

Document Communications Industry Trends: 2006 Survey Results

James Watson, Jr., PhD, Doculabs

C. Ranganathan, PhD, University of Illinois, Chicago

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200 West Monroe Street
Suite 2050
Chicago, IL 60606
(312) 433-7793

CRIM

Center for Research in Information Management
University of Illinois at Chicago
601 S. Morgan
Chicago, IL 60607
(312) 996-2676

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I. Executive Summary

Survey Snapshot

EDSF asked members and/or clients from the following organizations to participate:

- The Electronic Document Systems Foundation (EDSF)
- Xplor International
- The Association of Image and Information Management (AIIM)
- OutputLinks
- Doculabs

In the first quarter of 2006, consultants at Doculabs and faculty at the University of Illinois at Chicago collaborated with the Electronic Document Systems Foundation (EDSF) to conduct a study to gain an in-depth understanding of key issues and trends in the document communications industry. The study identified the following facts:

- **Overall, only increased support for electronic document delivery will improve document communications with customers.** Security concerns and the need to integrate paper and electronic delivery systems most inhibit migration toward electronic delivery.
- **Electronic document delivery continues to grow, but not at an accelerated rate,** most likely because of poor promotional efforts and suppliers' failure to offer sufficient incentives. There may also be user concerns about privacy and frustrations with functionality.
- **Electronic delivery has not reduced print volume and thus has not provided print or postal savings.** Simply "getting users online" may have been expected to reduce print volume, but the relationship between electronic delivery and print suppression is more complex.
- **Color print is gaining market share, not only with marketing materials but also for service fulfillment (transactional) documents such as quarterly statements.** The number of organizations using color in 10% or more of their documents has nearly doubled each year.
- **Responsibility for document communication strategies is increasingly consolidated but remains fragmented.** Respondents whose firms have a single executive to manage document strategy lodged responsibility variously in IT, operations, or marketing. This suggests that many firms remain unsure where document communications fits organizationally.

Based on these findings, it is critical to consider a number of implications:

First, organizations must consider increasingly complex dynamics in their document communications strategies. Understanding the increased use of color, electronic delivery adoption rates, print suppression metrics, etc., all in the light of cost constraints, will require more sophisticated approaches to forecasting and modeling than previously expected.

Second, the lack of centralized responsibility for document communication strategies and clear budgeting / charge-back mechanisms further clouds the financial implications of these trends. Many line managers or business unit managers make their own decisions, perhaps unaware of the long-term impact upon customer experience and spending optimization.

The industry is in transition. The effects of key trends, including electronic delivery, print suppression, and data-driven color, are unknown, but are certain to change companies' document communication strategies.

Third, these trends are likely to erode current black-and-white (bi-tonal) print volumes for in-plant print operations. While the decline may be slow initially, if in-plant operations are unable to scale down their staffing and asset bases or migrate to digital color, at some point the migration to electronic delivery and data-driven color will make unit costs non-competitive. **In fact, internal black-and-white print functions may follow a pattern similar to the in-plant offset printing functions of just a decade ago: commoditization and, potentially, extinction.**

While the document communications industry was once constrained to the narrow domain of “print,” today it must be considered in a much larger context. The trends identified in this 2006 study, coupled with the findings of the 2004 and 2005 studies, confirm that the industry continues a transition between paper and electronic communications. If an organization wants to increase its communication effectiveness and maximize the impact of its document-related expenditure, managing the transition requires an integrated, interdisciplinary approach.

Survey Participants

The survey is based on a total of 280 buyers, representing the following industry segments:

- Banking
- Financial services
- Insurance
- Government
- Education
- Manufacturing

II. Objectives and Methodology

Members, customers, and/or subscribers of EDSF, Xplor International, AIIM, OutputLinks, and Doculabs were solicited via e-mail for participation in this study. Participants completed a survey online via Zoomerang. In appreciation of their time, respondents were offered a copy of this report and a subscription to the *EDSF REPORT*, a bimonthly research newsletter. Respondents were given the option of identifying themselves or remaining anonymous.

We received 411 responses, representing various industry segments. For purposes of data analysis, we relied on the responses of just 280 “buy-side” participants (rather than “sell-side” participants) by aggregating the industry segments of Financial Services, Manufacturing, Government, Education, etc. Thus, the results shown in the analysis of this report are based on the perspective of only “buyers” in the industry.

In total, we asked three types of questions: four demographic questions, fifteen questions with “pick-from” options, and eight scale-type questions providing ranges of answers. The responses were analyzed using statistical techniques to ascertain reliability and validity. They were further aggregated and examined in depth to understand the results. Finally, the authors added their interpretation of the findings and implications, where appropriate.

III. Findings and Analysis

This section summarizes the findings and analysis of the study. Our findings are presented in seven subsections, representing our major conclusions from the study. Each subsection includes relevant statistics from the survey, and, where appropriate, analysis that represent the opinions of the authors and not necessarily those of EDSF or its sponsors.

Our analysis is presented in seven sections, highlighting the key findings.

Overall, only increased support for electronic document delivery will improve document communications with customers.

In 2006, more than 40% of our respondents expect their budgets for document communications to remain the same as last year, with an additional 32% indicating a slight increase of about 10%. The ratio of organizations expecting increases versus decreases was approximately 3 to 2.

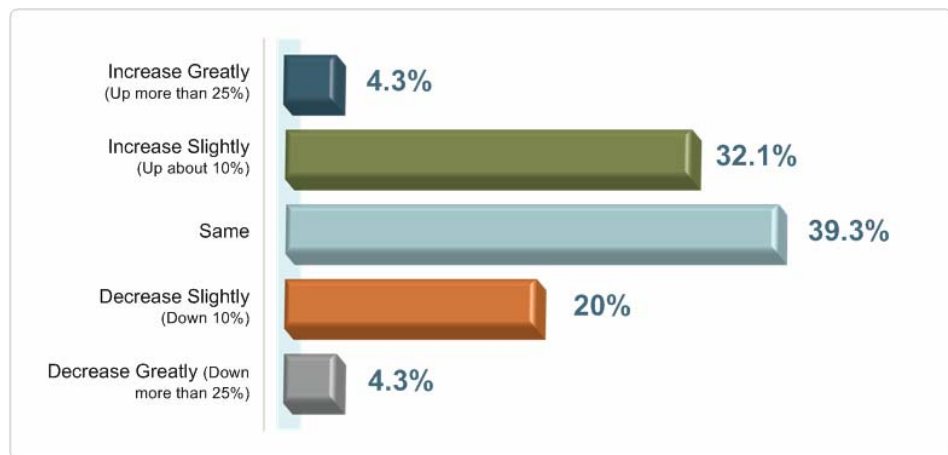


Figure 1. Growth in 2006 Document Communications Budget

Electronic document delivery is regarded as a primary mechanism to reduce print and distribution costs. But interestingly, survey respondents have not experienced the corresponding decline in print (see page 15).

As a result, constant or slightly increasing expenditures in document communications are creating interest in alternative delivery channels. And as one would expect, in terms of top priorities for 2006, the dominant theme is electronic document delivery.

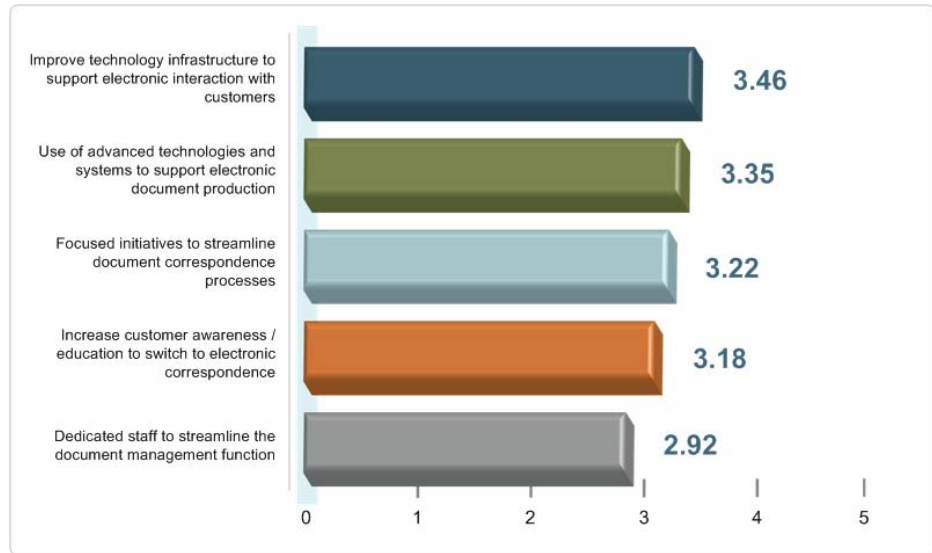


Figure 2. 2006 Dominant Theme – Electronic Document Delivery

The survey also explored the key inhibitors for electronic document communications. As in 2005, security, privacy, and regulatory concerns remain the top challenges. Yet business issues, such as lack of support from stakeholders, company mind-set, and company culture appear to be less significant inhibitors this year. Technology factors, such as systems integration and infrastructure, have become more critical than in 2005.

	Rank 2006	Rank 2005
Security issues	1	4
Privacy-related issues	2	1
Legal compliance and regulatory requirements	3	3
Customers are not prepared to accept electronic documents	4	2
Integrating new electronic systems with traditional IT systems	5	9
Pressure to manage/maintain both paper and electronic records	6	7
Inadequate technology infrastructure	7	11
Internal company culture	8	5
Costs in relation to benefits	9	9
Prevailing company mind-set doesn't favor electronic correspondence	10	8
Lack of support from key organizational stakeholders	11	6
Investments tied up in in-house print function	12	12

Table 1. Top Inhibitors for Electronic Document Communications

Electronic delivery of documents continues to grow, but not at an accelerated rate.

While electronic delivery is growing, current adoption is well below what many organizations had expected. Security, privacy, and promotional efforts are the primary inhibitors to accelerated growth in electronic delivery.

More than 44% of respondents expect electronic delivery to grow by less than 10% in 2006. Notably, 30% of respondents expect a moderate increase, between 10 and 30%, this year. While these statistics demonstrate continued growth in this delivery channel, the rate of growth is neither increasing nor decreasing, indicating steady progress (perhaps slower than many would like).

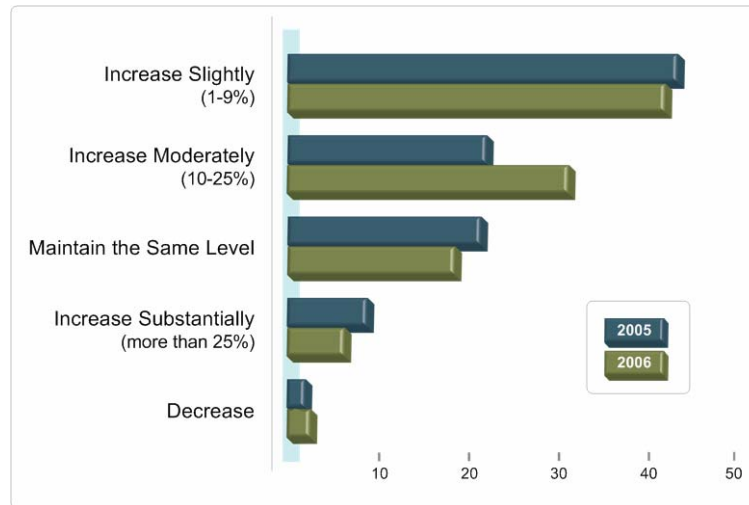


Figure 3. Organizations' Expected Use of Electronic Document Delivery

The survey also asked about organizations' perceptions of their clients' willingness to accept electronic documents. Here, too, we see increasing receptivity, and when comparing the two charts, we find that the expected use of electronic delivery largely mirrors anticipated customer adoption.

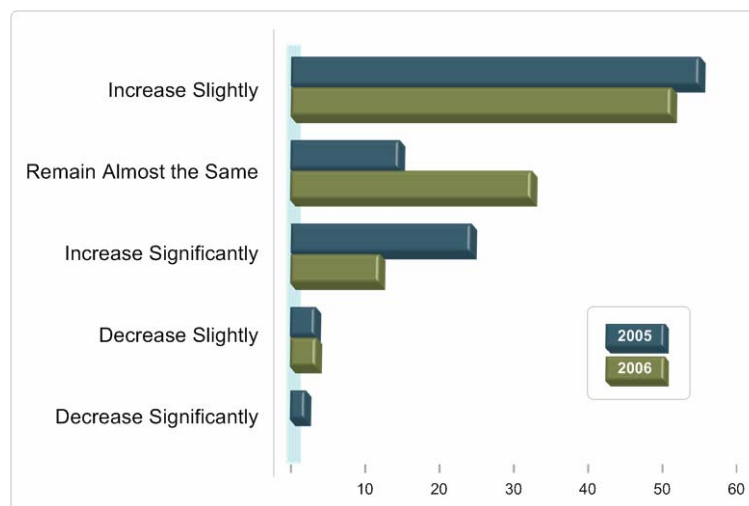


Figure 4. Perceptions of Customer Willingness to Accept Electronic Documents

Most firms regard their efforts to increase electronic delivery as “experimental.”

Incentives and promotion of electronic delivery are likely to be critical enablers of adoption, yet the use of these technologies remains in its infancy.

Given the interest in utilizing electronic delivery, we wanted to explore the varying approaches that organizations are using to increase user adoption. Successful electronic document delivery requires focused efforts in marketing and promoting the communication channel, such as campaigns, offers of exclusive web-only products or services, or offers of financial or other incentives such as discounts, coupons, and credits. Our study found that buyers are experimenting with many of these techniques.

This survey question allowed respondents to indicate their level of use of each of these techniques, with a 1-to-5 scale of responses, corresponding to “never used,” “experimentally used,” “somewhat used,” “aggressively used,” and “always used.” In the figure below, we averaged the numeric value of responses within each technique, across all survey respondents. As you can see, most organizations do not even touch the half-way mark (i.e. 3.00, or “somewhat used”) across all the four different electronic promotion techniques we asked about.

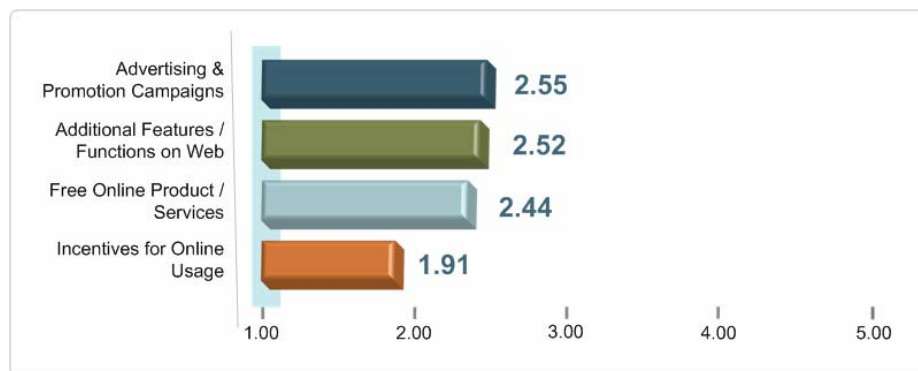


Figure 5. Approaches to Increase User Adoption of Electronic Document Delivery

The lack of formalized budgets for electronic delivery is another challenge identified in the study. If efforts to encourage or enable electronic delivery are buried with numerous other IT projects, time and attention are certain to be diluted.

We also examined whether organizations had a separate budget for supporting electronic document delivery, as one potential explanation for the limited promotional efforts. In 2006, only 30% of the firms had a distinct budget for electronic document distribution, compared to 23% in 2005. And in 44% of the firms, the funding for electronic document delivery was within the information technology budget, possibly reducing the visibility of electronic document delivery initiatives.

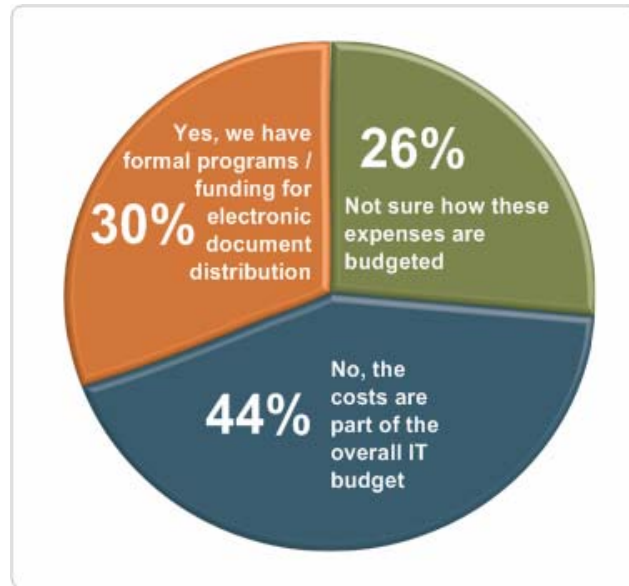


Figure 6. Funding for Electronic Document Communications

Thus these two factors, usage of marketing and promotional activities and the existence of a formal budget, may be areas that organizations should consider more thoroughly if they want to better leverage the electronic delivery channel.

Electronic delivery has not reduced print volume and thus has not provided print or postal savings.

Approximately 80% of the firms surveyed have experienced little or no change to their print volumes as a result of electronic delivery.

As organizations undertake electronic document communication initiatives, a logical expectation is a reduced dependence on printed materials. Our analysis found that the efforts toward electronic delivery have hardly reduced print volumes. In more than 70% of the respondent firms, the print volumes have remained flat or have declined marginally. In fact, in 8% of organizations, electronic delivery has had a reverse effect – the print volumes have increased! Note that the survey question was specific in asking about the direct effect of electronic delivery on print volumes, designed to isolate this dynamic from other factors influencing print volumes (such as the growth or decline in a firm’s customer base, for example).

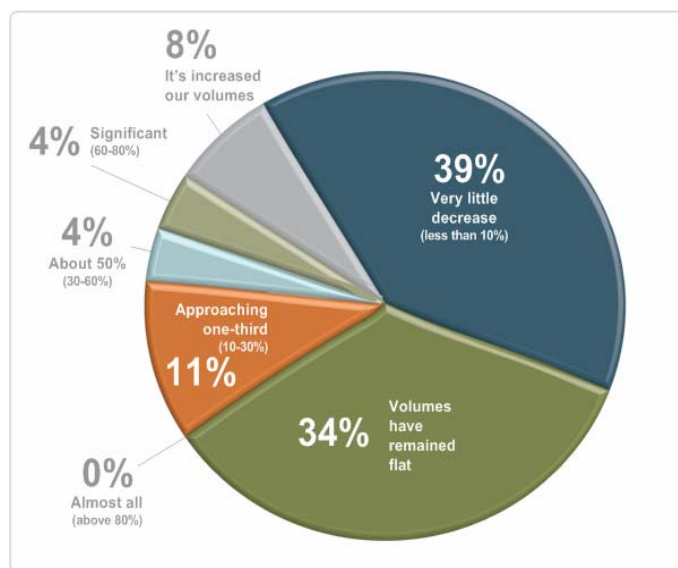


Figure 7. Impact of Electronic Document Initiatives on Print Volumes

This finding has many potential explanations, but one that we have found to be most logical is a poor understanding of expected print suppression ratios.

Many firms interested in electronic delivery make the erroneous assumption that for every document viewed online, there is a corresponding reduction in the volume of print. Thus, what appears to be a potentially significant volume of documents poised for print suppression is very quickly reduced to just a small percentage when a number of factors are considered, such as the number of users enrolled in an online portal, compliance issues, etc.

The logical conclusion that an increase in electronic documents delivered correlates to a decline in printed materials is false. Typically, only a fraction of the printed material that is viewed electronically can be suppressed.

Consider the model Doculabs developed in several of its consulting engagements within the insurance industry. The table below shows data compiled from 15 insurance firms, showing electronic document delivery and print suppression for customer enrollment and election.

Metric	Description	Percentage of Print
Number of policy holders	Total number of policy holders	100
Electronically enrolled	Percent of policy holders enrolled on the company portal	30
Electronic document presentment	Percent of portal users that elect to use the document viewing function	15
No-print election	Percent of users viewing documents who elect print suppression	7
No-print election based on compliance	Based on election, the percentage of documents that the carrier can suppress due to regulatory constraints	2 to 3
Actual print suppressed	Operationally, intercepting individual print records based on the above criteria may be impractical	1 to 1.5

Table 2. Electronic Document Delivery and Print Suppression

This step-down function helps explain why there is not a direct relationship between pages viewed and reduced print. For example, many customers may choose to enroll via a company's portal (create a user-name and password for themselves), perhaps to check the status of a claim or to get a price quote for a new policy, but not agree to receive their renewal bill electronically. In addition, many companies are hesitant, even if a customer agrees to suppress print, to stop using paper because of regulatory concerns. A cancellation notice is a good example. If an insurance carrier drops coverage, and the policy holder claims that they were never notified, litigation concerns can be very real.

Color print is gaining market share, not only for marketing-related materials but also for transactional documents such as quarterly statements.

The number of forms with data-driven digital used in 10% or greater of their documents has doubled in the last year.

While much attention is focused on alternative electronic delivery channels, perhaps because of cost constraints, the use of data-driven color (highlight or full color) is another dominant trend that industry professionals must track very closely. The use of color printing in documents has increased notably since our 2005 study. A year ago, 19% of our respondents indicated using color in 10% or more of their documents (either highlight or full-color). Since then, this figure has risen to 31%. Similarly, the percentage of firms using less color has also diminished in the past year. In addition, while data-driven digital color is being used more predominantly in marketing-related documents, we are seeing an increased use in service fulfillment and transactional-related documents.

Percent of Color in Documents	Percent of Respondents	
	2006	2005
Less than 1%	31.07	47.83
2-5%	23.93	18.21
6-10%	13.57	14.95
11-25%	14.64	8.15
More than 25%	16.80	10.87

Table 3. Growth in Color Print

What events can explain this increase? Certainly, the declining price of various color print manufacturing techniques and equipment is one reason. But another more important factor is the visual impression with the customer.

Only a few years ago, while many marketing professionals intuitively understood the promise of color print, its effectiveness was unproven. Recognize that marketers' decisions on the use of funding are typically tied directly to statistically-proven response data. Today, suppliers are able to provide marketers with hard statistics offering valid proof-points on the effectiveness of data-driven color print. Thus, as these metrics are better understood, the use of data-driven color print is becoming a part of the everyday communications portfolio.

While the steady increase in the use of color print within marketing material continues, the other dynamic to watch is the use of color within service fulfillment documents. Within this class of documents is a broad range of materials, including bills, correspondence, notifications, statements, etc. Of these, the one document type for which data-driven color has been used most effectively is the quarterly statement within the financial services industry.

Why has the use of color increased?

- Declining cost of production
- Increased statistical proof of color's communication effectiveness
- Competitive pressures to have documents look as good as those of market leaders

Here we find another pattern that may influence the growing use of data-driven color. As was the case with the quarterly statement over the past two years, a select few market-leading financial services firms decided to adopt the use of color. Soon after, a broader set of competitors followed.

Irrespective of whether the added expense could be justified by any of these firms, the use of color in quarterly financial statements is quickly becoming the competitive norm.

What if a similar set of events were to happen within other industries – for example, utilities, healthcare, and insurance? If just one market leader were to make the transition to color, the direct competitors would follow soon after. If this trend is valid, one could expect significant volumes of bi-tonal paper volume to transition to color in the next several years. In fact, we may be seeing evidence that this is beginning to occur right now, as firms in various industries begin to experiment more aggressively with the use of color in their service fulfillment (transactional) documents.

Responsibility for document output strategies is increasingly consolidated, but remains fragmented.

Today, more than half the firms surveyed still lack a centralized control mechanism for document output strategies, a clear challenge if organizations want to leverage this communication channel.

More than 48% of the organizations responding to our survey have a centralized function for managing document communications. Approximately 30% have a distributed arrangement, with a few different functional units catering to different locations or business units; and in 15% of cases, the function is totally decentralized, with each of the business units maintaining a distinct function for managing document communications. The remainder of respondents outsource this function.



Figure 8. Organizational Structure for Managing Document Communications

For those organizations that have a centralized function for managing document communications, IT is most often the unit responsible for this function. But nearly 70% of the firms surveyed either have no strategy or rely on individual departments or business units to formulate and execute document output strategies.

In terms of funding, 43% of the survey respondents reported that they follow a charge-back system, where the document communication expenses are billed back on the basis of specific usage. In the case of 36%, the expenses are channeled back to business units on high-level usage allocations, rather than by direct, consumption-based metrics. In 21% of the firms, the costs are absorbed as a corporate overhead expense.

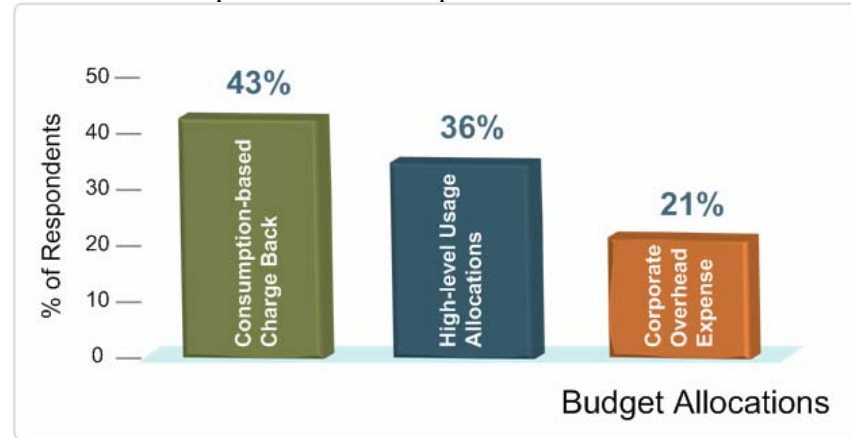


Figure 9. Budget Allocations for Document Output

Finally, more organizations are moving toward single executive ownership of their document output strategies. Yet the distribution of functional ownership between IT, operations, and marketing indicates that the industry remains fragmented as to where document communications should fit. This raises questions about coordination and governance, as all three functions have a vested interest in efficient and effective communications, and might explain why progress is slower than expected toward stated goals (reduce costs, increase electronic delivery, etc.).

Functional Ownership	2006 (percent)	2005 (percent)
No one; we do not have a documented strategy	27.50	27.29
Senior Financial Officer (or reporting up to this officer)	1.79	1.18
Senior IT officer (or reporting up to this officer)	15.00	7.53
Senior Marketing Officer (or reporting up to this officer)	5.00	4.71
Senior Operations Officer (or reporting up to this officer)	10.36	6.59
We have a document output strategy, but responsibility is spread across functional departments or business units	40.36	45.65

Table 4. Responsibility for Document Communications Strategy

For sourcing, internal services (in-plant) are preferred to outsourcing.

As in 2005, we found little change in sourcing preferences for 2006. If an organization currently used an internal function last year, it is likely to continue doing so this year.

Our 2005 survey found that most organizations prefer to retain document production and distribution internally. Note that the survey was sent to self-selected respondents generated from a list of industry participants who focus on document communications as part of their day-to-day functions. Thus, the survey was less likely to be completed by marketing, sales, or procurement professionals who rely on third-party suppliers (outsourcers) as a proxy for direct industry participation. Therefore, while the distribution of internal vs. outsourced print and distribution functions reported in this study is not likely to be indicative of the industry at large, the survey would identify any changes in direction on the part of organizations using internal services.

Overall, we did not find any significant changes to the buyers' sourcing strategies in 2006. More than 67% of the buyers indicated their preference to retain the document production in-house. The tendency to use an internal capability was largely governed by factors such as speed and timeliness, confidentiality of customer data, cost-effectiveness, and control factors. In the 2005 study, we concluded that no change to outsourcing preferences was likely, due to a number of factors, but most importantly cost. As in the 2006 study, preferences toward outsourcing have not changed.

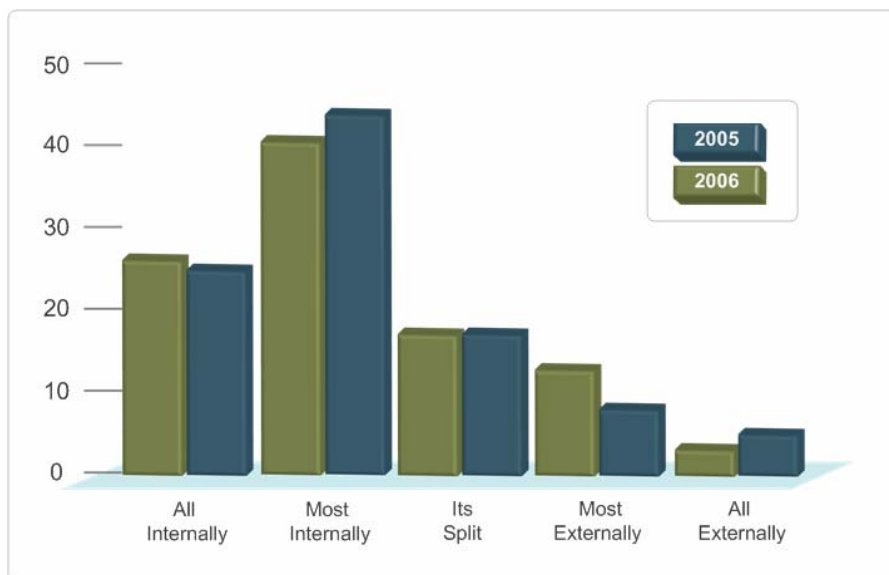


Figure 10. Sourcing Strategies for Document Production

But what if a competing internal capability does not exist, as potentially is the case with data-driven digital color? In this case, we would expect organizations to look externally, certainly at first when volumes are low. Then, as volumes increase, organizations will consider bringing the color capability in-house. Thus, it is likely that the outsourced service providers will continue to focus their efforts on providing specialized services requiring a more diverse asset base at premium prices.

IV. Implications: Document Communications Outlook

Given the trends identified in this study, possible impacts and outcomes are going to be much more complex for organizations to anticipate in the years to come. Those that do not sufficiently appreciate the subtle changes to document delivery preferences could experience significant financial ramifications.

Over the next few years, the implications of a successful customer document communications strategy will continue to be in flux. Yet the patterns and trends highlighted in this study lead to several interesting implications:

First, there is a complex set of dynamics that need to be taken into consideration when creating an organization's go-forward strategy.

Understanding the increased use of color, the electronic adoption delivery rate, print suppression metrics, etc. — all in light of cost constraints — will require more sophisticated approaches to forecasting and modeling than previously expected. The skills historically needed to ensure a firm's communications needs were being met (for example print operations) are likely to be marginalized, replaced with a cross-disciplinary skill set that combines the perspectives of marketing, IT, and operations.

Second, the lack of centralized responsibility for document communication strategies and clear budgeting / charge-back mechanisms further clouds the financial implications of these trends.

While corporate governance is a top priority in many organizations, most have not considered applying such discipline to the function of document communications. The cross-functional aspects of ensuring that documents are visually appealing, that they can be delivered both electronically and in paper form, and also managing the costs of these delivery mechanisms, could “slip under the radar” of typical corporate governance initiatives. As a result, many line or business unit managers might continue to make their own decisions, perhaps unaware of the long-term implications for the customer experience and for optimization of spending.

Third, for internal black-and-white (bi-tonal) print operations, these trends are likely to erode current print volumes. While the decline might be slow initially, at some point the migration to electronic delivery and data-driven color will make an internal print function's unit costs non-competitive, if they are unable to scale down their staffing and asset bases or migrate to digital color. **In fact, internal black-and-white print functions may follow a similar pattern to the in-plant offset printing functions just a decade ago: commoditization and potentially extinction.** Outsourced providers are likely to accelerate the commoditization, as their excess capacity may cause a drop in black-and-white pricing. Alternatively, the internal function's ability to convince senior management to make the investment required for color production will also be difficult, as document communications is not regarded as a strategic competency.

Finally, our 2006 study confirms a number of clear trends which were previously identified in our 2005 study. In 2005, however, we were cautious about predicting the timing of the impact of these trends on the industry. As a result of the 2006 study, we are now better positioned to at least begin to model the overall directional impact of these trends over time, and, more important, to understand the inter-dependencies of these trends.

Doculabs created a hypothetical model highlighting how, in just five years, a few percentage point changes in the use of various communication methods could change the overall landscape dramatically.

Consider the following hypothetical model, developed as a result of completing this analysis. The model is based on the following assumptions:

1. Black-and-white (bi-tonal) print volumes will erode at a rate proportionate to the growth in color print and the ability of organizations to suppress print.
2. The growth of color print will accelerate, as a result of price reductions and competitive pressures to improve the customer experience.
3. Electronically delivered documents will begin to grow quickly, as the latency between firms initializing the service and user acceptance are no longer inhibiting factors.
4. Print suppression continues to remain nominal in the short term until organizations begin to understand how to effectively influence user preferences, but eventually begins to grow at a constant rate.

Hypothetical Industry Transition (percentage of documents)	2004	2005	2006	2007	2008	2009	2010
B/W Bi-tonal Print	98	95	89	82	75	65	55
Digital Color	2	5	10	15	20	25	30
Paper-based Communication	100	100	99	97	95	90	85
Electronic-based Communication	5	10	15	20	25	30	35
Print Suppressed	0	0	1	3	5	10	15
Total Document-based Communication	100	100	100	100	100	100	100

Table 5. Hypothetical Industry Transition

Note that this model remains hypothetical, as the actual percentages shown above are unknown today with any level of statistical confidence. In this model, we see that over the course of just five years, it is possible that we will see some very dramatic changes. For that reason, over the next several years, EDSF and its research partners will continue to examine these dynamics very closely in an effort to better guide both suppliers and buyers of document communications systems and services.

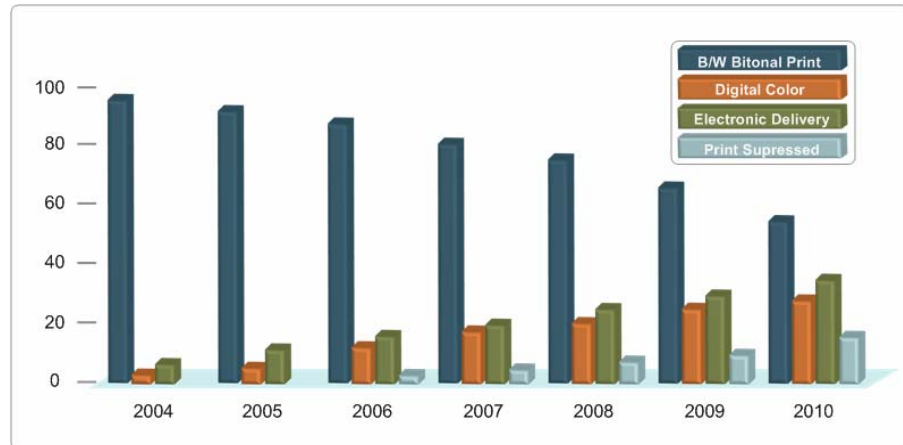


Figure 11. Projected Trend of Hypothetical Model

About the Electronic Document Systems Foundation (EDSF)

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- Linda Andrews and Amanda Maglish, Doculabs

The Electronic Document Systems Foundation is (EDSF) is a charitable foundation dedicated to preparing the next generation of professionals for the industry. EDSF supports the industry's future by granting scholarships to students in support of their academic careers, by sponsoring a research grant/mentor program for colleges and universities, by building awareness about industry careers, and by recognizing innovative educators and educational programs. EDSF serves vendors and users who design and implement document solutions for business applications.

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EDSf
The Electronic
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Foundation

606 Silver Spur Road, Suite 280
Rolling Hills Estates, CA 90275
Phone: +1 (310) 265-5510
Fax: +1 (310) 265-5588
www.edsf.org