HOW SMALL BUSINESSES LEARN

FINAL REPORT

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INTRODUCTION

The well-being of the American economy requires that small businesses receive the help and the information they need to thrive and grow. The source of more than one-half of our nation's jobs, and a focal point for innovation, small businesses are important catalysts in the continuing economic recovery. The small business community is an important market for those who sell business services, and an important constituency for policymakers.

Management experts are making ever-increasing efforts to understand and promote successful small business management methods. Many of those efforts involve providing needed information to small business owners and managers. Decisions made on the basis of no information or faulty information can be costly and damaging to small business interests. And it is difficult for many small firms to get access to timely, reliable information.

Much of the information small businesses need is or can be provided by government sources. Government agencies can offer small businesses help in the form of loan and management assistance programs; they are also the nation's largest single purchaser of small business goods and services. Federal agencies need to inform small businesses about changes in laws and regulations that affect them, offer them technical assistance, or purchase goods or services from them through small business set-aside programs.

Government agencies with responsibility for disseminating information cite small businesses as their most challenging audience to reach effectively. The difficulties of spreading information to the small business community are notable; small businesses are widely scattered, diverse, and only sporadically organized into cohesive groups. Owners and managers are the least likely to have the time to attend conferences, read in-depth government reports or news analyses.

The U. S. Small Business Administration's Office of Advocacy has recognized the need for government agencies and others to be more efficient and effective conveyors of information to small business, as well as the need to facilitate more effective gathering and use of information by small business owners and managers. Therefore they sponsored a study about how small business owners and managers acquire the information they need to make strategic decisions for their businesses and plan for the future. Berkeley Planning Associates (BPA) was the contractor carrying out the study.

The study was designed to:

- Help those who provide information -- including government agencies and publicly-sponsored information sources -- to become more efficient and effective in their communications with small business audiences;
• Understand small business owners' and managers' practices and preferences related to receiving information from outside sources;

• Help small business owners and managers become more efficient in acquiring and processing information; and

• Reveal differences among sectors of the small business community (defined by industry, size group, age of firm, extent of growth or change) in their response to existing communication efforts.

The principal source of data for this study was a telephone survey of 1247 owners and managers of companies with fewer than 100 employees, conducted during February and March of 1994. This survey was the first of its kind to cover this specific topic: it was nationwide in scope and included companies across several industry groups. About 60% of the individuals contacted completed the survey; data on responding and non-responding firms indicated no response bias. Reported barriers to response were lack of time, lack of interest, and general distrust of government inquiries.

The remainder of this summary describes the study's major findings and points out lessons for improving the effectiveness of federal agencies' communications with small business.

FREQUENCY OF RECEIVING INFORMATION FROM DIFFERENT SOURCES

The survey asked small business respondents how frequently they used each of nineteen sources of business information. The sources most frequently used were informal business contacts such as customers (91%), suppliers (87%), and competitors (72%). Other important sources were newsletters/magazines published by trade and professional associations (91%) and meetings of those groups (79%). Respondents reported that they read the direct mail advertisements they receive (82%), that they get more business-related information from newspapers and magazines (81%) than from television and radio (67%). Respondents had attended workshops for which they had paid a registration fee (64%) far more often than they had attended government-sponsored workshops (25%). Over 60% of them reported that they rarely or never receive business-related information from family members, as compared to 44% for friends. Among the least frequently-cited sources of business information were government officials (40%) and government reports (56%). All of these findings are consistent with the general observation often expressed that one of the scarcest commodities in a small company is the time of top management.

Variation in small business owners' use of information sources corresponded to differences in their companies' characteristics. Much of the variation appeared to be related to the out-of-pocket cost of using information. "Expensive" information sources -- such as accountants, consultants, attorneys, trade association meetings, paid workshops, and even trade association newsletters -- were most frequently used by larger, more mature companies, those experiencing substantial growth and change.
Differences associated with industry group had an entirely different logic, one linked more directly to the nature of the products and services being sold. Finance, insurance and real estate companies tended to be the heaviest users of government information and information from finance-related sources. Construction and retail firms had the strongest informational links to their suppliers, while manufacturing firms were the most heavily dependent on customers.

**ACTIVELY SEEKING DIFFERENT TYPES OF INFORMATION**

The survey also found that a high percentage of small business owners and managers actively seek information to help them manage their companies. The types of information most frequently sought were related to technology (72%), computers (78%), management skills (65%), and information to be used in making purchasing decisions (73%). Nearly three-fourths of respondents reported actively seeking information about regulations that affected their business operations, such as employment and safety laws.

In analyzing how different patterns of information-seeking behaviour relate to company characteristics, we found that many of the same types of companies noted above as heavy users of information are also active seekers of information. Two overlapping groups were the most active: (1) the largest companies, and those with high revenues; and (2) companies that were growing and experiencing moderate or extensive change. Those two groups appeared to have, respectively, the resources to enable them to absorb information, and the greatest need for information.

**USEFULNESS OF INFORMATION FROM SELECTED SOURCES**

Respondents were asked whether they found information from selected sources easy to obtain, easy to understand, timely, accurate, and relevant to their business needs. About 62% of respondents said they relied on accountants for information, and found that information timely (91%), accurate (89%), and relevant to their business needs (96%). The next most useful information sources were trade and professional associations (used by 54%). Sources such as these have a real need to satisfy their "customers," and therefore a strong incentive to provide up-to-date, individually-tailored information, on time and in an accessible and easy-to-understand form.

By contrast, governments, particularly the federal government, are seen as remote from the day-in-and-day-out circumstances of individual small business owners and managers. The information government agencies provide is of necessity generic, rarely industry-specific, usually unable to take into account local circumstances, and seldom tailored to the need and situation of the individual companies receiving it. In comparison with other sources, the federal government is impersonal and far removed from the reality that seems most immediate and most important to these respondents. Only a few respondents had direct experience with government sources of information. However, those who had used federal government sources said that the information was easy to obtain (85%), timely (78%), and relevant to their business needs (81%).
EFFECTIVENESS OF DISSEMINATION METHODS

Many small business owners and managers reported that direct mail notices were the most effective means of disseminating information to them. While the sheer volume of direct mail notices sent to small businesses may make it difficult to ensure that any particular notice stands out, this pattern was consistent with the respondents' tendency to rely heavily on printed media. Printed sources of information may have the advantage of being flexible as to when and where they are used.

Similarly, respondents cited both the front page and business sections of newspapers as relatively effective ways to attract their attention. Newspapers are extremely common and widely-read, and are quite cost effective for both the reader and those, such as public agencies, that may wish to use them to communicate with broad national audiences.

Organizational sources (meetings and newsletters of trade associations) were, overall, important media for communicating with small business owners and managers. We recommend that the SBA strongly consider working through trade groups and their various communications mechanisms to disseminate information. We also note that respondents rated broadcast media (news reports and public service ads on both television and radio) as relatively poor strategies for disseminating information.

SUMMARY

The overall pattern of survey responses is neither unexpected nor difficult to explain, based on reviewing related literature and on prior contacts with small business owners and managers. Small business owners and managers confirmed that they most frequently use -- and respond best to -- information provided by sources they already know and trust. The most important, prevalent, and useful information sources, overall, were:

- Sources that already know a great deal about the "consumers" of the information, the business conditions they face, and their immediate local context, and thus can tailor information to meet specific needs; and

- Sources with the strongest built-in incentives to be responsive to the needs of individual "consumers" of information -- that is:
  -- those that, like suppliers or accountants, have a business interest in strengthening their relationships, and
  -- those with constituencies that require them to be responsive, such as trade and professional associations

Particularly important for federal dissemination efforts were the following conclusions:

- Working with trade and professional associations, and taking advantage of their existing routes of communications with small business owners and managers, is likely to yield significant results.
Respondents' overall reactions to information provided by federal government agencies were negative; respondents were much more aware of the federal government as a factor constraining their operations through regulation than as a provider of opportunities such as purchasing, benefits, subsidies, or loan guarantees.

Several respondents -- along with other small business owners and managers who declined to participate in the survey -- offered comments making it clear they see government as acting in ways detrimental to small business interests. Communicating effectively with small business will require changing such perceptions, taking care that communications are sensitive to entrepreneurs' points of view. This study pointed to the possibility that the federal government, while having a great deal to offer small business, will have difficulty communicating that fact. But, given the importance of communication for improved understanding, these findings actually underline the need for continued attention to government communication with small business.
I. INTRODUCTION

Interest in improving the health of the American economy requires efforts to give small businesses the help and the information they need to thrive and grow. As the source of more than one-half of U. S. jobs and much of our country's innovation, small businesses are important catalysts in the continuing economic recovery. The small business community is being taken seriously by those who wish to sell business services as well as by policymakers. Management experts make ever-increasing efforts to understand (and promote) successful small business management methods.

The marketplace changes quickly in response to new technology, innovations that affect the way consumers use leisure time, changing attitudes about the environment, emphasis on health concerns, and other changes in our way of life. And at the center of each of these changes are small business opportunities; our nation's newest and fastest growing industries are dominated by small firms.¹

Management experts are making ever-increasing efforts to understand and promote successful small business management methods. Many of those efforts involve providing needed information to small business owners and managers. Decisions made on the basis of no information or faulty information can be costly and damaging to small business interests. And it is difficult for many small firms to get access to timely, reliable information.

Information small businesses need is also provided by government sources. Government agencies have opportunities to offer small businesses help in the form of loan and management assistance programs, as well as being the nation's largest single purchaser of small business goods and services. Federal agencies need to inform small businesses about changes in laws and regulations that affect them, or offer them technical assistance, or purchase goods or services from them through small business set-aside programs.

PURPOSES OF THE STUDY

The U.S. Small Business Administration's Office of Advocacy has recognized the need for government agencies to be more efficient and effective conveyors of information to small business, as well as the need to facilitate more effective gathering and use of information by small business owners and managers. Therefore, they sponsored this study on how small business owners and managers acquire the information they need to make strategic decisions for their businesses and plan for the future. Berkeley Planning Associates (BPA) was the contractor carrying out the study.

The study was designed to help those who provide information -- including government agencies and publicly-sponsored information sources -- to become more efficient and effective in their communications with small business audiences. And it was designed to help small business owners and managers become more efficient in acquiring and processing information from outside sources.

The study was also designed to reveal whether some sectors of the small business community are systematically left out of existing communication efforts. It analyzed whether the small businesses most efficient at acquiring information from government sources differ systematically from others (e.g., are larger, are growing faster, or are less affected by industry changes.)

THE CHALLENGE OF PROVIDING INFORMATION TO SMALL BUSINESS

Management theorists tell us that small businesses, particularly those in new, growing, and changing industries, are more likely to prosper if their owners and managers have access to the information they need to make wise business decisions.\(^2\) The quality of information a decision maker uses has a direct effect on the quality of the decisions he or she makes. Decisions made on the basis of no information or faulty information can be costly and damaging.

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to small business interests. And it is difficult for many small firms to get access to timely, reliable information.

Government agencies with responsibility for disseminating information cite small businesses as their most challenging audience to reach effectively. The difficulties of spreading information to the small business community are notable: small business owners are widely scattered, diverse, and only sporadically organized into cohesive groups. They are the least likely to have the time to attend conferences, or read in-depth government reports or news analyses.

For many reasons, the Office of Advocacy of the U. S. Small Business Administration (SBA) is in a unique position to take on the challenge of improving communications between the government and small businesses. Among the primary functions of the SBA are several that are closely related to that challenge:

- Studying the role of small business in the American economy and the unique contribution of small businesses to increasing employment and productivity, and stimulating innovation.

- Tracking the effectiveness of Federal subsidy and assistance programs designed to help small business.

- Measuring the direct costs and other effects of government regulation and the tax structure on small business.

- Assessing the merits of different methods to provide business education, management and technical assistance, and training to small business owners and managers, as well as to help them comply with Federal, State, and local laws.

- Evaluating the efforts of Federal agencies, business and industry to assist minority business enterprise.
• Recommending ways to assure a business environment in which all companies have the opportunity to compete effectively and expand to their full potential, and to ascertain the common reasons, if any, for small business successes and failures.

An effective response to these mandates is predicated on small business owners and managers having access to the information they need to operate effectively. For instance, in order for Federal subsidy and assistance programs to be effective, small business owners and managers must know that they exist and have information about how they can participate. Similarly, measuring the direct costs and other effects of government regulation and taxes on small business can only be done if small businesses are actually getting the information they need about regulations and taxes. Providing effective business education and management/technical assistance definitely requires effective communication channels.

In addition to representing the views and interests of small business before other Federal agencies whose policies and activities may affect small business, the Office of Advocacy has other ongoing mandates, of which two are particularly relevant to the needs presented here, including:

• Counseling small businesses on how to resolve questions and problems concerning the relationship of the small business to the Federal Government.

• Enlisting the cooperation and assistance of public and private agencies, businesses, and other organizations in disseminating information about the programs and services provided by the Federal Government that are of benefit to small businesses, and information on how small businesses can participate in or make use of such programs and services.
FINDINGS FROM PRIOR RELATED RESEARCH

Academic interest in "how small businesses learn" has spurred several studies and surveys by experts and practitioners, including several that have laid important groundwork for this study. Of particular interest has been the relationship between information and strategic planning; many but not all studies of this topic show that efforts to collect information from outside sources pay off in improved company performance. One major input into the strategic planning process is information about the external environment, or that gained from environmental scanning. Small business owners and managers lack formal training in planning, and so they typically use relatively informal scanning processes. To get information about the outside world, they often rely on people or institutions that also serve other purposes, such as customers, bankers, or accountants.

Findings from a study of 88 small firms' environmental scanning practices were that owner and managers: (1) conduct scanning regularly, relying on personal sources of information as the most important -- particularly informal personal sources such as family and friends; (2) do not, by contrast, regard competitors as important sources of information; and (3) see magazines and journals as the most important sources of impersonal information. Unanswered questions relate to the importance of these patterns for small business growth, financial well-being, or stability over time.

Another study looked at the relationship between the extent and type of environmental scanning and the firm's level of entrepreneurship (i.e., risk-taking, innovation). They study used

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4For example, gathering and interpreting outside information to be used in organizational decisions.

very small firms in a particular part of the health service industry. The highest levels of entrepreneurship were associated with heavy reliance on informal (human) information channels, channels which may be characterized as exclusive or to which the entrepreneur has preferential access. Written (i.e., formal) information sources, by contrast, are broadly available, and can be used by a range of decision makers.

Experts, including Lengel, O'Reilly, Fann, and Smeltzer (see footnotes 7-9 below), have analyzed several key dimensions (or attributes) of information that determine frequency of use by small business owners and managers. They conclude that the key attributes are: degree of richness, accessibility, and perceived quality of information. In other words, the richer, more accessible, and higher the quality of information from a particular source, the more likely it is that small business owner or manager will use the information. Those dimensions are explained as follows:

(a) **Richness of information**, a function of the communication media used. Face-to-face communication transmits the richest information, aided by complex "cues" (e.g., facial expression), and is most needed when the information being transmitted is ambiguous or complex. In descending order, less rich information is transmitted by telephone calls, letters, written documents, and numeric documents. Decision making in clearly defined situations can be successful using "non-rich" information (e.g., data). However, ambiguous situations and high levels of uncertainty require the manager to interact with others, usually face-to-face, to seek out interpretations and come to mutual understanding with those involved with the decision making. Overall, the richest information sources are the most frequently used.

(b) **Quality of information**, a function of its relevance, accuracy, reliability, and timeliness. It is nonetheless not an objective measure: reports of information quality tend to vary with decision maker's experience, goals, and personal preferences.

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Accessibility of information, which surveys have found to be a stronger determinant of frequency of use than quality. Small businesses disproportionately encounter barriers to acquiring and processing information. The principal barrier is cost -- even in the absence of measurable out-of-pocket dollar costs, the "price" (the investment of top management time) often represents a hardship for small businesses. However, perceived quality and accessibility are both closely related to frequency of use.

The three studies cited, and other related studies, have concluded that small business owners' and managers' preferred sources of information are:

- Family and friends;
- Customers and employees;
- Bankers, lawyers, and accountants;
- Suppliers or vendors;
- Newspapers or magazines;
- Competitors; and
- Trade and professional meetings.

However, these studies have usually been based on interviews with fewer than 100 companies, often in selected industries or within other specialized groups such as start-up firms or firms limited to a particular geographical area. Many of those studies have also used an open-ended face-to-face interviewing format; this method, though it yields rich anecdotal information and a wide range of information for each respondent, does not necessarily result in comparable questions being asked of all respondents, or in generalizable results.

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10In fact, the studies reported here generally did not consider the life cycle of the business, even though several recent studies have shown that a company's stage of development has a significant relationship to its operations.
Furthermore, the findings of these earlier studies are not necessarily applicable to the practical challenges of disseminating needed information to small business. They do not systematically address a crucial barrier to small business acquisition and use of information: cost. In particular, they do not address the "cost" of top management time. Another notable gap in the academic literature is the lack of attention to how small businesses respond to government activity. In particular, existing studies provide no data about the role and effectiveness of government agencies in providing information to small business.

ORGANIZATION OF THIS REPORT

Chapter II describes study methods, including sampling, and discusses the characteristics of survey respondents and non-respondents.

Chapter III summarizes the overall findings of the study. It describes the answers that interview respondents gave to the questions asked during the survey, including: both the frequency of receiving information from various sources and the efforts to search for various types of information; the accessibility, accuracy, timeliness, and usefulness of information from various sources; and the perceived effectiveness of alternative mechanisms for transmitting information.

Chapter IV presents the results of our analysis of the differences in survey responses given by different subgroups of respondents based on the characteristics of the business, such as industry, size, and growth rate.

Chapter V presents the conclusions and recommendations that emerged from our analyses of survey responses.
II. METHODOLOGY AND DESCRIPTION
OF THE SAMPLE

STUDY METHODS

Data was collected through a telephone survey conducted between February 22 and March 30 of 1994 from interviews with a total of 1,247\textsuperscript{1} small business owners and managers. Sampled companies were sent an introductory letter, signed by the Acting Chief Counsel for Advocacy of the U. S. Small Business Administration, approximately one week before the first phone call to the company. A computer-assisted telephone interviewing (CATI) system was used, allowing direct entry of data while each interview was being conducted. Appendix A includes a copy of the introductory letter and the OMB-approved survey.

Sampling

The sample for the survey was drawn from the database maintained by Dun and Bradstreet Information Services, the current version of Dun's Market Identifier (DMI). At the time of the sampling, the DMI contained over 11 million records covering the universe of U.S. small businesses.

The immediate focus of the inquiry was the individual small businesses owner or manager, though information was also gathered about the characteristics of each respondent's company to help us interpret the responses he or she gave to the questions. The sample included a total of 2,473 small firms, of which 2,048 were contacted, and 1,247 responded to the survey (see Figure II-1 below).

\textsuperscript{1} Eight interviews were terminated before completion (but after the collection of some relevant data). This was generally due to the respondent interrupting the interview and later being unavailable for completion of the interview. Thus, a number of questions have an \( n \) of 1,239 to 1,247.
Figure II-1
The Sample: Disposition of Cases

1 Source: Data provided by Dun & Bradstreet, January 1994.
The sample was stratified by company size (number of employees):

- Under 5;
- 5-19;
- 20-49; and
- 50 and over.

The sample was also stratified into five industry categories:

- Construction;
- Manufacturing;
- Retail;
- Finance, insurance, and real estate (FIRE); and
- Services.

Companies were sampled with probability proportional to size, and not in proportion to their distribution in the general population. The sampling procedure yielded a size-industry mix that differs from the universe of small businesses in several respects:

- Companies with more than 100 employees were excluded;

- Firms were sampled from only five selected industries;

- Companies with zero employees were excluded, unless they were already included in the Dun and Bradstreet data base (i.e., reported one and not zero employees); and

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*During data collection, interviewers found that some firms could not be classified into the five pre-coded categories; those firms were combined with construction firms, and the label construction and other was used when describing survey results.*
The number of employees was used as the basis for specifying the sampling strata, thereby over-sampling manufacturing firms and firms in the larger size categories, while under-sampling service and retail firms and those in the smallest size categories.

The study's sampling procedures allowed a slightly more equal spread across industry-size categories than a simple random sample would have produced. This procedure was adopted in order to avoid very small cell sizes that might have resulted from a strictly random sample, while retaining a structure that reflects the universe of small businesses. (Figure B-1 in Appendix B presents both the size and industry distribution of the universe, the initial sample, the final sample, and the survey respondents.)

Data Analysis

The software used for the survey, the Computer-Assisted Survey Execution System (CASES), automatically collected survey responses into data bases. Data were analyzed using SPSS/PC+ software (version 5.0.1), conducting both descriptive analyses (univariate frequencies, cross-tabulations) and hypothesis testing (Chi Square). Analysis focused on the sources from which respondents received information, how useful they found information from specific sources, and whether or not they had sought out different types of information, and the perceived effectiveness of different methods for disseminating information. Responses were cross-tabulated by company characteristics: size, industry, revenue, number of years in business, recent history of growth or contraction, and changes in the industry and the company itself.

DESCRIPTION OF RESPONDENT FIRMS

Of the 2,473 firms originally sampled, interviewers determined 425 to be non-valid cases. Generally, cases were non-valid because:
Interviewers were unable to contact the sampled firm: the telephone number was disconnected and no forwarding telephone number was listed with operator assistance, or

The sampled entity was found to not be a small business: it had gone out of business, or had become (or been absorbed by) a non-profit or a larger business concern.

Once non-valid cases were eliminated, a final sample of 2,048 small businesses remained. The percentage totals by firm size and industry for the initial and final sample closely match (Figure B-1). In other words, based on these company characteristics, we found no significant selection bias resulting from the elimination of non-valid cases.

Careful comparison shows that selection bias based on refusal to participate was extremely limited (see Figure II-2 below). The respondent group included a relatively higher percentage of firms with 20-49 employees (33%), than did the group who did not participate (27%). The same was true in the FIRE industry category, which included 10% of respondents

**Figure II-2**

**Summary of Characteristics:**

**Respondents and Non-Respondents**

<table>
<thead>
<tr>
<th>Size and Industry Group</th>
<th>Percentage of Respondents</th>
<th>Percentage of Non-Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 5</td>
<td>11.2</td>
<td>12.3</td>
</tr>
<tr>
<td>5-19</td>
<td>34.2</td>
<td>35.3</td>
</tr>
<tr>
<td>20-49</td>
<td>33.0</td>
<td>26.8</td>
</tr>
<tr>
<td>50 or More</td>
<td>21.7</td>
<td>25.5</td>
</tr>
<tr>
<td>Industry Group:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>14.3</td>
<td>14.4</td>
</tr>
<tr>
<td>FIRE</td>
<td>10.3</td>
<td>7.2</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>20.1</td>
<td>21.0</td>
</tr>
<tr>
<td>Retail</td>
<td>24.4</td>
<td>23.4</td>
</tr>
<tr>
<td>Services</td>
<td>30.9</td>
<td>34.0</td>
</tr>
</tbody>
</table>
and 7.2% of non-respondents. The services category was underrepresented among respondents (31%) compared to non-respondents (34%). With these exceptions, the two groups mirrored each other quite closely.

The survey gathered additional data describing the firms including:

- Number of employees;
- Industry group;
- Number of years in business;
- Annual gross revenue;
- Recent changes in the firms' gross revenue; and
- Extent of perceived change in the firms' industry and the firms themselves.

The data on firm characteristics allowed the study to validate or update the industry and size information that was provided by Dun and Bradstreet Information Services as part of the sampling process. The study did not require systematic comparison of information about individual companies' size and industry, comparing data from Dun and Bradstreet with self-reports during the survey. The analysis verified, however, that the overall respondent characteristics matched initial expectations.

The interrelationships among characteristics of the respondent firms were analyzed. Several statistically significant associations among those characteristics emerged (see Figure II-3 below). Those associations should also be considered when interpreting the analysis in Chapter IV of response variation by respondent characteristics.

NON-RESPONSE: EXTENT AND REASONS

Of the final sample of 2,048 firms, a total of 801 declined to complete a survey (refusals). These cases includes both individuals who clearly declined to cooperate (speaking directly to the interviewer or through an intermediary) and those who simply could not be reached directly (were not available to the interviewer and did not return calls). The latter group
constituted a vast majority of non-respondents; for them, the reason for non-cooperation was impossible to determine.

Figure II-3
Significant Associations among Company Characteristics

- Firms with fewer employees were more likely to be younger firms, and to report smaller gross revenues and lower growth and more change in their business (and vice-versa in each of the three former associations);
- The youngest and oldest firms were the most likely to report extensive change in their companies;
- Firms with higher gross revenue were more likely than others to report high growth and extensive change within the firms;
- Higher growth firms were more likely to be in lower change industries and to report more extensive company change (and vice versa);
- Firms in lower change industries were more likely to report less extensive company change, and vice versa;
- Manufacturing firms were more likely to report higher gross revenues and have more employees; and
- Service firms were the most likely to have small numbers of employees.

Whenever possible, interviewers asked refusals why they declined to cooperate. Without further explanation, 157 refusals reported that they were "not interested" in the survey. An additional 76 reported that they were "too busy." About 35 refusals declined to give a reason. At least 20 potential respondents addressed the question by hanging up the phone.

Approximately 94 refusals gave more specific reasons for not cooperating. While there is no evidence to suggest that refusals who were willing explain their lack of cooperation constitute a representative sample of all refusals, their answers do shed some light on sentiments of small business owners and managers towards telephone surveys. For instance, 20 refusal respondents asserted that they "never do surveys" and another 16 reported that they "never do
phone surveys." Many others indicated other reasons for declining, including: language barriers, illness, it was the busy time of the year, the firm was soon to close, the survey was a "waste of time," they were "anti-government", etc. One refusal respondent declined because the individual had been informed that the SBA was "backing Clinton's health care plan."

Interviewers were also asked to describe what they themselves thought were the main reasons for non-response. Most often, they reported a widespread misunderstanding, distrust, and cynicism with respect to the Federal government in general, and the SBA in particular, among small business owners and managers. Many respondents felt the agency had failed to carry out its mandate to support small business survival and growth. Many respondents recounted difficulty in obtaining SBA loans or expressed resentment about loan guarantee guidelines, minority business enterprise set asides, etc. More than a few business people wanted to know what the survey would do for them and their business specifically, or even wanted a direct quid pro quo. At least a few respondents declined to cooperate unless they were promised preferential treatment with a pending loan application. Several interviewers also believed that some types of business would probably be under represented because of the consistent difficulties they had in securing the cooperation of potential respondents. Beauty salons, eating establishments, and professional corporations (e.g., lawyers, doctors, accountants) were the types of firms most often mentioned.

Turning to the individuals who did respond to the survey, Chapters III and IV report the answers they gave to the survey questions about types and sources of information they use to make business decisions.
III. SURVEY FINDINGS

OVERVIEW

This chapter shows how respondents answered the four basic sets of questions in the survey:

- During the past year, how often did you receive business-related information from each of the following (nineteen) sources?

- During the past year, have you actively gone out and searched for each of the following (eleven) types of information?

- If you have received information from (each of six sources), please answer some questions about how you received the information and how useful it has been to your business; and

- If the government needed to get information to you about an important new policy or program, what would be the most effective (of the following ten) ways for them to go about bringing the change to your attention?

RECEIVING INFORMATION FROM DIFFERENT SOURCES

In inquiring about the extent to which, over the past year, respondents had received business-related information from each of nineteen sources listed, interviewers asked respondents to think in general about "all the ways you normally get information in your business life, such as through the mail, reading newspapers, radio or TV, talking to customers, suppliers, family or friends." Then they were asked to consider each source individually and to recall whether they had gotten information from that source:
• often (monthly or more often);
• sometimes (several times during the year);
• rarely (once or twice); or
• never.

This section summarizes answers from 1,247 small business owners and managers. (See Figures C-1 in Appendix C for a detailed breakout of the number and percentage of respondents who used each source often, sometimes, rarely, or never, and Figure C-2 for an illustration of those responses.) The 19 information sources are classified as business or non-business sources, formal or informal sources, as follows:

• Non-business sources
  -- Informal sources (family and friends)
  -- Media sources (newspapers and magazines, radio and TV news)

• Professional business sources (attorney, accountant, banker, consultant)

• Other business contacts
  -- Informal sources (competitor, supplier, customer)
  -- Formal sources (paid workshop, information hotline, direct mail advertisement)
  -- Organizations (newsletters or meetings of trade and business associations)

• Government sources (government report, government official, government-sponsored workshop)

Frequency of Use

The most frequently-used sources of information were informal business sources -- customers and suppliers, organizational sources, direct mail ads, and non-business sources -- newspapers and friends (See Figure III-1 below). One feature that all of these sources had in
common was their low cost. Of all sources used by more than 80% of respondents, only accountant represents a large expenditure.

Overall, business contacts were important as sources of information, particularly those other business contacts that do not have conveying information as a primary function. Among business-related sources of information, the most frequently used were informal sources: customers, suppliers, and competitors (91%, 87%, 72%). A large percentage of respondents also received information from organizational sources: newsletters and meetings of business and trade associations (86%, 79%). Among business professionals, accountants had provided
information to the largest number of respondents (80%), followed by bankers (69%) and attorneys (62%). Only 41% of respondents reported having received information from a consultant.

The most inconsistent category of business-related information sources was the one we have called formal. About 82% of respondents had received information from direct mail advertising, while 64% had attended paid workshops, and only 34% had used information hotlines.

*Informal non-business sources* -- friends, and to a lesser extent, family members (80%, 67%) -- provided information at least some of the time for a high percentage of all respondents. Similar proportions of respondents reported getting information from general news media. A large majority of them had received information from newspapers and magazines (81%); slightly fewer (67%) had received information from radio and television news.

By far the least prevalent sources of information for small business respondents during the past year were government sources. While 56% of those interviewed had received information from a government report and 40% had talked with a government official, only 25% had attended a government-sponsored workshop.

Looking closely at the information sources cited by respondents as often-used, the study found that:

- Trade association newsletters and customers were used often by at least two of every five respondents.

- Suppliers and direct mail advertisements were the next most frequently-cited (31%).

- Government sources were the least-frequently cited, by fewer than 10% of respondents.
Non-business sources and business professionals fell in the intermediate range, with between 10% and 25% of respondents using them often.

Among media sources, print media (newspapers and magazines, 29%) appeared to receive more than twice as much attention from small business owners and managers as did broadcast media (radio and television, 12%). Among informal sources, respondents received information from friends (21%) more frequently than from family members (15%).

TYPES OF INFORMATION SMALL BUSINESSES ACTIVELY SOUGHT

Respondents were also asked to think about different types of information commonly used in business, and whether or not, within the past year, they had actively gone out and searched for each of eleven types of information listed by interviewers. They were asked whether they had sought information in three general categories (see Figure III-2 below):
Technology (including computers) and management; Operations (capital, marketing, and purchasing); and Regulatory or other government-related information.

Technology and Management

This was the most frequently-sought category of information; a high percentage of respondents reported actively seeking:

- Information on the use of computers and software (78%);
- Information on technology that could affect the design, production, or delivery of the company's services or products (72%); and
- Information about management practices such as total quality management (65%).

Operations (Capital, Marketing, and Purchasing)

Another very important type of information was that needed to make purchasing decisions; nearly three-quarters of respondents had sought data about price, quality, or service. Respondents were also likely to have sought marketing information (61%). However, fewer than one-half of the companies surveyed had actively tried to find information on obtaining capital.

Regulatory or Other Government-Related Information

Companies were also likely to seek information about tax rules and regulations (64%), safety regulations (74%), and employment laws (72%) that could affect their businesses. The least frequently-sought types of information were related to:
• Government purchasing programs -- i.e., what products and services the government might want to buy (13%); and

• Government subsidies, grants, training programs or other benefits that the business might be able to receive (12%).

These differences related to types of information indicate that small business owners and managers think of government less as a source of assistance than as an influence constraining their business operations.

PERCEIVED USEFULNESS OF ALTERNATIVE SOURCES OF INFORMATION

Interviewers asked respondents a series of questions about selected sources of information -- if they had received information from each source, whether they had actively sought the information, in what form they had received it, and how they would rate its usefulness in several respects, including:

• Easy to obtain;
• Easy to understand;
• Received on time;
• Accurate; and
• Relevant to their business needs.

The sources rated were:

• finance sources (banker or accountant);
• federal government sources;¹
• local government;
• Small Business Development Centers;

¹The interviewers gave IRS and SBA as examples of federal government sources, so predictably, those were the sources respondents most frequently specified.
• trade or professional associations; and
• general business organizations.

(See Figure C-5 for comparison of respondents' answers for eight different sources. Figures C-6 through C-8 show how information was obtained, and Figures C-9 through C-14 show the detailed responses to each effectiveness question, comparing the exact unsummarized responses across information sources.)

**Frequency of Use**

By far the most frequently-used sources were accountants (62%) and trade or professional organizations (54%), followed by local government sources (43%) and general business organizations (40%). The least frequently-used sources were bankers (19%), Small Business Development Centers (SBDCs) (13%), and the SBA (7%).

**How Obtained**

The largest number of respondents reported receiving the information in writing, particularly from government sources. For bankers and accountants, face-to-face communication was almost as prevalent; bankers and accountants also communicated by telephone to a greater extent than other information sources.

**Actively Sought**

It was not surprising that respondents actively sought information from bankers and accountants more frequently than from the other information sources named in this series of questions -- nearly two-thirds of those who answered the question reported having taken the initiative to seek the information. Of the remaining sources, SBDCs and trade organizations -- when used -- were often actively sought out by the user, as was the SBA and local government. As expected, the IRS -- often the first example of a federal agency that came to mind for a small
business respondent -- most often provided information that arrived unsolicited rather than being actively sought or requested.

Easy to Obtain

Respondents were in substantial agreement that the information sources mentioned were accessible -- i.e., the information from those sources was easy to obtain, according to over 90% of respondents. Only for federal agencies did the percentage dip below 90%, and even then only slightly.

Easy to Understand

Judging from the pattern of these responses, small business owners and managers find questions of finance the most difficult to understand. Finance-related sources (the IRS, bankers, and accountants), more than others, provided information that was not as easy to understand as it had been to obtain. Overall, all but two of the eight sources (excluding the SBA and the IRS) rated quite high (above 80%) on this measure of usefulness.

Received on Time

The typical respondent answered "yes" when asked if the information was received on time. For several of the sources, the ratings were even higher than for ease of understanding. Only government agencies fell noticeably below a 90% rating.

Accurate

Respondent ratings for accuracy tended to be lower than for timeliness and far lower than ease of obtaining information. However, only the federal agencies fell below 80%, and none fell below 70%.
Relevant to Business Needs

Perhaps the most telling indicator of small business respondents' perceptions about the usefulness and importance of information was the extent to which they reported that the information was relevant to their business needs. For all but two sources, at least three-fourths of respondents said that the information was relevant to their needs. The two exceptions were SBDCs and general business organizations. The highest-rated sources on this measure were accountants, followed by trade and professional associations.

Summary of Usefulness Ratings

The overall pattern of the responses in this section is neither unexpected nor difficult to explain. Small business owners and managers confirmed that they respond best to information provided by sources they already know and trust. The highest-rated sources, in general, were:

- Those that have prior information about them, the business conditions they face, and their immediate local context; and

- Those with the strongest incentives to be responsive.

Government, particularly the federal government, is of necessity providing generic information, not tailored to the need and situation of each company receiving it. By contrast to other sources, the federal government is far-removed from the individual business owner's circumstances.

Many of the sources rated as most useful depend for their business success (or for the continued existence of their organization) on business owners' and managers' satisfaction with their services. Therefore, they have a strong incentive to provide up-to-date, individually-tailored information, on time and in an accessible and easy-to-understand form.
EFFECTIVENESS OF ALTERNATE MEANS OF DISSEMINATING INFORMATION

Respondents were asked to imagine that the government had an important new policy or program that would affect their business and needed to transmit information to them about it. We asked them to rate the effectiveness of ten ways (or media) for transmitting information:

- public service announcements (PSAs) broadcast on radio;
- PSAs broadcast on television;
- television and radio news;
- the front pages of daily newspapers;
- business section of daily newspapers;
- general news magazines;
- trade magazines and newsletters;
- direct mail notices;
- publicly-posted notices; and
- meetings of trade and professional associations.

Respondents rated the effectiveness of each medium on a 1-to-5 scale, where 1 was not at all effective and 5 was extremely effective. To compare, responses among the ten different methods named, we calculated the mean (or average) rating score for each. (See Figure C-15 and C-16.)

Clear lessons emerged about the perceived effectiveness of different methods for government transmitting information to small business owners and managers. The overall ranking of methods, based on the average of rating scores from all respondents, shows direct

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2 Interviewers verified the numerical scores given, using the following additional verbal cues: 2 = not very effective; 3 = somewhat effective, and 4 = effective.

3 The use of means for ordinal data can be challenged on technical or methodological grounds; however statisticians such as E. R. Babbie (Survey Research Methods, Wadsworth Publishing Co., 1973) encourage this and "whatever statistical techniques help the researcher (and the reader) understand the body of data under analysis." While mean rating scores facilitate comparison, a mean score of 4 does not mean that one source is twice as effective as a source rated 2.
mail notices as the most effective, with an average rating score of 4.2 (very effective). Unsolicited respondent comments indicated that the most effective direct mail notices are those that arrive in the most official-looking envelopes.

The other methods rated as effective, in order, were front page newspaper (3.7); trade association newsletter (3.5); business section of newspaper (3.4); and trade association meeting (3.3). The methods seen as less effective were radio and television news (2.9); television PSA (2.6); general news magazine (2.4); and radio PSA (2.2). Only posted notice (2.0) received a rating of "not very effective."

Effectiveness of Broadcast Media

Broadcast media include PSAs on radio, PSAs on television, and television and radio news. Generally, our respondents did not consider broadcast media particularly effective as ways of disseminating information. Nearly two-thirds of them rated the effectiveness of radio PSAs as not at all effective (30%) or not very effective (36%). As for the effectiveness of television PSAs, the largest percentage (31%) found this medium "somewhat effective," though an additional 50% considered it less effective than that. Similarly, respondents typically rated the effectiveness of television and radio news as somewhat effective (31%), and an additional 35% considered it not very effective or not at all effective.

Print Media

Print media includes information from the front page of newspapers, the business section of newspapers, news magazines, and magazines and newsletters produced by trade and professional associations. Print media fared better in our survey than broadcast media. The most frequent rating for the front page of daily newspapers was effective (39%); a total of 65% rated this medium as effective or extremely effective. The business sections of daily newspapers were nearly as effective for our respondents: 37% considered this medium to be effective, and an additional 17% scored it as extremely effective. General news magazines were slightly less
successful, with the typical respondent (34%) considering the medium to be not very effective, and only 18% finding the medium to be effective or extremely effective.

Trade Media

Trade media include trade and professional associations' magazines and newsletters and the meetings sponsored by those associations. Respondents generally considered trade media to be rather effective in transmitting information. Respondents typically considered trade magazines and newsletters to be effective; 35% of them rated this source as 4. In fact, a total of 79% of respondents reported that trade magazines and newsletters were at least somewhat effective (3, 4, or 5) in communicating useful information to business owners and managers. The typical respondent (25%) considered trade meetings to be somewhat effective, and 71% reported that trade meetings were somewhat effective or better.

Direct Mail and Posted Notices

Responses on the effectiveness of direct mail and posted notices varied significantly. Our respondents considered direct mail notices to be the single most effective medium for communicating information to small business owners and managers: the typical response (57%) was extremely effective. In fact, only a total of 11% considered this medium to be not very effective or not at all effective. Conversely, posted notices were not considered effective by the respondents: the most common (35%) response was not very effective, and only 10% reported that posted notices were effective or extremely effective.

SUMMARY

A few of the survey findings differed from those presented in the existing literature on information gathering in small business. Others diverged from the original hypotheses generated during the study, which were based on informal contact with small businesses. For example:
Unlike the findings of earlier studies, this survey found that family members were not considered particularly important as information sources -- nearly two-thirds of respondents reported rarely or never receiving information from family members.

Contrary to the expectation that small businesses would use costly information less often than subsidized (low cost or free) information, respondents had attended workshops that had a registration fee about three times as often as they had attended government-sponsored workshops.

Printed news media generally received more attention than broadcast media; the revolution of electronics in the information age appears not to have reached broad segments of the small business community.

Respondents do in fact read the direct mail advertisements they receive.

Though government is not a frequently-used source of information overall, nearly three-fourths of respondents did actively seek information about regulations that affect their business operations, such as employment and safety laws.

Another group of survey findings emerged as particularly important for the purpose of planning future federal dissemination and communication efforts:

Working with trade and professional associations, and taking advantage of their existing routes of communications with small business owners and managers, is likely to yield significant results.

Respondents characterized direct mail notices as particularly effective ways of communicating with small business owners and managers.

Respondents reported that they do find the time to read at least the front page and business section of newspapers with great regularity.
• A high percentage of small business owners and managers reported actively seeking information to help them manage their companies; the types of information most frequently sought were related to technology (computers in particular), management practices (with emphasis on purchasing) and regulatory information.

• Small business owners and managers reported relying heavily on accountants for information, and found that information highly useful and relevant to their business.

• Respondents' overall reactions to information provided by federal government agencies were negative; respondents were much more aware of the federal government as a factor constraining their operations through regulation than as a provider of opportunities such as purchasing, benefits or subsidies, or loan guarantees.
IV. RESPONSE VARIATION BY RESPONDING FIRMS' CHARACTERISTICS

Respondents reported the characteristics of their companies:

• Company size (number of employees): under 4, 5-19, 20-49, 50 and over;

• Number of years in business: less than 5, 5-9, 10-19, 20-49, 50 and over;

• Company's annual revenues: less than $500,000, $500,000 to $2 million, or over $2 million;

• Company growth over the past three years (10% or more, less than 10%, none, or negative);

• Extent to which the industry was changing: on a scale from 1 (none) to 5 (extensive);

• Extent to which the company itself had experienced change: on a scale from 1 (none) to 5 (extensive); and

• Product or service produced by the company (industry group: manufacturing, services, retail, finance/insurance/real estate, construction and other).

The study analyzed the relationships between those company characteristics and the responses to questions about how business owners and managers gather information. This chapter discusses the differences and similarities among companies in the ways they answered the survey questions about:

• The frequency with which they received information from different sources;
• The extent to which they actively sought different types of information;

• The perceived usefulness of information from selected sources; and

• The likely (perceived) effectiveness of alternative methods the government might use to transmit information to them.

A summary of the relationships between company characteristics and information is shown in Figure IV-1. Overall, the most active firms in seeking and using information from outside sources were large firms, high-revenue firms, firms experiencing growth and change, and firms in the Finance/Insurance/Real Estate industry. More detailed observations are contained in the sections which follow.

The analytic techniques presented here include cross-tabulation, using the most commonly-understood tests of statistical significance (chi square), and comparison of means for scaled survey responses. These techniques were selected primarily for their ease of presentation and familiarity to readers.

RECEIVING INFORMATION FROM DIFFERENT SOURCES

Company Size

For twelve of the nineteen information sources, respondents from the largest of the small firms (those with over 50 employees) were the ones who had most frequently received information from those sources. (See Figure D-1 in Appendix D). Where the study found differences related to size, the most meaningful differences were between companies with fewer than 50 employees and those with 50 or more. This distinction was particularly pronounced for information sources that tend to be costly to use: trade association meetings, consultants, and paid workshops. A similar pattern was seen for contact with a government official. For several information sources -- newspapers/magazines, meetings of trade and business

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1See footnote 3 on page 3-11 for a detailed discussion of comparison of means.
### Summary of Relationships between Company Characteristics and Information

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associations, accountants, consultants, and suppliers, the analysis pointed to important
differences between companies with fewer than 5 employees and those with 5 or more
employees. Several other information sources also appeared unrelated to company size:
competitors, information hotlines, direct mail advertising, government reports, and government
workshops, family, and friends.

The most notable overall pattern in the relationship between business size and use of
different information sources was an almost-universal tendency for larger companies to use all
information sources more frequently. This tendency seems logical since larger companies --
particularly those with more than 50 employees -- tend to have staff whose job descriptions
specifically include information gathering, whereas owners and managers of very small
companies have to make time to gather information themselves, along with their many other
business responsibilities.

**Number of Years in Business**

The age of the respondent's business did not generally appear to have consistent or
striking relationships to their responses to questions about how often they got information from
different sources. Only six information sources (of nineteen possible) exhibited some
relationship. The clearest pattern was that, for four of those six sources, the companies that had
been in business for at least 50 years were the most active in getting information. However, the
patterns among the other company age groupings were inconsistent. One possible explanation
for this phenomenon is that those four information sources (attorneys, bankers, paid workshops,
and particularly government reports) require a level of user sophistication that comes with years
of business experience. By contrast, customers and competitors are relatively obvious
information sources, and were reported to be heavily used by owners and managers of
companies that had been in business a relatively short time (Figure D-2).
Company Revenues

The patterns of responses, when analyzed by different levels of company revenues, also show consistent patterns across several different information sources (Figure D-3). The companies with the highest revenue levels were the most likely to seek information from each of several different sources. Only seven of the nineteen sources listed in the survey were found to vary with company revenues:

- attorney;
- accountant;
- banker;
- consultant;
- paid workshop;
- trade association newsletter; and
- trade association meeting.

Those were sources that typically involve out-of-pocket expenditure. It is logical, for instance, that companies with revenues in excess of $2 million, far more than others, have budgets that allow for use of consultants and attorneys, and attendance at workshops and trade association meetings that have registration fees. When it came to receiving information from accountants,

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Note: Of 1239 respondents who completed the full survey, only 782 (63%) provided information on their companies' revenues; the remaining 457 believed that company revenue information was sensitive or proprietary and chose not to respond. In order to understand the relationship between survey responses and company revenues, we first analyzed the characteristics of respondents and non-respondents to this particular question. Companies providing revenue information did not differ from other companies in terms of company size, years in business, and extent of industry change. Respondents who did not report revenue information tended disproportionately to be from companies in the following categories:

- No growth, followed by low or negative growth;
- Some company change over the last year -- in contrast to no change or extensive change; and
- Finance, insurance and real estate (FIRE) industry, and to a lesser extent service and retail industries.

Because companies with unknown revenues differed from the remainder of companies, we excluded them -- over one-third of all respondents -- from our analyses of revenues.
on the other hand, the most significant distinction was between companies with revenues under one-half million dollars and larger companies.

Company Growth

The extent of company growth was related to use of twelve of the nineteen information sources listed in the survey (Figure D-4). For eight of those twelve sources, high-growth companies were the most frequent recipients of information: attorney, accountant, banker, consultant, supplier, customer information hotline, and trade association newsletter. For the remaining four sources, low-growth companies were the leading recipients of information: friend, newspaper/magazine, direct mail, and trade association meeting. In all cases, no-growth companies lagged behind, with negative-growth companies the least-frequent users of information from most of the sources examined.

Extent of Industry Change

Respondents in industries experiencing more extensive change tended to be more active users of information from a variety of sources (Figure D-5). It seems that business executives in stable industries have little incentive to gather information from outside sources, and prefer instead to concentrate their energies on managing their own businesses effectively. As was true for other company characteristics, the information sources showing the strongest patterns of variation were business professionals, government sources, formal sources, and business organizations.

Extent of Company Change

Though change in the industry and change in the respondent's company were strongly interrelated, the patterns of receiving information from different sources showed differences along with similarities. Company change was associated with variation for a larger number of information sources (twelve) compared to industry change (nine). Accountants and attorneys were added to the list of business professionals from which information receipt varied with
extent of change (Figure D-6). And one entirely new category of information source emerged as relevant: informal business contacts -- specifically competitors and customers. As with other information sources, greater degrees of company change were associated with more frequent receipt of information. For most information sources, companies experiencing little or no change were notably less active in using information than were other groups.

Industry Group

By far the most dramatic variation found was the variation in patterns of receiving information by different industry groups (Figure D-7). By a large margin, respondents in the finance/insurance/real estate (FIRE) industry were the most active users for most information sources. This pattern was particularly striking for government sources and bankers, where few other differences among industry groups were found. The exceptions to this generalization were quite logical, taking into consideration the structure of individual industry groups. For instance:

- It is understandable that companies in the retail and construction industries receive more information from suppliers than companies in other industries. Suppliers tend to deliver products that have a close and clear relationship to the products and services the company is selling, and the typical company is highly dependent on relationships with key suppliers. If conditions (such as product availability, quality, or price of key products) change, the company depends on suppliers for accurate information, since such circumstances can have far-reaching effects on their business well-being. By contrast, suppliers for a company in the finance/insurance/real estate industry (e.g., sellers of office supplies) have little or no direct connection to the product or service being sold, and thus are not key sources of information.

- Manufacturers, by contrast, are likeliest to turn to customers for information. Manufacturers, more than companies in other industries, have customer lists, depend on repeat business from a limited number of customers, and even develop specialized product lines to meet customer needs.
ACTIVELY SEEKING INFORMATION

Eleven types of information were considered: technology, computers, management practices, capital, marketing, purchasing, tax regulations, safety requirements, employment laws, government purchasing opportunities, and available government benefits or subsidies. The company characteristics used for analysis are the same ones used previously.

Company Size

In almost every case, the larger the company, the more likely they were to seek information actively (Figure D-8). The largest firms were the most active in seeking eight of the ten types of information presented.³

The most pronounced differences were those between the smallest companies (those fewer than five employees) and the remaining companies. This pattern is understandable because the smallest companies usually have the least available staff time to seek information. The smallest companies were the least likely to seek information in all areas except for government purchasing and government subsidies or benefits. Differences among companies with 5 to 19 employees, 20 to 49 employees, and more than 50 employees were not as pronounced.

Number of Years in Business

The relationship between a company’s age and information seeking was not as strong or consistent as were relationships based on company size. Only three areas of information seeking showed statistically significant relationships with company age: technology, capital, and purchasing (Figure D-9). Companies in business for fewer than 21 years and those older than 50 years were the most likely to seek information on new technology. Fewer companies between 21 and 50 years old sought this type of information. Companies in business for fewer than 21 years, compared to older companies were more likely seek information about sources

³The eleventh category, tax information, did not vary significantly by firm size.

4-8
of capital. On the other hand, the oldest companies were the most likely to seek information about purchasing decisions. In fact, though not statistically significant, the oldest companies tended to be the most active seeking information about computers, tax regulations, and almost all the other areas probed.

Company Revenues*

Company revenues were significantly related to information seeking in eight of the eleven areas explored. Overall, companies reporting higher revenues were more likely than others to seek information actively (Figure D-10). This relationship was particularly strong for those companies reporting annual revenues of over $2 million. Companies with different annual revenue did not differ significantly in seeking information on how to obtain capital, tax rules and regulations, or government subsidies. Companies with over $2 million in annual revenues were markedly more likely than others to seek information on technology, management practices, computers, marketing, and employment law. Companies with annual revenues under $500,000 were noticeably less active in seeking information on computers, management practices, purchasing, and employment law.

These relationships, like the others reported in this chapter, are not to be interpreted as causal. That is, one can conclude neither that companies with lower revenues have lower earnings because they did not seek out information that could have helped their companies grow, nor that if they sought more information, their revenues would increase. It is tempting, but nonetheless not warranted without further evidence, to assume that companies with lower revenues do not seek information because they cannot afford the staff time involved in seeking information actively.

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4See again the footnote about company revenues on page 4-5.
Company Growth

For the most part, growing companies (either high-growth or lower-growth) were more likely to have sought information than companies that had no growth or negative growth (Figure D-11). This relationship was consistent across several types of information: technology, capital, management practices, computers, marketing, purchasing, tax regulations, safety regulations, and employment laws. However, it was only the high growth companies (compared to low, no, or negative growth companies) that had actively sought information about government purchasing (17.8% versus 11.3%) or government benefits available (15.8% versus 10.7%).

Extent of Industry Change

Respondents in industries characterized by at least some change were more likely than other to have sought new information on computers, management practices, capital, marketing, and tax rules and regulations (Figure D-12). The relationships found, however, were neither very strong nor very consistent. Companies in industries experiencing little or no change were the least likely to seek information.

Extent of Company Change

The patterns of variation in information seeking by extent of company change were similar to the ones for industry change. (Figure D-13). Companies undergoing extensive changes were the most likely to seek information about government purchasing and government benefits or subsidies. However, there is an indication that fairly extensive company change or even some company change may be associated with information seeking activities. In the areas of management practices, capital, and tax regulations, the most notable patterns were that companies experiencing little or no change were far less active in seeking information than other companies.
Industry Group

Industry group was significantly related to only four types of information seeking: management practices, marketing, tax regulations, and safety regulations (Figure D-14). Information about computers and government purchasing opportunities varied by industry but less strongly. Retail companies and finance, insurance, and real estate firms were more likely than others to seek information on management practices (71%) and marketing (71%). It was not surprising that finance-related firms (FIRE and real estate) were the most likely to seek information on tax regulations (77.2%) and -- given the dominance of white-collar occupations in these industries -- the least likely to seek information about safety (61.4%). Similarly, it is logical that manufacturing firms were the most likely to seek information about safety (78.8%) and about opportunities to sell their goods to government agencies (18.3%).

USEFULNESS OF INFORMATION FROM SELECTED SOURCES

Respondents reflected on their experience using specific information sources: federal, state, and local government sources, small business development centers, business organizations, and business professionals. Only a very few responses were significantly related to company characteristics; those are indicated in the text below with an asterisk (*).

Ninety (90) respondents had received information from the SBA. Those individuals, when asked to rate the usefulness of that information, said that it was:

- Easy to obtain, according to 85% of those who had experience with the SBA as an information source; this was more likely to be true for the smallest* and largest* firms in the sample and for firms in FIRE, retail, and construction industries; it was less true for the newest* firms and firms experiencing fairly extensive change.

- Easy to understand (according to 61%); the pattern was even more pronounced for the largest and smallest firms, those who declined to report annual revenues, and firms in FIRE, retail, and manufacturing industries.
• Timely (according to 79%); this was even more true for the largest* and smallest* firms in the sample, firms with the lowest revenues, firms with low but positive growth rates, those in fast-changing industries, and retail firms.

• Accurate (according to 72%); more so for larger firms, growing firms, faster-changing firms, and FIRE firms.

• Relevant to business needs (according to 81%); those that agreed even more strongly were the largest* firms in the sample, growing firms, changing firms, and firms in FIRE and retail industries.

Five hundred individuals had received information from general business organizations such as Chambers of Commerce. They tended to report that the information was:

• Easy to obtain (according to 95%); this was most true for manufacturing firms, and least true for firms in the FIRE industry.

• Easy to understand (according to 95%); the pattern was more pronounced for the largest and oldest firms, those with lowest revenues and low but positive growth, and firms in the FIRE and services industries.

• Timely (according to 91.6%); the pattern was more pronounced for mid-size firms, the oldest firms, those with the least revenue and low but positive growth rates*, those in the fastest-changing industries, and those in manufacturing, FIRE, and services.

• Accurate (according to 88%), but less so for high-growth firms, and manufacturing and construction firms.

• Relevant to their business needs (for 75%); the pattern was more pronounced for larger firms, very old firms, those with the lowest revenues* and with low but positive growth
rates, those experiencing extensive industry and company change, and those in retail and FIRE industries.

EFFECTIVE WAYS TO DISSEMINATE INFORMATION

Among the key findings of the survey were the effectiveness ratings of ten information channels that the government uses to transmit information to small business owners and managers.

These ratings varied in important ways by company characteristics: the company's size, age, revenues, growth, change in the industry and company itself, and industry group. The mean (average) rating scores for different types of companies were calculated, and the scores compared across groups.

Company Size

Firm size appears to have little to do with the perceived effectiveness of various ways of transmitting information to small business owners and managers. The association between firm size and the effectiveness was significant for only two media: the business sections of newspapers and trade association meetings. Larger firms tended to rate both media as more effective than did smaller firms (Figure D-15).

Number of Years in Business

Company age appeared to be significantly related to perceived effectiveness for PSAs on the radio, televised PSAs, and television and radio news. The association was weaker for the front page of newspapers (Figure D-16). Respondents in the youngest firms tended to rate PSAs, and to a lesser extent broadcast news, as more effective than did respondents in older firms. The pattern for the front page of newspapers was more ambiguous: firms in business for 11-20 years, compared to older and younger firms, rated this medium as more effective.
Company Revenues

Differences in company revenues were associated with relatively clear patterns of effectiveness ratings for five of the ten media listed in the survey. Relationships between revenues and ratings for the business section of newspapers, general news magazines, trade magazines and newsletters, and with trade meetings all exhibited the same directionality (Figure D-17). Respondents in firms with higher gross revenues tended to consider these media more effective than did other respondents. For trade magazines and newsletters, the most striking difference was the low rating coming from low-revenue firms. The trend for television PSAs was weak, but showed medium-revenue firms rating this method the more highly than others.

Company Growth

Differences in company growth were significantly related to differences in effectiveness ratings for three media: trade association meetings, direct mail notices, trade association magazines and newsletters (Figure D-18). Respondents from low-growth companies gave the highest ratings for direct mail notices and trade association magazines and newsletters, and respondents from negative-growth companies gave the lowest ratings. By contrast, respondents from negative-growth companies perceived trade association meetings as substantially more effective than did respondents from other companies. A less significant trend for the business section of newspapers showed growing companies producing slightly higher ratings than no-growth and negative-growth companies.

Extent of Industry Change

Perceived effectiveness was related significantly to industry change for trade meetings and, even more strongly, for trade magazines and newsletters (Figure D-19). For both media, the greater the industry change, the lower the perceived effectiveness.

See again the footnote about company revenues on page 4-5.
Extent of Company Change

A significant association was found between variations in the extent of company change and variations in the perceived effectiveness of the business section of newspapers, trade association meetings, and trade magazines and newsletters. The greater the change in respondents' firms, the higher the effectiveness rating for each of the three media (Figure D-20). The relationship was strongest for trade magazines and newsletters and also quite significant for trade association meetings.

Industry Group

The industry group to which companies belonged was significantly associated with respondents' effectiveness ratings for PSAs on both television and radio, and for meetings and magazines and newsletters of trade associations (Figure D-21). PSAs on both radio and television presented identical patterns. Respondents in retail firms found the media the most effective, followed in order by construction and other, services, FIRE, and manufacturing. In rating trade magazines and newsletters, FIRE firms stood out, reporting a significantly higher level of effectiveness than did respondents from other industry groups. Trade meetings found construction and other firms and firms in the FIRE industry providing the highest ratings.
V. CONCLUSIONS

The findings of this survey of small business owners and managers help us understand their practices and preferences related to receiving information from outside sources. This survey was unique in several respects: it was the first of its kind to cover this specific topic; it was nationwide in scope; it included a large number of companies in a range of industry groups. This chapter summarizes the major findings and points out lessons for improving the effectiveness of Federal agencies' communications with small business.

FREQUENCY OF RECEIVING INFORMATION FROM DIFFERENT SOURCES

By far the most frequently-used sources of information for small business owners and managers were organizational sources: meetings of trade and professional associations and newsletters or magazines published by those groups. The second most important group of sources were informal business contacts: customers, suppliers, and competitors. Other findings included:

- Respondents reported that they read the direct mail advertisements they receive, and anecdotally, a few of them related that sometimes they even organize and save such materials to be used at a later time;

- Respondents reported that they do find time to read newspapers with great regularity;

- Respondents did not consider family members particularly important as information sources -- nearly two-thirds of respondents reported rarely or never receiving information from family members;

- Respondents attended workshops for which they had paid a registration fee about three times as often as government-sponsored workshops;

- Printed news media generally received more attention than broadcast media.
All of these findings underline the observation often expressed that *one of the scarcest commodities in a small company is the time of top management.*

Small business owners varied in their use of information sources in ways that were associated with several inter-related differences in their companies' characteristics. Some of the types of variation observed were related to the use of a subset of information sources -- those that involve a direct, out-of-pocket expenditure, such as accountants, consultants, attorneys, meetings of trade and professional associations, workshops that require a registration fee, and sometimes even trade and professional associations' newsletters. The most frequent users of those types of information tended to be respondents from:

- The largest companies in our sample;
- Companies that had been in business for a relatively long period of time;
- Companies with high growth rates; and
- Companies experiencing moderate or extensive change internally or and/or throughout their industry.

These patterns were among the strongest and most consistent observed.

Differences associated with industry group had an entirely different logic, one linked more directly to the nature of the products and services being sold. Finance, insurance and real estate companies tended to be the heaviest users of government information, information from bankers, attorneys, and accountants -- an understandable pattern given that many FIRE firms are heavily regulated and that most component products and services are financial. Construction and retail firms had the strongest informational links to their suppliers, while manufacturing firms were the most heavily dependent on customers. The most frequent overall information users were in the FIRE industry, followed in order of frequency by construction, retail, and services.
ACTIVELY SEEKING DIFFERENT TYPES OF INFORMATION

A high percentage of small business owners and managers actively seek information to help them manage their companies. The types of information most frequently sought were related to:

- Technology that might affect the design or production of their goods and services;
- Computers and how to use them; and
- Management and company operations, with emphasis on information to be used in making purchasing decisions.

Nearly three-fourths of respondents did report actively seeking information about regulations that affected their business operations, such as employment and safety laws.

In analyzing how different patterns of information-seeking behavior relate to company characteristics, we found that many of the same types of companies noted above as heavy users of information are also active seekers of information. Two overlapping groups were the most active: (1) the largest companies, and those with high revenues; and (2) companies that were growing and experiencing moderate or extensive change. Those two groups appeared to have, respectively, the resources to enable them to absorb information, and the greatest need for information.

USEFULNESS OF INFORMATION FROM SELECTED SOURCES

Many small business owners and managers reported relying on accountants for information, and found that information highly useful and relevant to their business. The next most useful information sources were trade and professional associations. Sources such as those differ from others in that they depend for their business success (or for the continued existence of their organization) on business owners' and managers' satisfaction with their services. Therefore, they have a strong incentive to provide up-to-date, individually-tailored information, on time and in an accessible and easy-to-understand form.
Another group of survey findings emerged as particularly important for the purpose of implementing federal dissemination efforts:

- Working with trade and professional associations, and taking advantage of their existing routes of communications with small business owners and managers, is likely to yield significant results.

- Respondents' overall reactions to information provided by federal government agencies were negative; respondents were much more aware of the federal government as a factor constraining their operations through regulation than as a provider of opportunities such as purchasing, benefits or subsidies, or loan guarantees.

EFFECTIVENESS OF DISSEMINATION METHODS

Many small business owners and managers reported that direct mail notices were the most effective means of disseminating information to them. While the sheer volume of direct mail notices sent to small businesses may make it difficult to ensure that any particular notice stands out, this pattern was consistent with the respondents' tendency to rely heavily on printed media. Printed sources of information may have the advantage of being flexible as to when and where they are used.

Similarly, respondents cited both the front page and business sections of newspapers as relatively effective ways to attract their attention. Newspapers are extremely common and widely-read, and are quite cost effective for both the reader and those, such as public agencies, that may wish to use them to communicate with broad national audiences.

Among the three summary media variables, trade media proved to be the most effective, followed closely by print media, and then more distantly by broadcast media. The summarized trade media variables (meetings and newsletters) were also individually rated quite highly. We recommend that the SBA strongly consider working through trade groups and their various communications mechanisms to disseminate information. We also note that respondents rated
broadcast media (news reports as well as public service ads, and television as well as radio) as relatively poor strategies for disseminating information.

We found some differences in effectiveness ratings associated with company characteristics. Specifically, we found that:

- Firms in business for the shortest time (less than five years) tended to find the broadcast media to be the most effective. These young, often technology-conscious firms should be sought out on the airwaves.

- The owners and managers of businesses with larger gross revenues were much more likely to consider trade magazines and newsletters -- and to a lesser extent, the business sections of newsletters, general news magazines, and trade meetings -- to be more effective in conveying information to them. Therefore, print and trade media are the better ways to reach the larger of the small businesses.

- Companies experiencing low growth considered trade magazines and newsletters, direct mail notices, and trade meetings more effective than other media. Those experiencing extensive change tend to find trade magazines and newsletters, trade meetings, and the business section of newspapers more effective. Firms experiencing extensive industry change found trade magazines and newsletters, and trade meetings to be the more effective. (Note that these media were among the most effective for all respondents.) We recommend that Federal agencies seeking to reach the most insecure businesses should utilize the most highly rated media.

- FIRE firms tended to rate trade magazines and newsletters more effective than other industry group members. Retail firms were similarly impressed with PSAs on both radio and television. To target these, firms the most highly rated media should be employed.
Some of these differences may prove important to federal information dissemination efforts, particularly those to be targeted to specific industries or other business subgroups of policy interest, such as microbusiness, companies affected by defense slowdowns, or those eligible for trade adjustment assistance.

SUMMARY

The scarcity of top managers’ time in small business shapes their decisions about how and from what sources they seek and use information. As reported in other studies, easily-accessible studies tend to be used more than others, as do information sources encountered during non-business time. Small business owners and managers most frequently use -- and respond best to -- information provided by sources they already know and trust. The most important, prevalent, and useful information sources, overall, were:

- Sources that already know a great deal about the “consumers” of the information, the business conditions they face, and their immediate local context, and thus can tailor information to meet specific needs; and

- Sources with the strongest built-in incentives to be responsive to the needs of individual “consumers” of information -- that is:
  - those that, like suppliers or accountants, have a business interest in strengthening their relationships, and
  - those with constituencies that require them to be responsive, such as trade and professional associations

Governments, particularly the Federal government, are, by comparison, remote from the day-in-and-day-out circumstances of individual small business owners and managers. The information government agencies provide is of necessity generic, rarely industry-specific, usually unable to take into account local circumstances, and seldom tailored to the need and situation of each
company receiving it. By contrast to other sources, the federal government is impersonal and far removed from the reality that seems most immediate and most important to these respondents.

Several respondents -- along with other small business owners and managers who declined to participate in the survey -- offered comments making it clear they are most aware of government as a source of policy actions that seem detrimental to small business interests. Changing perceptions such as those will involve long-range efforts and a strategic approach that is sensitive to entrepreneurs' points of view. In a very small way, this survey actually took a step in that direction. Of the 1,247 individuals who responded to it, several said they were glad to have been asked for their opinion, and several expressed interest in receiving a copy of the report's summary.
Appendix A

Introductory Letter and
Survey of Small Business Owners and Managers
Dear Business Owner:

I am writing to encourage you to participate in an important national survey of small businesses. This survey is part of a major study, sponsored by the Office of Advocacy in the Small Business Administration. We want to learn how small businesses in the U.S. gather the information they need for strategic planning and everyday business decisions. We expect that the study will help small businesses have access to better information for making decisions.

Your company was selected, as part of a random sample, from a list of small companies nationwide. To protect your confidentiality, we are having the survey company send out this letter to you. We have also agreed with them that they will not give the government any information which could be used to identify the companies or individuals responding to the survey.

You will get a telephone call within two weeks from our survey contractor, Berkeley Planning Associates. They will ask you to spend about 15 minutes by telephone answering a few questions. If you are interested, they can send you more information about the study or even a summary of the study findings once the survey is completed.

Thank you for your cooperation. Your participation is key to the success of our research.

Best wishes for success in your business,

Doris S. Freedman
Acting Chief Counsel for Advocacy
Hello, [RESPONDENT NAME], this is [NAME]. I'm calling from BPA, a small company in California that does research about small business management. You received a letter last week from Doris Freedman of the Small Business Administration, inviting you to participate in a national survey of small businesses to find out how owners and managers get the information they need to make everyday business decisions and plan for the future. As we said in the letter, [COMPANY] has been selected at random to participate in this important national study. The survey should take about 15 minutes to complete. Your answers will be completely confidential. So, may I go ahead with my questions? [OR when would it be convenient for you to take a few minutes so I can call you back?]

First, I'd like to ask you to think about all the ways you normally get information in your everyday business life -- such as through the mail, over the telephone, from reading newspapers or magazines, from radio or TV, from talking to people such as those you work with, customers, suppliers, consultants, family or friends, or by going to workshops or conferences.

1. I'm going to read a list of places you might get information related to your business and ask you to tell me whether, during the last year, you have actually gotten information from each of those sources. As I read each one, please tell me whether you have gotten information often, (monthly or more often) sometimes (several times a year), rarely (i.e., once or twice), or never.

<table>
<thead>
<tr>
<th>3 = often</th>
<th>2 = sometimes</th>
<th>1 = rarely</th>
<th>0 = never</th>
</tr>
</thead>
<tbody>
<tr>
<td>trade or professional magazine</td>
<td>competitor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>trade or professional newsletter</td>
<td>supplier</td>
<td></td>
<td></td>
</tr>
<tr>
<td>general newspaper or magazine</td>
<td>employee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV or radio news report</td>
<td>customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>internal company document</td>
<td>government report</td>
<td></td>
<td></td>
</tr>
<tr>
<td>direct mail advertisement</td>
<td>government official</td>
<td></td>
<td></td>
</tr>
<tr>
<td>friend</td>
<td>toll-free information hotline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>family member</td>
<td>other public information service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attorney</td>
<td>training for which you have paid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>accountant</td>
<td>training provided or paid for by the government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>banker</td>
<td>notice you receive in the mail from government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>paid consultant</td>
<td>meeting of trade or professional association</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Berkeley Planning Associates
I'm going to list some types of information that business owners and managers sometimes need. For each type, please tell me whether or not you have, in the past year, actively gone out and searched for each type of information. Please answer yes or no as I read the list, or if you aren't sure, just say so.

a. Technology that could affect the design of your service or product, or that could influence how you produce or deliver your service or product
   ___ Yes  ___ Not Sure  ___ No

b. How to get capital for expansion or improved cash flow
   ___ Yes  ___ Not Sure  ___ No

c. Improving management practices, for instance learning about total quality management
   ___ Yes  ___ Not Sure  ___ No

d. Learning about computers or software and how they can help your business
   ___ Yes  ___ Not Sure  ___ No

e. Facts you may need for making marketing decisions, such as demographics or feedback about customer preferences
   ___ Yes  ___ Not Sure  ___ No

f. Facts you need to make purchasing decisions, such as price, quality, or service quality
   ___ Yes  ___ Not Sure  ___ No

g. Tax rules and filing requirements
   ___ Yes  ___ Not Sure  ___ No

h. Government safety regulations that might affect your business
   ___ Yes  ___ Not Sure  ___ No

i. Equal employment laws and regulations that you may need to comply with
   ___ Yes  ___ Not Sure  ___ No

j. What products and services the government is interested in buying
   ___ Yes  ___ Not Sure  ___ No

k. What, if any, government subsidies, grants, training programs, and other benefits your business might be eligible to receive
   ___ Yes  ___ Not Sure  ___ No

Berkeley Planning Associates
Section II

Now, I'd like to ask you about some specific sources of information -- first of all, for each source, tell me whether you have received any information from that source in the past two years. If you have, I'll go on to ask about how you received the information and how useful it from each source has been to your business.

3. Have you received general information -- such as information about tax strategies, interest rates, or laws and regulations -- from your banker or accountant?
   _ No (skip to next question)
   _ Not sure (skip to next question)
   _ Yes ⇒ (From which source? If several, pick one)

   ⇒ In what form did you get it? _ In writing
   _ By telephone
   _ Face-to-face

   ⇒ Did you actively seek out the information? _
   Or did it come to you unsolicited? _
   (Not sure) _

Could you please tell me whether you agree or disagree with each of the statements I'm about to read concerning the information you received from that source. I'll ask you to say for each statement whether you strongly agree, agree, aren't sure, disagree, or strongly disagree.

5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree

_ The information was accessible or easy for you to obtain
_ The information was clear and easy to understand
_ You got the information on time.
_ The information was accurate
_ The information was relevant to your business needs
4. Have you received information directly from an office of the federal government, such as the IRS or the Small Business Administration or the Department of Labor, or some other agency that regulates businesses in your industry?

- No (skip to next question)
- Not sure (skip to next question)
- Yes => (Which office? If several, pick one)

=> In what form did you get it? __ In writing

__ By telephone

__ Face-to-face

=> Did you actively seek out the information? __

Or did it come to you unsolicited? __

(Not sure) __

Could you please tell me whether you agree or disagree with each of the statements I'm about to read concerning the information you received from that source. I'll ask you to say for each statement whether you strongly agree, agree, aren't sure, disagree, or strongly disagree.

5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree

__ The information was accessible or easy for you to obtain

__ The information was clear and easy to understand

__ You got the information on time.

__ The information was accurate

__ The information was relevant to your business needs
5. Have you gotten information -- such as information about taxes, licensing, unemployment insurance, job applicants, regulations, or new economic development initiatives -- directly from offices of your state or local government?

_ No (skip to next question)
_ Not sure (skip to next question)
_ Yes ⇒ (Which office? If several, pick one)

⇒ In what form did you get it? ___ In writing

___ By telephone

___ Face-to-face

⇒ Did you actively seek out the information? ___

Or did it come to you unsolicited? ___

(Not sure)

Could you please tell me whether you agree or disagree with each of the statements I'm about to read concerning the information you received from that source. I'll ask you to say for each statement whether you strongly agree, agree, aren't sure, disagree, or strongly disagree.

5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree

___ The information was accessible or easy for you to obtain

___ The information was clear and easy to understand

___ You got the information on time.

___ The information was accurate

___ The information was relevant to your business needs
6. Have you gotten information from a Small Business Development Center or a college- or university-based business center, or a consultant working for one of those centers?

__ No (skip to next question)

__ Not sure (skip to next question)

__ Yes =, (Which one? If several, pick one) 

________________________

= In what form did you get it?

___ In writing

___ By telephone

___ Face-to-face

= Did you actively seek out the information?

__

Or did it come to you unsolicited?

__

(Not sure)

Could you please tell me whether you agree or disagree with each of the statements I'm about to read concerning the information you received from that source. I'll ask you to say for each statement whether you strongly agree, agree, aren't sure, disagree, or strongly disagree.

5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree

__ The information was accessible or easy for you to obtain

__ The information was clear and easy to understand

__ You got the information on time.

__ The information was accurate

__ The information was relevant to your business needs
7. Have you gotten information -- such as information about government regulations, marketing, management, finance, or technology -- through a trade or professional association?

__ No (skip to next question)

__ Not sure (skip to next question)

__ Yes ⇒ (Which organization? If several, pick one)

⇒ In what form did you get it?

__ In writing

__ By telephone

__ Face-to-face

⇒ Did you actively seek out the information?

Or did it come to you unsolicited?

(Not sure)

Could you please tell me whether you agree or disagree with each of the statements I'm about to read concerning the information you received from that source. I'll ask you to say for each statement whether you strongly agree, agree, aren't sure, disagree, or strongly disagree.

5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree

__ The information was accessible or easy for you to obtain

__ The information was clear and easy to understand

__ You got the information on time.

__ The information was accurate

__ The information was relevant to your business needs
8. Have you received information -- such as information about government regulations, marketing, management, finance, or technology -- through a general business organization, such as chamber of commerce or organization representing small business owners?

- No (skip to next question)
- Not sure (skip to next question)
- Yes = (Which organization? If several, pick one)

⇒ In what form did you get it?
- In writing
- By telephone
- Face-to-face

⇒ Did you actively seek out the information?
- Or did it come to you unsolicited?
- (Not sure)

Could you please tell me whether you agree or disagree with each of the statements I'm about to read concerning the information you received from that source. I'll ask you to say for each statement whether you strongly agree, agree, aren't sure, disagree, or strongly disagree.

5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree

- The information was accessible or easy for you to obtain
- The information was clear and easy to understand
- You got the information on time.
- The information was accurate
- The information was relevant to your business needs
Section III

9. Now, suppose the government needed to get information to you about an important new policy or program. What would be the most effective ways for them to go about bringing the change to your attention. I’m going to read several possibilities, and I’d like you to rate their effectiveness on a scale from 1 to 5, where 5 is extremely effective and 1 is not at all effective.

[How effective would a .... be in bringing this change to your attention?]

- public service announcement over the radio
- television public service announcement
- TV or radio news story
- front page article in the newspaper
- business section article in the newspaper
- story in general interest news magazine
- story in trade or professional newsletter or magazine
- direct mail notice
- billboard or other posted notice
- announcement at meeting of trade or professional organization
Section IV

10. What types of product or service does your company produce?

11. How many employees do you have?

12. When was your company founded?

Please tell me which of the revenue and growth categories I am about to read currently describe your company

13. Approximate Annual Revenues

14. Revenue Growth (past three years)

- $5,000,000 or more
- between $2 and $5 million
- between $1 and $2 million
- between $500,000 and $1 million
- between $100,000 and $500,000
- less than $100,000
- decline to report

- More than 20 percent
- 11 to 20 percent
- 1 to 10 percent
- No Change
- Decline

15. On a scale from 1 to 5, where 1 is no change and 5 is extensive change, how much change would you say has occurred in your industry during the past two years?

1 2 3 4 5
None Fairly Little Some Fairly Much Extensive

16. On a scale from 1 to 5, where 1 is no change and 5 is extensive change, how much change would you say has occurred in your own business during the past two years?

1 2 3 4 5
None Fairly Little Some Fairly Much Extensive

Thank you for your help.

Berkeley Planning Associates
Appendix B

Supplementary Figures to Accompany Chapter II
Figure B-1
Summary of Sample Characteristics
Percentages in Each Category

<table>
<thead>
<tr>
<th>Firm Size and Category</th>
<th>Construction</th>
<th>Finance, Insurance, and Real Estate</th>
<th>Manufacturing</th>
<th>Retail</th>
<th>Services</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Universe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 4</td>
<td>10.4</td>
<td>6.1</td>
<td>3.9</td>
<td>16.0</td>
<td>24.5</td>
<td>60.9</td>
</tr>
<tr>
<td>5 - 19</td>
<td>4.4</td>
<td>2.7</td>
<td>3.7</td>
<td>9.3</td>
<td>10.5</td>
<td>30.6</td>
</tr>
<tr>
<td>20 - 49</td>
<td>0.7</td>
<td>0.6</td>
<td>1.3</td>
<td>1.9</td>
<td>1.8</td>
<td>6.3</td>
</tr>
<tr>
<td>50 - 99</td>
<td>0.2</td>
<td>0.2</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>15.7</td>
<td>9.5</td>
<td>9.5</td>
<td>27.8</td>
<td>37.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

| **Initial Sample**     |              |                                     |               |        |          |       |
| **n = 2473**           |              |                                     |               |        |          |       |
| 1 - 4                  | 2.9          | 1.6                                  | 1.1           | 3.9    | 5.2      | 14.7  |
| 5 - 19                 | 5.7          | 3.1                                  | 6.0           | 8.2    | 11.4     | 34.5  |
| 20 - 49                | 4.0          | 2.5                                  | 6.3           | 7.7    | 8.1      | 28.6  |
| 50 - 99                | 2.4          | 1.8                                  | 5.7           | 4.9    | 7.4      | 22.2  |
| **TOTAL**              | 15.0         | 9.0                                  | 19.1          | 24.7   | 32.2     | 100.0 |

| **Final Sample**       |              |                                     |               |        |          |       |
| **n = 2048**           |              |                                     |               |        |          |       |
| 1 - 4                  | 2.0          | 1.4                                  | 0.8           | 3.1    | 4.2      | 14.6  |
| 5 - 19                 | 5.6          | 3.3                                  | 6.5           | 7.9    | 11.5     | 34.7  |
| 20 - 49                | 4.2          | 2.5                                  | 7.0           | 7.9    | 8.8      | 30.5  |
| 50 - 99                | 2.6          | 1.8                                  | 6.1           | 5.0    | 7.7      | 23.2  |
| **TOTAL**              | 14.4         | 9.0                                  | 20.5          | 24.0   | 32.2     | 100.0 |

| **Respondents**        |              |                                     |               |        |          |       |
| **n = 1247**           |              |                                     |               |        |          |       |
| 1 - 4                  | 2.1          | 1.7                                  | 0.9           | 2.9    | 3.6      | 11.2  |
| 5 - 19                 | 5.8          | 3.8                                  | 6.1           | 7.9    | 10.6     | 34.2  |
| 20 - 49                | 4.1          | 3.1                                  | 7.7           | 8.6    | 9.4      | 33.0  |
| 50 - 99                | 2.3          | 1.7                                  | 5.4           | 5.0    | 7.4      | 21.7  |
| **TOTAL**              | 14.3         | 10.3                                 | 20.1          | 24.4   | 30.9     | 100.0 |

* Source: data provided by Dun & Bradstreet Information Services, January 1994.

* The difference between the initial sample (all attempted contacts) and the final sample (all actual contacts) consisted of non-valid cases -- no longer a small business or not reachable by telephone.
# Figure B-2

## Comparison of Respondents and Non-Respondents

Percentages in Each Category

<table>
<thead>
<tr>
<th>Firm Size</th>
<th>Construction</th>
<th>Finance, Insurance, and Real Estate</th>
<th>Manufacturing</th>
<th>Retail</th>
<th>Services</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 4</td>
<td>2.1</td>
<td>1.9</td>
<td>1.7</td>
<td>1.0</td>
<td>0.9%</td>
<td>0.7</td>
</tr>
<tr>
<td>5 - 19</td>
<td>5.8</td>
<td>5.3</td>
<td>3.8</td>
<td>2.5</td>
<td>6.1</td>
<td>7.0</td>
</tr>
<tr>
<td>20 - 49</td>
<td>4.1</td>
<td>4.3</td>
<td>3.1</td>
<td>1.7</td>
<td>7.7</td>
<td>6.1</td>
</tr>
<tr>
<td>50 - 99</td>
<td>2.3</td>
<td>3.0</td>
<td>1.7</td>
<td>2.0</td>
<td>5.4</td>
<td>7.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14.3%</td>
<td>14.4%</td>
<td>10.3%</td>
<td>7.2</td>
<td>20.1%</td>
<td>21.0%</td>
</tr>
</tbody>
</table>
Appendix C

Supplementary Figures to Accompany Chapter III
## Frequency of Using Information Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
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</thead>
<tbody>
<tr>
<td><strong>Newspaper, Magazine</strong></td>
<td>232</td>
<td>213</td>
<td>439</td>
<td>361</td>
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<td></td>
<td>(18.6)</td>
<td>(17.1)</td>
<td>(35.3)</td>
<td>(29.0)</td>
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<tr>
<td><strong>TV and Radio News</strong></td>
<td>411</td>
<td>375</td>
<td>316</td>
<td>143</td>
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<tr>
<td></td>
<td>(33.0)</td>
<td>(30.1)</td>
<td>(25.4)</td>
<td>(11.5)</td>
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<tr>
<td><strong>Friend</strong></td>
<td>265</td>
<td>438</td>
<td>293</td>
<td>248</td>
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<td></td>
<td>(19.9)</td>
<td>(23.6)</td>
<td>(35.2)</td>
<td>(21.3)</td>
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<tr>
<td><strong>Family Member</strong></td>
<td>415</td>
<td>348</td>
<td>297</td>
<td>184</td>
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<td>(33.4)</td>
<td>(28.0)</td>
<td>(23.9)</td>
<td>(14.8)</td>
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<td><strong>Attorney</strong></td>
<td>476</td>
<td>334</td>
<td>305</td>
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<td>(26.8)</td>
<td>(24.5)</td>
<td>(10.4)</td>
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<td>239</td>
<td>461</td>
<td>290</td>
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<td>(20.4)</td>
<td>(19.2)</td>
<td>(37.1)</td>
<td>(23.3)</td>
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<td><strong>Banker</strong></td>
<td>382</td>
<td>303</td>
<td>379</td>
<td>180</td>
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<tr>
<td></td>
<td>(30.7)</td>
<td>(24.4)</td>
<td>(30.5)</td>
<td>(14.5)</td>
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<td>258</td>
<td>164</td>
<td>92</td>
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<tr>
<td></td>
<td>(58.7)</td>
<td>(20.7)</td>
<td>(13.2)</td>
<td>(7.4)</td>
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<td>242</td>
<td>418</td>
<td>131</td>
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<td></td>
<td>(36.4)</td>
<td>(19.5)</td>
<td>(33.6)</td>
<td>(10.5)</td>
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<td>315</td>
<td>434</td>
<td>152</td>
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<td></td>
<td>(27.6)</td>
<td>(25.3)</td>
<td>(34.9)</td>
<td>(12.2)</td>
</tr>
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<td>551</td>
<td>152</td>
<td>379</td>
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<td></td>
<td>(13.0)</td>
<td>(12.2)</td>
<td>(44.3)</td>
<td>(30.5)</td>
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<td>156</td>
<td>473</td>
<td>508</td>
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<td></td>
<td>(8.6)</td>
<td>(12.5)</td>
<td>(38.0)</td>
<td>(40.8)</td>
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<td>356</td>
<td>379</td>
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<td></td>
<td>(18.1)</td>
<td>(22.8)</td>
<td>(28.6)</td>
<td>(30.5)</td>
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<td>26</td>
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<td>(66.4)</td>
<td>(21.6)</td>
<td>(9.9)</td>
<td>(2.1)</td>
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<td>138</td>
<td>397</td>
<td>539</td>
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<td></td>
<td>(13.9)</td>
<td>(11.1)</td>
<td>(31.8)</td>
<td>(43.2)</td>
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<td><strong>Trade Meeting</strong></td>
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<td>193</td>
<td>501</td>
<td>284</td>
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<td>(15.5)</td>
<td>(40.3)</td>
<td>(22.8)</td>
</tr>
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<td><strong>Government Report</strong></td>
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<td>265</td>
<td>76</td>
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<td>(44.0)</td>
<td>(28.6)</td>
<td>(21.3)</td>
<td>(6.1)</td>
</tr>
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<td><strong>Government Official</strong></td>
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<td>330</td>
<td>125</td>
<td>39</td>
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<td>(60.3)</td>
<td>(26.5)</td>
<td>(10.0)</td>
<td>(3.1)</td>
</tr>
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<td><strong>Government Workshop</strong></td>
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<td>83</td>
<td>11</td>
</tr>
<tr>
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<td>(75.2)</td>
<td>(17.3)</td>
<td>(6.7)</td>
<td>(0.9)</td>
</tr>
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</table>

*The number of responses ranged from 1244 to 1247.*
Figure C-2

Frequency of Using Information Sources
(All Respondents)
Figure C-3

Extent to Which Respondents Have Actively Searched for Different Types of Information

<table>
<thead>
<tr>
<th>Type of Information</th>
<th>Yes (%)</th>
<th>Not Sure (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology that could affect the design, production or delivery of your service or product</td>
<td>889 (71.5)</td>
<td>36 (2.9)</td>
<td>318 (25.6)</td>
</tr>
<tr>
<td>How to get capital to expand or improve cash flow</td>
<td>611 (49.2)</td>
<td>79 (6.4)</td>
<td>553 (44.5)</td>
</tr>
<tr>
<td>Improving management practices</td>
<td>803 (64.6)</td>
<td>42 (3.4)</td>
<td>398 (32.9)</td>
</tr>
<tr>
<td>Computers or software and how they can help your business</td>
<td>972 (78.2)</td>
<td>18 (1.4)</td>
<td>253 (20.4)</td>
</tr>
<tr>
<td>Marketing decisions, such as who your customers are and what they want</td>
<td>761 (61.3)</td>
<td>62 (5)</td>
<td>419 (33.7)</td>
</tr>
<tr>
<td>Facts you need to make purchasing decisions, such as price, quality, or service</td>
<td>905 (72.9)</td>
<td>56 (4.5)</td>
<td>281 (22.6)</td>
</tr>
<tr>
<td>Tax rules and filing requirements</td>
<td>788 (63.5)</td>
<td>84 (6.8)</td>
<td>369 (29.7)</td>
</tr>
<tr>
<td>Safety regulations that might affect your business</td>
<td>912 (73.5)</td>
<td>42 (3.4)</td>
<td>287 (23.1)</td>
</tr>
<tr>
<td>Employment laws or other regulations that you may need to comply with</td>
<td>899 (72.4)</td>
<td>42 (3.4)</td>
<td>300 (24.2)</td>
</tr>
<tr>
<td>Government purchasing programs</td>
<td>163 (13.1)</td>
<td>54 (4.4)</td>
<td>1024 (82.5)</td>
</tr>
<tr>
<td>Any government subsidies, grants, training programs, and other benefits your business might be eligible to receive</td>
<td>151 (12.2)</td>
<td>60 (4.8)</td>
<td>1030 (83)</td>
</tr>
</tbody>
</table>

*The number of responses ranged from 1241 to 1243.*
Figure C-4
Percentage Actively Searching for Different Types of Information

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>71.5</td>
</tr>
<tr>
<td>Capital</td>
<td>64.6</td>
</tr>
<tr>
<td>Computers</td>
<td>61.3</td>
</tr>
<tr>
<td>Marketing</td>
<td>72.9</td>
</tr>
<tr>
<td>Purchasing</td>
<td>63.5</td>
</tr>
<tr>
<td>Tax Rules</td>
<td>73.5</td>
</tr>
<tr>
<td>Employment Laws</td>
<td>72.4</td>
</tr>
<tr>
<td>SafetyRegs</td>
<td>13.1</td>
</tr>
<tr>
<td>Govt. Purchasing</td>
<td>12.2</td>
</tr>
</tbody>
</table>
## Figure C-5

### Summary of Usefulness of Selected Information Sources

<table>
<thead>
<tr>
<th>Information Source</th>
<th>Obtained in Writing</th>
<th>Actively Sought</th>
<th>Easy to Obtain</th>
<th>Easy to Understand</th>
<th>Timely</th>
<th>Accurate</th>
<th>Relevant to Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Government (N=527; 42.5%)</td>
<td>82.4</td>
<td>35.3</td>
<td>90.0</td>
<td>80.5</td>
<td>84.8</td>
<td>83.5</td>
<td>84.7</td>
</tr>
<tr>
<td>Small Business Development Center (N=158; 12.7%)</td>
<td>73.4</td>
<td>47.5</td>
<td>92.4</td>
<td>89.2</td>
<td>91.8</td>
<td>85.4</td>
<td>74.7</td>
</tr>
<tr>
<td>Trade/Professional Association (N=671; 54.1%)</td>
<td>75.3</td>
<td>50.1</td>
<td>94.9</td>
<td>93.9</td>
<td>92.7</td>
<td>89.0</td>
<td>91.7</td>
</tr>
<tr>
<td>General Business Organization (N=500; 40.3%)</td>
<td>82.4</td>
<td>28.8</td>
<td>94.6</td>
<td>94.6</td>
<td>91.6</td>
<td>88.0</td>
<td>74.0</td>
</tr>
<tr>
<td>Banker (N=240; 19.2%)</td>
<td>27.9</td>
<td>66.3</td>
<td>96.3</td>
<td>87.1</td>
<td>88.8</td>
<td>82.9</td>
<td>89.6</td>
</tr>
<tr>
<td>Accountant (N=769; 61.7%)</td>
<td>35.9</td>
<td>64.5</td>
<td>96.1</td>
<td>88.5</td>
<td>90.8</td>
<td>88.9</td>
<td>95.5</td>
</tr>
<tr>
<td>SBA (N=90; 7.2%)</td>
<td>78.9</td>
<td>40.0</td>
<td>83.3</td>
<td>75.6</td>
<td>82.2</td>
<td>75.6</td>
<td>77.7</td>
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<tr>
<td>IRS (N=254; 20.4%)</td>
<td>91.7</td>
<td>18.9</td>
<td>85.4</td>
<td>64.7</td>
<td>78.3</td>
<td>70.4</td>
<td>78.7</td>
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</tbody>
</table>
Figure C.6
How Information Was Obtained
From Selected Sources

- Local govt.
- SBDC
- Trade Org.
- General Bus. Org.
- Banker
- Accountant
- SBA
- IRS

- Obtained in Writing
- Actively sought
**Figure C-7**

**Manner in Which Information from Different Sources Was Transmitted**

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>IN WHAT FORM WAS INFORMATION TRANSMITTED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In Writing (%)</td>
</tr>
<tr>
<td>Banker or Accountant</td>
<td>319 (36)</td>
</tr>
<tr>
<td>(n = 887)</td>
<td></td>
</tr>
<tr>
<td>Federal Government</td>
<td>397 (85.2)</td>
</tr>
<tr>
<td>(n = 466)</td>
<td></td>
</tr>
<tr>
<td>State or Local Government</td>
<td>434 (82.4)</td>
</tr>
<tr>
<td>(n = 527)</td>
<td></td>
</tr>
<tr>
<td>Small Business</td>
<td>116 (73.4)</td>
</tr>
<tr>
<td>Development Center</td>
<td></td>
</tr>
<tr>
<td>(n = 158)</td>
<td></td>
</tr>
<tr>
<td>Trade or Professional</td>
<td>505 (75.3)</td>
</tr>
<tr>
<td>Organization</td>
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</tr>
<tr>
<td>(n = 671)</td>
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</tr>
<tr>
<td>General Business</td>
<td>412 (82.4)</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
</tr>
<tr>
<td>(n = 500)</td>
<td></td>
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</table>
**Figure C-8**

Extent to Which Respondents Actively Sought Information from Different Sources

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>Actively Sought (%)</th>
<th>Received Unsolicited (%)</th>
<th>Not Sure (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banker or Accountant (n = 887)</td>
<td>557 (65.1)</td>
<td>220 (24.8)</td>
<td>90 (10.1)</td>
</tr>
<tr>
<td>Federal Government (n = 466)</td>
<td>133 (28.5)</td>
<td>306 (65.7)</td>
<td>27 (5.8)</td>
</tr>
<tr>
<td>State or Local Government (n = 527)</td>
<td>186 (35.3)</td>
<td>321 (60.9)</td>
<td>20 (3.8)</td>
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<td>Small Business Development Center (n = 158)</td>
<td>75 (47.5)</td>
<td>75 (47.5)</td>
<td>8 (5.1)</td>
</tr>
<tr>
<td>Trade or Professional Organization (n = 671)</td>
<td>336 (50.1)</td>
<td>279 (41.6)</td>
<td>46 (8.3)</td>
</tr>
<tr>
<td>General Business Organization (n = 500)</td>
<td>144 (28.8)</td>
<td>326 (65.2)</td>
<td>30 (6)</td>
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Usefulness of Selected Sources
(Percent Citing Source As...)

- Easy to obtain
- Easy to understand
- Timely
- Accurate
- Relevant to needs
### Figure C-10
Respondent Assessment of Information From Different Sources: Easy to Obtain

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>Strongly Disagree (%)</th>
<th>Disagree (%)</th>
<th>Not Sure (%)</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
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<tr>
<td>Banker or Accountant (n = 887)</td>
<td>3 (.3)</td>
<td>15 (1.7)</td>
<td>16 (1.8)</td>
<td>734 (82.8)</td>
<td>118 (13.3)</td>
</tr>
<tr>
<td>Federal Government (n = 466)</td>
<td>6 (1.3)</td>
<td>34 (7.3)</td>
<td>30 (6.4)</td>
<td>336 (72.1)</td>
<td>60 (12.9)</td>
</tr>
<tr>
<td>State or Local Government (n = 527)</td>
<td>6 (1.1)</td>
<td>23 (4.4)</td>
<td>24 (4.6)</td>
<td>434 (82.4)</td>
<td>40 (7.6)</td>
</tr>
<tr>
<td>Small Business Development Center (n = 158)</td>
<td>2 (1.3)</td>
<td>5 (3.2)</td>
<td>10 (6.3)</td>
<td>128 (81)</td>
<td>13 (8.2)</td>
</tr>
<tr>
<td>Trade or Professional Organization (n = 671)</td>
<td>2 (.3)</td>
<td>10 (1.5)</td>
<td>22 (3.3)</td>
<td>529 (78.8)</td>
<td>108 (16.1)</td>
</tr>
<tr>
<td>General Business Organization (n = 500)</td>
<td>1 (.2)</td>
<td>7 (1.4)</td>
<td>19 (3.8)</td>
<td>423 (84.6)</td>
<td>50 (10)</td>
</tr>
</tbody>
</table>
## Figure C-11

**Respondent Assessment of Information From Different Sources: Easy to Understand**

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>Strongly Disagree (%)</th>
<th>Disagree (%)</th>
<th>Not Sure (%)</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banker or Accountant (n = 887)</td>
<td>4 (.5)</td>
<td>47 (5.3)</td>
<td>50 (5.6)</td>
<td>712 (80.4)</td>
<td>73 (8.2)</td>
</tr>
<tr>
<td>Federal Government (n = 466)</td>
<td>41 (8.8)</td>
<td>85 (18.2)</td>
<td>57 (12.2)</td>
<td>267 (57.3)</td>
<td>16 (3.4)</td>
</tr>
<tr>
<td>State or Local Government (n = 527)</td>
<td>10 (1.9)</td>
<td>49 (9.3)</td>
<td>44 (8.3)</td>
<td>400 (75.9)</td>
<td>24 (4.6)</td>
</tr>
<tr>
<td>Small Business Development Center (n = 158)</td>
<td>2 (.13)</td>
<td>5 (3.2)</td>
<td>10 (6.3)</td>
<td>128 (81)</td>
<td>13 (8.2)</td>
</tr>
<tr>
<td>Trade or Professional Organization (n = 671)</td>
<td>2 (.3)</td>
<td>7 (1)</td>
<td>32 (4.8)</td>
<td>529 (78.8)</td>
<td>101 (15.1)</td>
</tr>
<tr>
<td>General Business Organization (n = 500)</td>
<td>0 (0)</td>
<td>8 (1.5)</td>
<td>19 (3.8)</td>
<td>437 (87.4)</td>
<td>36 (7.2)</td>
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</table>
Respondent Assessment of Information From Different Sources: Received on Time

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>Strongly Disagree (%)</th>
<th>Disagree (%)</th>
<th>Not Sure (%)</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banker or Accountant ((n = 887))</td>
<td>4 (.5)</td>
<td>34 (3.8)</td>
<td>44 (5)</td>
<td>701 (79.1)</td>
<td>103 (11.6)</td>
</tr>
<tr>
<td>Federal Government ((n = 466))</td>
<td>12 (2.6)</td>
<td>37 (7.9)</td>
<td>52 (11.2)</td>
<td>332 (71.2)</td>
<td>33 (7.1)</td>
</tr>
<tr>
<td>State or Local Government ((n = 527))</td>
<td>7 (1.3)</td>
<td>27 (5.1)</td>
<td>46 (8.7)</td>
<td>421 (79.9)</td>
<td>26 (4.9)</td>
</tr>
<tr>
<td>Small Business Development Center ((n = 158))</td>
<td>1 (.6)</td>
<td>3 (1.9)</td>
<td>9 (5.7)</td>
<td>133 (84.2)</td>
<td>12 (7.6)</td>
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<tr>
<td>Trade or Professional Organization ((n = 671))</td>
<td>1 (.1)</td>
<td>13 (1.9)</td>
<td>35 (5.2)</td>
<td>535 (79.7)</td>
<td>87 (13)</td>
</tr>
<tr>
<td>General Business Organization ((n = 500))</td>
<td>0 (0)</td>
<td>6 (1.2)</td>
<td>36 (7.2)</td>
<td>422 (84.4)</td>
<td>36 (7.2)</td>
</tr>
</tbody>
</table>
Figure C-13

Respondent Assessment of Information From Different Sources: Accurate

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>Strongly Disagree (%)</th>
<th>Disagree (%)</th>
<th>Not Sure (%)</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
</tr>
</thead>
<tbody>
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<td>3 (.3)</td>
<td>10 (1.1)</td>
<td>85 (9.6)</td>
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<tr>
<td>Federal Government (n = 466)</td>
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<td>18 (3.9)</td>
<td>107 (23)</td>
<td>311 (66.7)</td>
<td>24 (5.2)</td>
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<tr>
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<td>5 (.9)</td>
<td>11 (2.1)</td>
<td>71 (13.5)</td>
<td>412 (78.2)</td>
<td>28 (5.3)</td>
</tr>
<tr>
<td>Small Business Development Center (n = 158)</td>
<td>2 (1.3)</td>
<td>2 (1.3)</td>
<td>19 (12)</td>
<td>123 (77.8)</td>
<td>12 (7.6)</td>
</tr>
<tr>
<td>Trade or Professional Organization (n = 671)</td>
<td>0 (0)</td>
<td>1 (.1)</td>
<td>73 (10.9)</td>
<td>493 (73.5)</td>
<td>104 (15.5)</td>
</tr>
<tr>
<td>General Business Organization (n = 500)</td>
<td>1 (.2)</td>
<td>4 (.8)</td>
<td>55 (11)</td>
<td>408 (81.6)</td>
<td>32 (6.4)</td>
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</tbody>
</table>
Figure C-14

Respondent Assessment of Information From Different Sources:
Relevant to Their Business Needs

<table>
<thead>
<tr>
<th>SOURCE OF INFORMATION</th>
<th>Strongly Disagree (%)</th>
<th>Disagree (%)</th>
<th>Not Sure (%)</th>
<th>Agree (%)</th>
<th>Strongly Agree (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banker or Accountant (n = 887)</td>
<td>4 (0.5)</td>
<td>16 (1.8)</td>
<td>31 (3.5)</td>
<td>607 (68.5)</td>
<td>228 (25.7)</td>
</tr>
<tr>
<td>Federal Government (n = 466)</td>
<td>9 (1.9)</td>
<td>33 (7.1)</td>
<td>47 (10.1)</td>
<td>307 (65.9)</td>
<td>70 (15)</td>
</tr>
<tr>
<td>State or Local Government (n = 527)</td>
<td>8 (1.5)</td>
<td>30 (5.7)</td>
<td>43 (8.2)</td>
<td>385 (73.1)</td>
<td>61 (11.6)</td>
</tr>
<tr>
<td>Small Business Development Center (n = 158)</td>
<td>5 (3.2)</td>
<td>18 (11.4)</td>
<td>17 (10.8)</td>
<td>90 (57)</td>
<td>28 (17.7)</td>
</tr>
<tr>
<td>Trade or Professional Organization (n = 671)</td>
<td>1 (0.1)</td>
<td>14 (2.1)</td>
<td>41 (6.1)</td>
<td>391 (58.3)</td>
<td>224 (33.4)</td>
</tr>
<tr>
<td>General Business Organization (n = 500)</td>
<td>7 (1.4)</td>
<td>47 (9.4)</td>
<td>71 (14.2)</td>
<td>328 (65.6)</td>
<td>47 (9.4)</td>
</tr>
</tbody>
</table>
Figure C-15

Effectiveness of Alternative Methods for Government to Disseminate Information

<table>
<thead>
<tr>
<th>Ways of Transmitting Information*</th>
<th>Not at all Effective (%)</th>
<th>Not Very Effective (%)</th>
<th>Somewhat Effective (%)</th>
<th>Effective (%)</th>
<th>Extremely Effective (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio Public Service Ad</td>
<td>368 (29.7)</td>
<td>443 (35.7)</td>
<td>291 (23.5)</td>
<td>83 (6.7)</td>
<td>55 (4.4)</td>
</tr>
<tr>
<td>TV Public Service Ad</td>
<td>237 (19.1)</td>
<td>379 (30.6)</td>
<td>388 (31.3)</td>
<td>156 (12.6)</td>
<td>80 (6.5)</td>
</tr>
<tr>
<td>TV/Radio News</td>
<td>140 (11.3)</td>
<td>294 (23.7)</td>
<td>434 (35.0)</td>
<td>271 (21.9)</td>
<td>101 (8.1)</td>
</tr>
<tr>
<td>Front Page of Newspaper</td>
<td>73 (5.9)</td>
<td>107 (8.6)</td>
<td>254 (20.5)</td>
<td>489 (39.4)</td>
<td>317 (25.6)</td>
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<tr>
<td>Business Section of Newspaper</td>
<td>96 (7.7)</td>
<td>153 (12.3)</td>
<td>315 (25.4)</td>
<td>460 (37.1)</td>
<td>215 (17.4)</td>
</tr>
<tr>
<td>General News Magazine</td>
<td>274 (22.1)</td>
<td>422 (34.1)</td>
<td>325 (26.2)</td>
<td>168 (13.6)</td>
<td>50 (4.0)</td>
</tr>
<tr>
<td>Trade Magazine/Newsletter</td>
<td>108 (8.7)</td>
<td>149 (12.0)</td>
<td>273 (22.0)</td>
<td>441 (35.6)</td>
<td>268 (21.6)</td>
</tr>
<tr>
<td>Direct Mail Notice</td>
<td>60 (4.8)</td>
<td>74 (6.0)</td>
<td>161 (13.0)</td>
<td>233 (18.8)</td>
<td>711 (57.4)</td>
</tr>
<tr>
<td>Posted Notice</td>
<td>468 (37)</td>
<td>437 (35.3)</td>
<td>224 (18.1)</td>
<td>92 (7.4)</td>
<td>28 (2.3)</td>
</tr>
<tr>
<td>Meeting of Trade Association</td>
<td>165 (13.3)</td>
<td>189 (15.3)</td>
<td>308 (24.9)</td>
<td>329 (26.6)</td>
<td>248 (20)</td>
</tr>
</tbody>
</table>

*The number of respondents for the first four media (Radio and TV PSA, TV/Radio News, and Front Page of Newspaper was 1240. 1239 respondents answered questions about the remaining six media.
Figure C-16
Effectiveness of Media
(Rated on a Scale of 1 to 5)
Appendix D

Supplementary Figures to Accompany Chapter IV
Figure D-1
Selected Information Sources
by Company Size

- Significant at the ≤ .05 level
- Significant at the ≤ .01 level
- Significant at the ≤ .001 level
(1) trend: significance 0.05 to 0.10

<table>
<thead>
<tr>
<th>Source</th>
<th>Under 5 Employees</th>
<th>5 to 19 Employees</th>
<th>20 to 49 Employees</th>
<th>Over 50 Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newspaper/Magazine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV/Radio News</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attorney</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplier</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Potential Workshop</td>
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<td></td>
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</tr>
<tr>
<td>Trade Mag</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Newsletter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt Official</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure D-2

Selected Information Sources by Years in Business

Percent Receiving from Each Source

Attorney*  Banker  Paid Workshop**  Competitor**  Customer**  Govt Report***

Less than 5 Years  5 to 10 Years  10 to 19 Years
20 to 49 Years  50 Years and Over

significant at the ≤ .05 level
significant at the ≤ .01 level
significant at the ≤ .001 level
trend: significance .05 to .10
Selected Information Sources
by Company Revenues

- Significant at the .05 level
- Significant at the .01 level
- Significant at the .001 level
- Trend: significance .05 to .10

- Attorney
- Accountant
- Banker
- Consultant
- Paid Workshop
- Trade Newsletter
- Trade Meeting

Categorical groups:
- Under $500,000
- $500,000-$2 Million
- Over $2 Million
Figure 1

Selected Information Sources
by Extent of Company Growth

Percent Receiving from Each Source

Significant at the .05 level
Significant at the .01 level
Significant at the .001 level
Bend: significance .05 to .10

Negative Growth No Growth Low Growth: 1-10% High Growth: 11%+

Selected Information Sources
by Extent of Industry Change

- Significant at the ≤ .05 level
- Significant at the ≤ .01 level
- Significant at the ≤ .001 level
(t) Trend: significance .05 to .10

Little or No Change  Some Change  Fairly Extensive  Extensive Change
Figure D-6

Selected Information Sources
by Extent of Company Change

Percent Receiving from Each Source

significant at the .05 level
significant at the .01 level
trend: significance .05 to .10

Legend:
- Little or No Change
- Some Change
- Fairly Extensive
- Extensive Change
Figure D-7

Selected Information Sources
by Industry Group

- significant at the $p < .05$ level
- significant at the $p < .01$ level
- significant at the $p < .001$ level

Graph showing the percent receiving from each source by industry group.

- Attorney***
- Accountant**
- Banker***
- Competitor**
- Supplier***
- Customer*
- Paid Worker***
- Trade Mgr**
- Govt Report*
- Govt Official*
Figure D-8

Actively Seeking Information by Company Size

![Bar Chart](chart.png)

- Technology**: Significant at the ≤ .05 level
- Management***: Significant at the ≤ .01 level
- Marketing***: Significant at the ≤ .001 level
- Capital (l)
- Purchasing***: Trend: significance .05 to .10
- Safety***
- Employment***
- Govt Purch*
- Govt Benefit (l)

Legend:
- ** Under 5 Employees
- 5 to 19 Employees
- 20 to 49 Employees
- Over 50 Employees

Percent Seeking Each Type

8-0
Actively Seeking Information
by Years in Business

- **significant at the ≤ .001 level**
- **significant at the ≤ .01 level**
- * significant at the ≤ .05 level

(1) trend: significance .05 to .10

<table>
<thead>
<tr>
<th>Years in Business</th>
<th>Technology*</th>
<th>Capital***</th>
<th>Purchasing**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 to 10 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-20 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-50 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 50 Years</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure D-10
Actively Seeking Information
by Company Revenues

Technological

Computer

Management

Marketing

Purchasing

Safety

Employment

Govt Purch (t)

Percent Seeking Each Type

significant at the .05 level

significant at the .01 level

significant at the .001 level

trend: significance .05 to .10

0 to $500,000

$500,000 to $2mil

Over $2 million
Actively Seeking Information
by Company Growth

- Significant at the $< .05$ level
- Significant at the $< .01$ level
- Significant at the $< .001$ level
- Trend: significance $.05$ to $.10$
Figure D-12
Actively Seeking Information
by Industry Change

Percent Seeking Each Type

- Extensive Change
- Fairly Extensive Change
- Some Change
- Little or No Change

significant at the ≤ .05 level
significant at the ≤ .01 level
significant at the ≤ .001 level
trend: significance .05 to .10
Actively Seeking Information
by Company Change

- significant at the ≤ .05 level
- significant at the ≤ .01 level
- significant at the ≤ .001 level
(t) trend; significance .05 to .10

Technology***
Computer***
Management***
Capital***
Marketing***
Purchasing*
Taxes*
Govt Purch*
Govt Benefit**

Extensive Change
Fairly Extensive Ch
Some Change
Little or No Change
Figure D-14

Actively Seeking Information
by Industry Group

Percent Seeking Each Type

Computer (t)  Management*  Marketing***  Texas**  Safety**  Govt Purch (t)

Manufacturing  Retail  Finance, Insur, RE
Services  Construction, Other

significant at the ≤ .05 level
significant at the ≤ .01 level
significant at the ≤ .001 level
trend: significance .05 to .10
Effectiveness of Alternative Media by Company Size

Figure D-15

Effectiveness of Alternative Media
by Company Size

Business Section of Newspaper

Trade Meeting

* significant at the .05 level
** significant at the .01 level
*** significant at the .001 level
(1) trend: significance .05 to .10
Effectiveness of A. Native Media
by Number of Years in Business

Figure D-16

Mean

0  0.5  1  1.5  2  2.5  3  3.5  4

PSA Radio*  PSA TV*  TV/Radio News*  Front Page Newspaper (t)

Less than 5  5-10  Over 50

21-50

significant at the ≤ .05 level
significant at the ≤ .01 level
significant at the ≤ .001 level
trend: significance .05 to .10
Figure D-1/

Effectiveness of Alternative Media
by Company Revenue

- Significant at the ≤ .05 level
- Significant at the ≤ .01 level
- Significant at the ≤ .001 level
(t) Trend: significance .05 to .10

- PSA TV (t)
- Business Section of Newspaper
- General News Magazine
- Trade Magazine/Newsletter
- Trade Meeting

Legend:
- Over $2 million
- $500,000 to $2 million
- Under $500,000
Figure D-19

Effectiveness of Alternative Media
by Industry Change

- Significant at the .05 level
- Significant at the .01 level
- Significant at the .001 level
(t) Trend: Significant at .05 to .10

<table>
<thead>
<tr>
<th></th>
<th>Little or No Change</th>
<th>Some Change</th>
<th>Fairly Extensive Change</th>
<th>Extensive Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Magazine/Newsletter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure D-20

Effectiveness of Alternative Media by Company Change

- Significant at the .05 level
- Significant at the .01 level
- Significant at the .001 level

* Little or No Change
** Some Change
*** Fairly Extensive Change
**** Extensive Change

Legend:

- Little or No Change
- Some Change
- Fairly Extensive Change
- Extensive Change
Figure D-21

Effectiveness of Alternative Media
by Industry Group

<table>
<thead>
<tr>
<th>Media Type</th>
<th>Industry Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSA Radio*</td>
<td>Retail</td>
</tr>
<tr>
<td>PSA TV**</td>
<td>Retail</td>
</tr>
<tr>
<td>Trade Magazine/Newsletter*</td>
<td>Finance, Ins, RE</td>
</tr>
<tr>
<td>Trade Meeting*</td>
<td>Construction, Other</td>
</tr>
</tbody>
</table>

Legend:
- Manufacturing
- Retail
- Finance, Ins, RE
- Services
- Construction, Other

- significant at the ≤ .05 level
- significant at the ≤ .01 level
- significant at the ≤ .001 level
- Trend: slight to moderate