several distinct environments each with its own discrete management and reporting structure. For example, desktop printing is typically under the auspice of the computer network group, while copiers and faxes have traditionally been the responsibility of administrative services or purchasing departments. Centralized reprographics may be a part of mail or graphics services, whereas data center printing remains staunchly part of the information technology organization. The marketing department most often contracts with outside providers of commercial print, while ad hoc documents may find birth at the local Kinko's at the behest of variety of business areas.

Due to this disconnected view of documents across the enterprise, most organizations do not have a clear or comprehensive view of their total document-related expense. Some print environments may routinely report print costs, while others are loosely monitored...if at all. Even those departments that actively track printing expenses are typically viewed in isolation – printing regarded as a cost center or line item expense, rather than as a part of an entire enterprise document cost infrastructure.

This fragmented structure results in a fragmented attitude toward printing. Without a cohesive management approach, companies cannot be sure whether the printing habits of their users are in the best interest of the organization as a whole. For example, in many organizations little, if any, attention is paid to how, where and why users engage printing resources. More cost effective and efficient methods may indeed exist, but they are overlooked either because of lack of information or due to force of habit. The prevailing perception among users may be that that printing is “free” – the

cost of printing either falling outside of their particular budget, or the expense considered only in passing as a price of doing business.

The expense of printing is only part of the equation. Inefficiencies, rework and error are also expensive in terms of lost productivity, missed deadlines and customer dissatisfaction. If enterprise documents, and the processes they support, are flawed the overall performance of the enterprise is greatly impacted. As a result, organizations must address the entire document-related life cycle and all associated supply chains, not just the output. This holistic view clarifies how documents are created, used, and delivered, and puts companies in the position to not only improve the efficiency of document-related processes but also uncover the full savings potential enterprise wide.

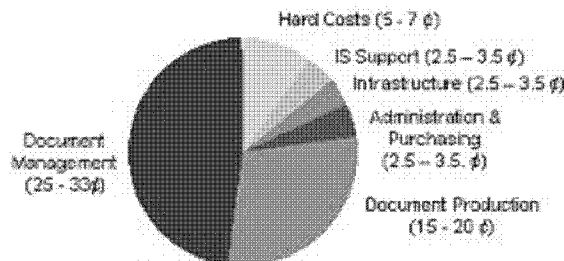
FRAGMENTED DOCUMENT MANAGEMENT DRIVES INCREASED COSTS

- Organizational structure often leads to decision-making and spending in silos.
- Companies lack the means to measure, manage and control document costs.
- Unknown or inconsistently applied service levels and reporting.
- The need to negotiate, administer and manage multiple vendor contracts.
- Complex, multi-technology environments.
- Lack of visibility and focus on all of the print-related supply chains.
- Un-optimized document output infrastructure across the enterprise.

THE TOTAL COST OF OWNERSHIP OF DOCUMENTS

Considered separately in “information silos” before, organizations will save money by establishing a holistic, rather than disconnected view of their enterprise print environments. Research indicates that over thirty billion documents are used each year in the United States, and the cost of producing and managing those documents is estimated to reach as much as 15 percent of annual corporate revenue. By closely examining the entire enterprise document supply chain – including documents produced internally as well as those procured externally – organizations find that the resulting expense is significantly higher than anticipated and often more costly than necessary.

Analysts estimate that for every dollar a company spends to create a document, ten dollars are spent on other burdened costs including support and infrastructure, procurement and facilities, end-user interaction time, and document management expense. These fragmented costs are hidden in budgets and processes across the entire enterprise. According to CAP Ventures, a noted document industry research firm, only about 10 percent of actual document costs are ever exposed by an assessment, which means that 90 percent of document-related expense is being overlooked.



TOTAL BURDENED COSTS OF ENTERPRISE DOCUMENTS

Another study conducted by the Center for Advanced Purchasing Studies and Arizona State University found that only one-half of companies surveyed had a formal print supply management program. Nearly a third of the respondents said that they were not actively managing print at all. This is surprising since research also clearly indicates that companies can significantly reduce the total cost of ownership of corporate documents by assessing printing habits across the enterprise. CAP Ventures, for example, reports that companies that have implemented an enterprise approach to document management have decreased maverick spending by an average of 51 percent, reduced inventory expense between 25 to 50 percent, and decreased in the price of goods paid by as much as 10 percent.

Understanding an organization's overall enterprise document expense is a challenge, but without this information it is impossible to assess the magnitude of the savings opportunity and develop a meaningful document management strategy. This paper will examine the three primary corporate print environments, consider factors that influence costs in each environment, and explore approaches to assess the entire enterprise print supply chain and to uncover opportunities for cost reduction and process improvement.

FACTS ABOUT ENTERPRISE DOCUMENT MANAGEMENT

Most companies could reduce their printing expenditures by 10% – 30%.

Gartner Group

The average company spends 6% of annual revenues on the hard costs of document production (assets, consumables, service and support).

CAP Ventures

Strategic supplier agreements can reduce operating costs by 20% to 30%.

Granada Research

ENTERPRISE PRINT ENVIRONMENTS

In general, print happens across an enterprise in three environments: The desktop or office environment, a centralized production printing or reprographics department, and via external commercial print-for-pay providers. While the expenses of each print environment eventually becomes part of the overall cost of enterprise operation, each environment is typically administered under different management and cost structures.

Most organizations do not have a "Chief Document Officer," but perhaps they should. By looking at the trends, current state, and potential future state, decision-makers are in a better position to make strategic choices that will reduce document-related costs and bolster the efficiency of the business processes they support.

DESKTOP PRINTING

The desktop printing environment includes the multitude of office documents that fuel the inner-workings of any organization. Proposals, contracts, marketing collateral, forms, applications, claims, and even printed e-mail are among the many documents that are indispensable for daily office

operations. Desktop printing is categorized by the need for immediate turnaround of documents that are low volume and have limited color and finishing requirements.

By far the largest share of printing done in the U.S. is from the desktop and companies spend an estimated \$100 billion each year to print and manage office documents.² Regardless, most organizations do not have a clear understanding of the amount they spend on desktop printing. In general, IT directors are unclear just how many printers reside in their corporations, how many pages are printed each month, or the cost of each sheet of paper that passes through their printer fleet. For the most part, corporations have loosely organized methodologies for acquiring and managing office printers, few have effective utilization and expense tracking capabilities, and printer fleets often grow by default as a result of a non-integrated in placement philosophy.

In addition to the straight printing costs, corporate technicians and network administrators testify that they spend 15 percent of their time on printing related issues. Printer installation and driver management are their top two issues for support. Over 55 percent of network traffic is printer related and between 50 and 60 percent of help desk calls are printer related.³

DESKTOP PRINTING TRENDS

Utilization is increasing – The convenience of local printing, combined with the rising tide of desktop documents along with the increasing capabilities of workgroup printers, has resulted in an explosion of desktop printing.

Costs are out of control – Research shows that few companies have comprehensive document tracking, routing and accounting systems in place. As a result, organizations do not have control over the amount of money spent on desktop printing.

Cost per copy vs. total cost of ownership – Organizations tend to view desktop printing as a commodity and look at the desktop printing from a cost-per-copy or departmental perspective rather than from an enterprise view.

CURRENT STATE OF DESKTOP PRINTING

Unknown costs – Most organizations do not have their arms around the total cost of ownership of office documents. Fragmented accountability along with a lack of standardized reporting methods obscures the total expense across the enterprise.

Too many devices – Imbalanced deployment of printers results in significant hidden costs, yet without an integrated placement philosophy printer fleets grow by default rather than by design. Consumable costs are high due to a lack of a structured and standardized program.

Internet and e-mail printing – The World Wide Web holds over 2.3 billion digital documents, and Americans send and receive well over 6.8 trillion e-mail messages each year.⁴ Even as the number of electronic transactions continues to grow many of these digital documents are eventually printed on office printers.

Poor contracts – Due to the fragmented nature of desktop printer management many printer, copier and multi-function device contracts, as well agreements for the associated supplies and service, are sub-optimal. Analysts estimate that strategic supplier agreements can reduce desktop printing costs by 20 to 30 percent.⁵

Perceived as free – For the most part, users regard desktop printing as a free resource since the expense often is not a direct a line item expense or part of their departmental operating budget.

IT organizations have no accountability or authority to modify user behavior and often regard printing as a perpetual expense of business unit support.

FUTURE STATE OF DESKTOP PRINTING

Fact-based expense monitoring – The adage “what gets measured gets improved” holds true for desktop printing. By implementing clear and factual reporting, organizations make more informed decisions and “print smarter.”

Right-sized, digital fleet – By optimizing the desktop print environment with a balanced deployment of printers, and by replacing aging printers with standardized, digital output devices, companies significantly reduce the total expense of deploying, maintaining and managing their desktop printer fleet.

Renegotiated, more flexible contracts – By virtue of comprehensive tracking, measurement and planning, organizations leverage relationships with suppliers to achieve more cost effective and flexible contracts. For many organizations, using fewer suppliers results in reduced administrative overhead and more advantageous pricing.

Library of benchmarks and best practices – Business needs vary from organization to organization. As a result, no single strategic approach is the universal remedy to solve runaway desktop printing expense. By collecting benchmarks and studying industry best practices, companies make informed directional decisions to reach specific business outcomes.

Least-cost routing – Organizations adopt a “least cost” document routing philosophy supported by software that examines each ‘File > Print’ job and applies business rules to help users simultaneously understand the true cost of printing for each job.

CENTRALIZED PRODUCTION PRINTING

Centralized production printing environments, also known as “in-plant” printing or reprographics, produce documents in higher volumes, often with digital color, and provide moderate finishing options. Manuals, directories, catalogs, booklets, office stationary, reports and compliance documents are good examples, but the range of work depends on the nature of the organization. These documents have a slightly longer turnaround than is associated with desktop printing, generally within hours, and many are printed “on demand” on a regular recurring basis. Companies in America spend an estimated \$50 billion a year on centralized production printing.⁶

On a cost-per-copy basis it often makes sense to print documents in a centralized production center. Compared to office printing, economy of scale generally provides centralized printers a much lower per-page cost than is found using desktop printers. This cost advantage erodes quickly, however, if in-plant printing equipment is underutilized or if the current contracts are misaligned with current usage. With trends leaning toward declining volumes and attention focused on desktop printing or other digital delivery methods, many in-plant printing departments find they are left somewhat adrift, either working under sub-optimal agreements or without sufficient volumes to sustain their investments.

CENTRALIZED PRINTING TRENDS

Declining utilization – The convenience of desktop printers, often combined with quick access to color, compels users to print locally. The growing tide of Internet documents and e-mail also accounts for a steady increase in desktop printing. Users also perceive office printing as “free,” whereas centralized reprographics services are often charged as a budget line item.

Combining in-plant and data center printing – The line between high volume digital copiers and production data center printers continues to blur, prompting organizations to merge these related functions. This can potentially reduce redundant equipment and capabilities, but the transition requires the coordination of formerly disparate specialized skills.

Increasing postage costs – Many organizations are going a step further by bringing mail services into the mix. Whether officially merged or not, postage expense is influenced by the entire print-and-mail process. In the face rising rates, coupled with slow adoption of electronic document delivery, many companies feel caught between a rock and a hard place.

CURRENT STATE OF CENTRALIZED PRINTING

Under utilized assets – Investments in hardware and software are significant, yet often underutilized. Excess capacity and over-purchased features add to the cost burden. Trends indicate declining in-plant volumes as users increase utilization of more expensive desktop printers.

Inflexible contracts – Equipment leases and service contracts often span multi-year terms and impose minimum and maximum usage limits. Under utilized in-plants pay for capacity they do no use, or run the risk of excessive over utilization charges if they exceed the maximum allotment allowed under contract.

Perceived as expensive – Despite a typically lower per-page cost, users regard centralized printing as an expensive option. In-plant printing is commonly charged back to business units as a direct expense, whereas desktop printing is relatively “free” for most users.

FUTURE STATE OF CENTRALIZED PRINTING

Right-size assets – By evaluating investments in hardware and software, and understanding current and future usage trends, organizations find savings by aligning their equipment and capacity with production demand. Accurate ongoing measurement and monitoring is vital.

Contracts and partnerships – Organizations find benefit by renegotiating equipment lease agreements and service contracts to include more flexible minimum and maximum usage levels. By reducing the number of vendors used, organizations reduce administrative overhead and leverage relationships with key suppliers.

Digital color expertise – Digital printing technology has evolved to rival the quality of traditional offset printing while providing on-demand, short-run print production. Organizations find they can drive increased utilization by bolstering their abilities with digital color, giving desktop users a more cost effective color option and providing a viable option to outside print-for-pay providers.

“Document focused” support – Centralized printing organizations become business document experts with a high level of customer support. By providing a “document guru” organizations see to it that the most cost effective methods are used while ensuring a high level of technical expertise and process support.

Incentives drive desired behavior – Organizations establish business rules and provide real-time information to drive efficient and cost effective choices about print. Users are educated about costs, utilization is tracked, and incentives prompt appropriate printing habits.

External Printing

The external printing environment, also commonly referred to as commercial printing or “print-for-pay,” involves a broad array of graphic and printing services. Commercial printing has historically been the domain of traditional offset printing but over recent years has evolved to include a variety of high-end digital printing systems as well. Organizations often “source” external print because the nature of their documents requires sophisticated set up, demands very high quality color, or involves customized finishing. Building this capability in-house is expensive and is dependent upon specialized staffing and expertise.

Virtually all businesses rely on commercially printed materials as the primary medium for important business communications, including marketing brochures, promotional materials, direct mail, annual reports, product and user manuals, and other informational items. These documents have longer turnaround times, generally days or weeks, and range from moderate to very high volumes. Analysts estimate that U.S. companies spend approximately \$100 billion annually on externally procured commercial printing.⁷

EXTERNAL PRINTING TRENDS

Utilization is flat – Unlike rising desktop printing trends, or declining in-plant utilization, trends for external printing have remained relatively flat. As a result, print-for-pay providers are constantly looking for ways to expand their business by bringing in new customers and by offering expanded services to existing clients.

Digital migration on the rise – While digital color has been around for a while, corporate marketing departments are still relatively early in the digital color adoption curve. Many are now accepting the quality of digital color as an alternative to offset printing.

Document personalization – Personalization capitalizes on knowledge collected about customer preferences to rise above the din of competitive messages. Organizations are eager to leverage investments in Customer Relationship Management tools by including variable data in highly personalized documents. External print providers are eager to provide this service.

Established local relationships – Commercial printers often establish long-term relationships with organizations and court marketing reps and procurement agents with doughnuts and periodic account reviews over lunch. While these local relationships can be vital partnerships, they can also detract from sourcing print on a more broad or nationalized level.

CURRENT STATE OF EXTERNAL PRINT

Viewed as a commodity – Due to the overwhelming number of print-for-pay providers, organizations view external printing as a commodity. Often, using a “three-bid” approach, buyers get comfortable with familiar providers and become complacent in the comfort of those local relationships. At the mercy of buyer habits, users often do not have enough information to make a good decision.

Focus on cost per job – Organizations may aggressively bid jobs or utilize reverse print auctions without taking into account best practices or their ability to leverage of buying power of their entire enterprise print environment. A cost per job orientation appears cost effective, but additional expenses often result from change orders and rework.

Enterprise process overlooked – By focusing only on the most inexpensive channel for procuring print, organizations miss substantial opportunity for process improvements enterprise

wide. Operating in isolation, or in a fragmented way, print buyers overlook the broader application and options available to the entire enterprise.

FUTURE STATE OF EXTERNAL PRINT

Print is viewed as custom manufacturing – With advancing capabilities in desktop printing and correctly aligned usage of centralized printing resources, organizations regard external printing as a specialized resource responsible for “custom manufacturing” of high volume and high impact documents.

Competitive market for each job – Rather than rely on local or convenient external print sources, companies extend their reach to national providers via digital job submission and proofing. Best practices are leveraged to provide advanced production capabilities while ensuring competitive pricing for each job.

Focus on cost per response – No longer a commodity; the expense of external print is measured by the cost per response rather than per piece or by job. Total print supply chain lifecycle costs are factored into the benefit analysis of externally sourced printing.

Champions of personalized communications – To create low- cost/high-value documents, commercial printers are advocates for personalized communications. With selective data mining, thoughtful document composition, and digital printing technology, print-for-pay providers produce documents that command dramatically improved customer response.

WHAT ARE THE TOTAL COSTS OF ENTERPRISE DOCUMENTS?

DESKTOP PRINTING	CENTRALIZED PRINTING	EXTERNAL PRINTING
<p>Cost Per Page Hardware acquisition Maintenance costs Consumables</p> <p>Operating Costs Deployment and configuration Updates and upgrades Network administration Problem resolution / help desk Preventative maintenance Supply replenishment Software Training</p>	<p>Cost Per Page Hardware Maintenance costs Consumables, including paper</p> <p>Operating Costs Labor Operators Customer Support Administration Space and utilities Postage Inventory management Obsolescence Warehouse space Sourcing Software Training Depreciation Waste</p>	<p>Transactional Costs Design Prepress Data Management File Transfer File Storage Print Specifying Bidding and Awarding Project/Change Order Mgmt Scheduling Production Shipping / Distribution Warehousing Rework and changes</p> <p>Administrative Costs Supplier Management Contracting Invoicing Reporting</p>

RETHINKING DOCUMENT OUTPUT

Organizations are rethinking document output because print is both enduring and essential to doing

Business. Due to the varied scope of documents across the enterprise, and the fragmented nature with which they are managed, organizations find that evaluating all aspects of their enterprise print supply chain helps control of the cost of documents and enables substantial and innovative work process improvements.

By rethinking current approaches to enterprise document management organizations address both the tactical deficiencies of printing as well as the strategic opportunities that can be gained by improving the process.

Business rules drive optimal output – Organizations can reduce the total cost of ownership of documents across the enterprise by establishing business rules to determine the most advantageous method of printing...or if a document should be printed at all. With a “less paper” approach, companies can leverage advancements in online document delivery, while ensuring that printed documents are sent to the optimal output device or printing environment for production. Rules-based routing along with appropriate measurement and reporting brings control to a formerly fragmented process.

Centralized responsibility for enterprise documents – The notion that “print is a commodity” is only true to a certain extent. Documents can be complex and expensive, and their strategic importance warrants subject matter expertise as well as a single point of accountability. Organizations can dramatically improve process flow enterprise-wide by centralizing responsibility for documents either through a “Chief Document Officer” or by establishing a single strategic partner who assumes responsibility for all document-related processes and vendors. This ensures that the right level of focus and management is applied across all three print environments.

Moving from low-value/high-cost documents to high-value/low cost documents – Evaluating the entire enterprise print supply chain unlocks savings in all three major print environments. In turn, these savings can be reinvested in activities and technology to bolster the value and effectiveness of documents. Market expansion, brand recognition and customer satisfaction are all fostered by documents that communicate clearly, provide accurate and timely information, and serve the needs of readers. With selective data mining, thoughtful document composition, and digital printing technology, organizations can produce documents that command dramatically improved customer response.

Core Competency – Companies now recognize that they cannot be experts in every aspect of enterprise printing and as a result are rethinking how documents fit into their core competencies. Effective outsourcing brings in an outside expert to become part of business process and provide resources and process expertise on an “on demand” basis. This eliminates the need to maintain a large fixed investment in terms of staff, technology and process development, and creates a much more flexible document management environment.

BUSINESS PROCESS IMPROVEMENT THROUGH ENTERPRISE DOCUMENT MANAGEMENT

Since no two companies are exactly alike, neither are the appropriate solutions. What is needed is a process to guide the development actions and solutions that are meaningful, practical and ensures worthwhile and lasting results. It is important to assess the current state from a fact-based perspective that is comprehensive enough to ensure that something important is not overlooked while manageable enough to avoid the risk of a project so large that nothing ever gets done.

SITUATION ASSESSMENT

Many organizations use formalized methodologies such as Six Sigma or Lean methodologies to conduct an assessment of their enterprise print supply chain. Whatever approach is employed it is

important that it include both before and after process measurements as well as the ability to monitor ongoing results. The adage *you can improve only that which you can measure* holds true. Measuring and demonstrating improvement is critical for the ongoing success of enterprise document management. Measurements help answer these essential questions:

- What is the current state of all three enterprise print environments?
- How does the current compare to benchmarks and best in class processes?
- What should the future state look like in order to meet business outcomes?
- How do we close the gaps in process performance?
- What is needed to ensure improvements are sustained on an ongoing basis?

A effective enterprise document management looks at how documents are created throughout the entire print supply chain and then examines the enabling technologies or services available to improve the gaps in performance. Plans are also made for ongoing management of the process using performance measures and benchmarks, as well as effective negotiation of pricing by leveraging print volumes across the enterprise.

ENTERPRISE PRINT ENVIRONMENTS

Desktop printing – The goal is to reduce the total cost of ownership specific to desktop printing. The assessment should identify and analyze the fleet of printing devices, their related cost of ownership, utilization and workflow. Efforts are focused to leverage investments and ensure “least cost print” through rules base routing. Steps are taken to provide users with adequate information and education in order to optimize the quality, cost and delivery of printed documents

Centralized printing – Improvement goals for centralized printing center focus on increasing the utilization of the copy centers, where appropriate, and reducing the total cost per copy to the enterprise. Efforts are applied to identify appropriate equipment sizing through analysis of ongoing user demand and to renegotiate flexible and cost effective equipment lease and service contracts.

External printing – Process improvement efforts focused on external printing not only on ensure a competitive price, but also leverage best in class processes and technology. With the advent of digital printers and advanced database external printers offer the promise of one-to-one documents that perform well beyond generic "junk" mail. Another key objective is to eliminate the "bypass" printing that result from users working outside of the centralized print supply chain function.

DESIGNING AN ENTERPRISE DOCUMENT MANAGEMENT STRATEGY

Most organizations do not have a clear or comprehensive understanding of the costs associated with the documents they produce in the course of doing business. The disconnected view of documents throughout most organizations gives rise to increased expense and decreased ability to leverage current investments in technology and services. Innovation and process improvement are made more difficult because there is no cohesive management or centralized accountability for enterprise documents.

An effective document management strategy starts by examining all aspects of the print supply chain and building a holistic view of enterprise printing. With clearly defined measurements and business outcomes, organizations can get control of the cost of their documents and make substantial work process improvements. Centralized accountability, rules based routing, and ongoing process measurement and monitoring ensure that output is printed in the most optimal environment, if at all.

KEY QUESTIONS TO ASK

- Do you know your organization currently spends on printing and associated document management processes? If so what?
- How do you define your organization's "print supply chain?"
- Have you evaluated your three printing environments (desktop, centralized and external) as a whole?
- What actions have you put in place to streamline the workflows associated with key documents?
- What programs are in place to reduce the use of printed documents?
- What are the key documents that will continue to be printed?
- Have you considered having an outside assessment of your enterprise printing?

For many organizations, the time has come to regard documents and printing as a strategic, rather than tactical activity. The perception that documents are not important to corporate mission has given way to the understanding that documents are an indispensable aspect of any business operation. By stepping back and building a more holistic view of printing across the enterprise, organizations can cut costs and transform corporate documents from high-cost liabilities to high-value assets.

###

NOTES

1. Kevin Craine, *Designing a Document Strategy* (MC² Books), referencing various statistics from the Gartner Group, CAP Ventures, and others.
2. International Data Corporation (IDC).
3. Hewlett-Packard.
4. Kevin Craine, *White Paper: The Growth of Digital Information*.
5. Granada Research
6. IDC.
7. Ibid.

CRAINE COMMUNICATIONS GROUP
WWW.CRAINECOMMUNICATIONSGROUP.COM
503.452.9166

GOOD WRITING = GOOD BUSINESS