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PRACTITIONERS' PERCEPTIONS AND RECOMMENDATIONS

by

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An exciting new service for the practicing audit professional is the
creation of financial data bases usable for electronic research. Over the
past ten years, service companies have compiled data bases of financial data
and other information. Service companies make their products available through
subscription to clients who want easy and instant access to data which can
be helpful in the decisionmaking process. All of the "Big 8" accounting
firms are now subscribers to one or more of these services. They, in turn,
provide access to their local offices where telephone communication facilities
permit.

In an attempt to determine what use is made of public access data
bases in the auditing process, the authors conducted a national survey of
469 offices of "Big 8" firms. The results of the survey and some suggestions
for practitioners which surfaced in the responses are discussed in this article.
First, to provide some basic background, a general discussion of the most
often used data bases and their contents follows.

DATA BASE CONTENTS

According to the survey results, the most widely known and used data
base system is provided by Mead. While many accounting professionals are
aware of Mead or have used it through its Lexis data base for tax information,
Mead provides many services which are useful for other purposes in auditing
and consulting. For example, the NAARS data base developed jointly by the
AICPA and Mead contains the most recent five years of the audited portions

of financial statements for approximately 4,000 companies per year. For an additional fee, the user can access data from five or more prior years if needed.

NAARS also provides files which contain the professional literature of the AICPA, APB, FASB, GASB and SEC. Auditing Standards and Accounting and Auditing Guides, Industry Standards and current news articles are other data bases of business significance available to the Mead subscriber through NAARS. In addition, "Big 8" firms have been encouraged to enter their firm audit guides in private libraries for local office access. With such breadth and depth, Mead has been able to market its services to meet many diverse needs.

Other popular publicly available data bases are available through Dialog, Dow Jones, and other sources. Industry statistics, company profile statistics, extracts of filings such as 10-K's, proxy statements, etc., and current business news are some of the types of information available through these data bases.

Data base services themselves suggest that the usefulness of various data bases to the professional auditor ranges from information gathering to seeking support for audit decisions. The information gathering process can be much like reading today's issue of the Wall Street Journal. The audit professional can quickly and efficiently obtain information about the current conditions of a certain industry or company as he is seeking to develop a potential client. Of a more specialized nature, some data bases can identify audit reports which have been issued in unique situations or predecessor audit reports and financial statements for a company which may become a new client. With vast information sources instantly available, is was suggested

that electronic research (hereafter, ER) is a major resource marketing tool for the practitioner in developing clients for audit or other purposes.

THE SURVEY

With so much information readily available for the price of subscription fees, access fees, and search fees, the authors sought to discover how professionals in local offices of "Big 8" firms employ these services: what situations created frequent use in auditing and which data base services were used most often. During a summer internship at the local office of a "Big 8" firm, a preliminary survey instrument was developed to answer similar questions for the local office. Information received from other offices within the firm was helpful in developing a plan for fuller implementation of electronic research when desired.

Offices to be surveyed were identified with the help of local offices of "Big 8" firms. Of paramount consideration were the size and potential client base necessary to make electronic research practicable and feasible. Office size was designated by the number of partners in the office. Only offices with five or more audit partners were selected initially. The survey instrument was sent to the partner in charge of audit services, if identified, or to the managing partner of the office with a letter requesting that he forward the survey to the appropriate person for response.

Of the 469 offices of "Big 8" firms solicited, 112 responded. It should be noted that this represents a response rate of 24%, a very respectable and highly representative return especially in professional subjects. All firms are represented in the analysis that follows as are all parts of the country. Respondents ranged in size from those having no public clients to offices with more than 25 publicly held clients. Diversity in their approaches

to the use of electronic research is apparent from the responses and is as much a function of firm policy as office size and client base.
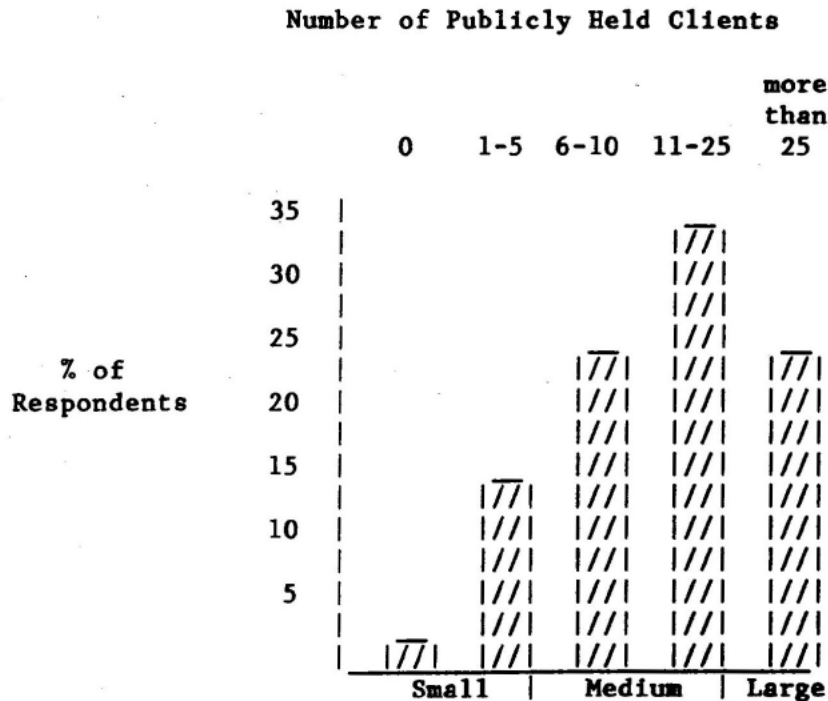
RESPONDENT PROFILE

A profile of the respondents is found in Charts 1 and 2. Chart 1 depicts the responding offices by the number of professionals in the audit department while Chart 2 reflects the number of publicly held clients serviced by the office. Because firm policies differ in the promotion process to effectively run a local practice, it is the combination of office size and client base that best describes the practitioner group whose opinions, experiences and attitudes are reported here.

CHART 1

Number of Professionals
in Audit Department

```
                 less                        more
                 than    26-    41-   71-    than
                  25     40     70    90      90

             35  |                          |77|
                 |                          |//|
             30  |                          |//|
                 |                          |//|
             25  |                          |//|
  % of           |                          |//|
Respondents  20  |              |77|        |//|
                 |       |77|   |//|  |77|   |//|
             15  |       |//|   |//|  |//|   |//|
                 |       |//|   |//|  |//|   |//|
             10  |       |//|   |//|  |//|   |//|
                 |       |//|   |//|  |//|   |//|
              5  |       |//|   |//|  |//|   |//|
                 |  |77| |//|   |//|  |//|   |//|
                 |  |//| |//|   |//|  |//|   |//|
                     Small  |    Medium  |  Large
```
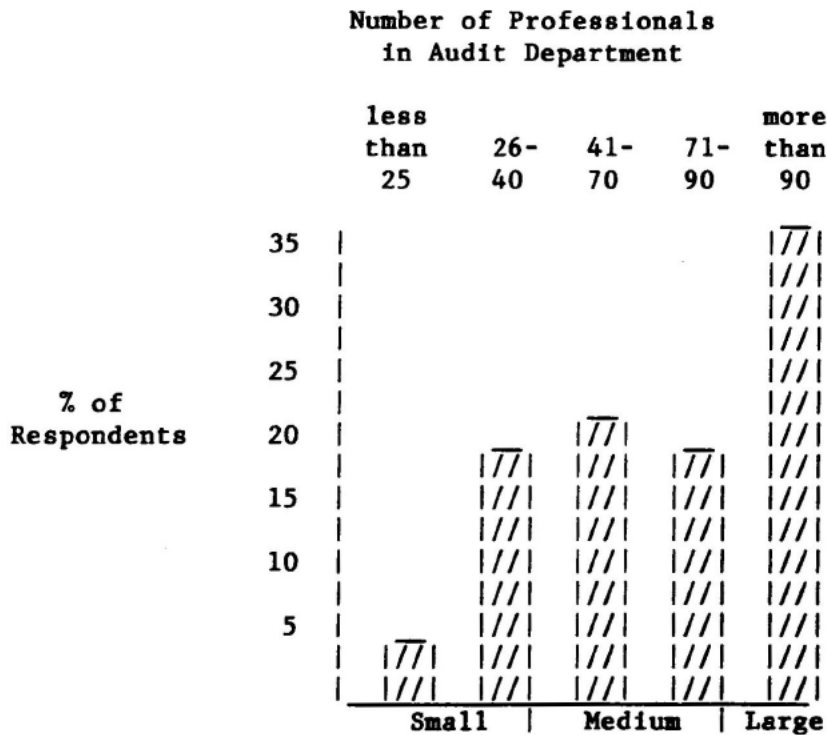
The authors have chosen to describe the responding offices in the following manner. Those respondents with less than 40 audit professionals/five publicly held clients are considered small offices. Offices with 41-90 audit professionals and 6-25 publicly held clients are medium sized offices. Large offices consist of more than 90 audit professionals and more than 25 audit clients. As the charts indicate, by either definition there is a significant percentage of responses in each category. Therefore, attitudinal responses are not overly biased by larger offices. It was anticipated, however, that the larger offices might have utilized ER to a greater extent and thus would be a resource for sharing information with the smaller offices.

CHART 2

Number of Publicly Held Clients

```
                                             more
                                             than
                    0     1-5   6-10  11-25   25

            35  |
                |                        |77|
            30  |                        |//|
                |                        |//|
            25  |                        |//|
    % of        |                  |77|  |//|  |77|
  Respondents 20|                  |//|  |//|  |//|
                |                  |//|  |//|  |//|
            15  |                  |//|  |//|  |//|
                |            |77|  |//|  |//|  |//|
            10  |            |//|  |//|  |//|  |//|
                |            |//|  |//|  |//|  |//|
             5  |            |//|  |//|  |//|  |//|
                |            |//|  |//|  |//|  |//|
                |      |77|  |//|  |//|  |//|  |//|
                   Small  |      Medium    | Large
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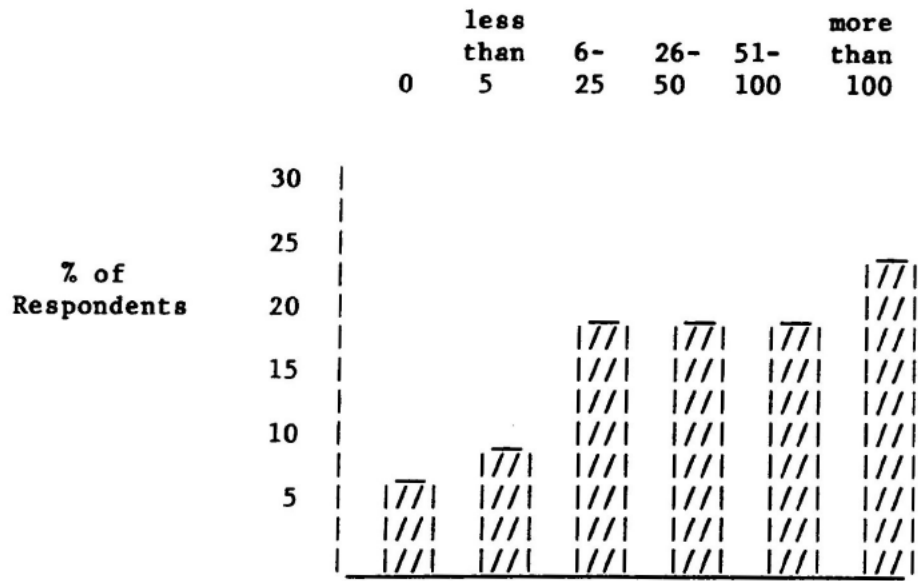
A measure of the importance of electronic research to the audit function is represented in the hours of its use during the last year and the

respondent's attitude toward its use. Chart 3 indicates that more than 45% of the respondents use some form of electronic research more than 50 hours per year. Yet, when asked what kind of research tool ER provided for auditing, the respondents were almost evenly split. Fifty-one percent considered usage of publicly available data bases to be a secondary tool in auditing while 44% reported using electronic research very little or not at all. Of all the respondents, only five percent have developed uses of ER to the point where they considered access to publicly available data bases to be a primary research tool for audit purposes at this time.

CHART 3

Hours Use of Electronic
Research Past Year

```
                   less                          more
                   than    6-    26-   51-       than
            0       5       25    50    100      100

        30 |
           |
        25 |                                      |77|
% of       |                                      |//|
Respondents 20 |                                  |//|
           |                |77|  |77|  |77|       |//|
        15 |                |//|  |//|  |//|       |//|
           |                |//|  |//|  |//|       |//|
        10 |                |//|  |//|  |//|       |//|
           |          |77|  |//|  |//|  |//|       |//|
         5 |  |77|    |//|  |//|  |//|  |//|       |//|
           |  |//|    |//|  |//|  |//|  |//|       |//|
           |__|//|____|//|__|//|__|//|__|//|_____|//|
```

In order to implement the usage of electronic data bases in an efficient and effective manner, there needs to be a fairly high level of knowledge or familiarity with each of the data bases made available by the

national firm. Several means may be available to an office to ensure that electronic research is conducted in an efficient and cost effective manner. At least two "Big 8" firms channel all use of electronic research for audit purposes through the national office where specially trained personnel are available to conduct efficient searches at local office requests. Another firm maintains research librarians in local offices whenever possible, again to encourage cost effective use of specialized skills. Most firms, however, make access to data base services available to the local office, provide training manuals and let the local office decide upon its implementation.

When the use of electronic research is decentralized with little specialized support, there appears to be less tendency to utilize it. This is especially true when the microcomputer used by the audit staff is not an IBM or IBM compatible machine. From experience, training manuals for sophisticated data base services to accompany non-IBM/IBM compatible machines do not provide the necessary details to enable the user to effectively utilize the more sophisticated public access data bases.[1]

So who is running the show in electronic research at the local office when its use is decentralized? While only 34% of the respondent offices use research librarians, 88% of the respondents indicated that some or all of their management group are "knowledgeable" about electronic research. Many offices seem to be placing the greatest emphasis on training seniors and staff accountants in the use of data base services as well as other computer oriented tasks. The fact that the management group is "knowledgeable" in ER

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[1]   It has been the authors' observation that if an office uses non-IBM micros for audit but IBM micros for its tax department, as is the case for some "Big 8" firms, the necessary instructional materials for audit-related data bases are most often available with the tax materials for that data base.

does not necessarily mean they are also proficient. In fact, the initial availability of ER and public access data bases and the slow development of their use for audit purposes suggests that the upper management group in the local office has few experts and may have many questions about the effectiveness of its uses. Thus, firms appear to be developing expertise in this as other computer specialty areas at lower levels of professional staff in hopes that such knowledge will be promoted into management.

MAJOR USES OF ELECTRONIC RESEARCH

It is debatable whether the size of the client or the research question is more important in the decision to use ER. When asked the effect of the size of client in terms of billings on the use of electronic research, 48% responded that the larger the client in terms of billings the more likely would be the chance of using such research. Another 40%, however, did not know if there was a relationship between the decision to use ER and the size of the client for their practice. This suggests that when the question is important enough, the billing amount is not a factor affecting the decision to use ER. On the other hand, it may be that ER costs are viewed as costs which, if incurred, will have to be absorbed rather than passed on to the client as a billing item and are, therefore, not isolated.

Many offices indicated that access exists locally to several public access data bases yet at the same time noted that availability did not necessarily lead to use. This was determined when respondents who listed numerous data bases omitted any preference ranking for data bases other than the two or three most used. Of the responding offices, the Mead data base system (specifically, NAARS) was available in 81% of the local offices.

Dialog, Disclosure and the Dow Jones Data Bases enjoyed relatively equal popularity with 32%, 37%, and 34% availability respectively. It is important to note that Mead enjoys immense popularity with the national firm providers yet it is one of the most complex data base services to access in an efficient manner without a research specialist on hand. Consequently, access provided by the national firm does not necessarily translate into effective use in the local office.

Data base services themselves suggest that their products are useful for information and for support in audit decisions. Clearly the respondents felt that informational purposes of data base usage were more significant, especially as a marketing tool, than use as support in audit decisions. This conclusion was drawn from individual comments and the number of positive responses to informational use compared with audit decision categories. Nevertheless, firms were asked to rank both types of use for several areas. A summary of the ranking provided by the respondents is contained in Table 1. The respondents were given a range from "1" to "6" with "1" being the highest ranking and "6" representing the lowest possible ranking.

TABLE 1

Ranking of Uses of ER in Audit

	Informational	Support for Audit Decisions
Industry analysis	3	4
Firm industry guides	5	6
Researching unusual matters	1	1
To acquire an annual report	2	2
To research an audit area from several Firm manuals	6	5
Researching audit reports	4	3

As expected, the ranking of different uses of public data bases differs in most cases depending upon whether the need is for information or for audit support. From this table it is clear that the most significant uses of public access data bases for audit purposes are researching unusual matters and acquiring an annual report. These situations pose the most efficient uses of electronic research compared to other means of researching a given question, especially when the professional's billing rate is factored into the research process.

Data base services also provide efficient means of acquiring industry analyses or researching audit reports when compared with other methods of gathering the same information. Note that the ranking of these items reverses in significance relative to information compared with support for audit decisions. Of least importance are the availability of firm industry guides and the private libraries of "Big 8" firms provided through some services. Since both of these items are more readily available in the local office by less costly means, it follows that their uses may not be cost effective through electronic research.
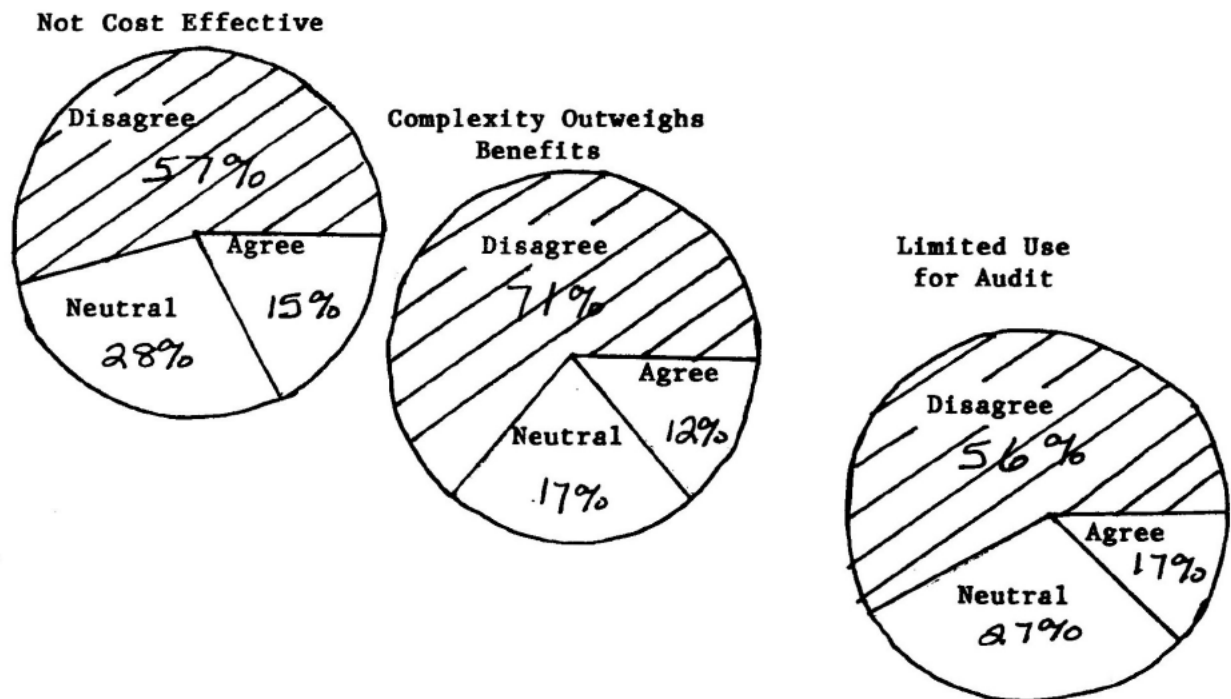
ATTITUDES TOWARD ELECTRONIC RESEARCH

Electronic research is an emerging issue in auditing practice. Interviews and our pretest survey indicate that some preconceived attitudes which could limit its use may exist. To examine the strength of such attitudes, 11 statements about ER and its use were presented, asking respondents to express agreement, disagreement or a neutral position.

The first three statements were made to reflect the negative attitudes often expressed about ER or any new tool. The statements asked respondents for their agreement with the main criticisms of ER, namely that 1) it is not

cost effective, 2) it has limited use in auditing, and 3) its complexity outweighs the benefits. Chart 4 reflects that the respondents disagree with all criticisms presented for ER. The most surprising fact, however, comes from the very small numbers who, in each case, agreed with the criticisms. The number of "neutral" responses is interesting because it may represent lack of use, lack of personal experience or lack of knowledge.

CHART 4

Not Cost Effective

Disagree 57%
Agree 15%
Neutral 28%

Complexity Outweighs Benefits

Disagree 71%
Agree 12%
Neutral 17%

Limited Use for Audit

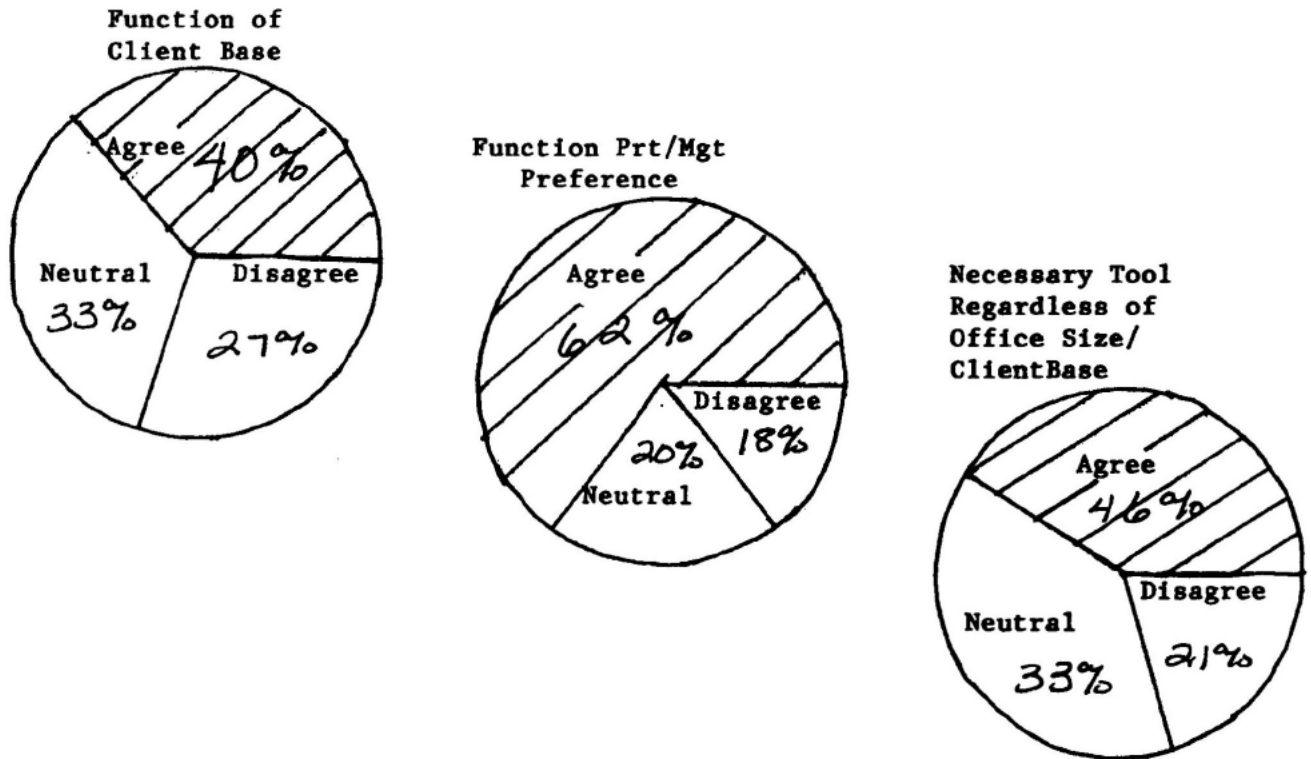Disagree 56%
Agree 17%
Neutral 27%

Agreement with the common criticisms range from only 12% to 17%, the highest being the question of limited use in auditing.

A second group of questions sought to determine the most important factors in the decision to use ER. The statements asked for agreement that 1) ER is a function of the client base, 2) ER is a function of the partner

or management group's preference and 3) that ER is a necessary tool regardless of office size or client base. Chart 5 indicates that the respondents showed support for each of these statements with the strongest agreement on the partner/management group preferences.

CHART 5

Function of
Client Base

Agree 40%
Neutral 33%   Disagree 27%

Function Prt/Mgt
Preference

Agree 62%
Disagree 18%
Neutral 20%

Necessary Tool
Regardless of
Office Size/
ClientBase

Agree 46%
Disagree 21%
Neutral 33%

As expected, the influence of partners in decisions to implement the use of new tools or to approve new costs is crucial to acceptance of ER.

The uses of ER that are available for risk assessment of clients would be those suggested by Table 1: researching unusual matters, acquiring an annual report, industry analysis, and researching audit reports which

deal with a questionable situation. Respondents believed that data bases which provide such information are more important for assessing the risk of accepting a new client than for assessing the risk associated with a continuing client. This is to be expected since ER should perform a more valuable service of providing an information base about a client who is not yet known.

The final questions sought to reflect the respondents opinions of the most effective and efficient uses of ER. While 42% of the respondents agreed that ER is best utilized when an office employs research librarians, these numbers are comparable to the number of respondents who actually employ such personnel. It could be inferred that the research librarian/ paraprofessional for audit departments is a skilled support person whose time is now coming.

This observation may find support in the fact that an overwhelming 76% of the respondents believed that not all potential uses of electronic data bases have been implemented by their offices. Thus, we must conclude that much can be done to expand upon the uses of ER for audit purposes but the learning process could be costly without thoughtful guidelines.

RECOMMENDATIONS

Implementation of ER is most closely associated with partner preferences, yet partners may be farthest removed from its use. At the same time, partners are sensitive to any new or incremental costs, especially those which traditionally may not have been considered billable. Finding an efficient and cost effective solution to employing ER is paramount if partnership support for use of this tool in auditing is going to increase at the local level. Partnership involvement speaks to the fact that only five percent of the respondents view ER as a primary research tool.

Utilizing ER for auditing is best done when the office has access to specially trained personnel who are thoroughly familiar with all the available data bases. Choices need to be made among data bases to respond to specific situations and desired information at the lowest cost. Some data bases are complex and efficiency of usage that is cost beneficial comes with repetition. Thus, average search costs quoted by vendors may appear too costly on the surface unless the product of time and billing rate to research a question by alternate means is fully examined. This does not appear to be the case since many respondents indicated that cost data for ER was not determinable.

Where firm policy dictates centralized access to ER for audit purposes, the local office may have little specific knowledge of what can be made available for specialized research needs. On the other hand, the question of research costs being billable is irrelevant. It is the local offices of those firms which have decentralized usage of ER as well as firms which are regional or local in nature that most need recommendations for implementation.

In many public accounting offices paraprofessionals are filling an important supporting role for the audit staff, following the experience of the legal profession or the office's own tax division. Paraprofessionals who are trained to perform routine functions with computers for the local office can fill the need for a research librarian and help the local office expand its use of ER in a very cost effective manner. Perhaps the term "research librarian" caused confusion for respondents who might associate this terminology with personnel only available in the largest offices. Again, paraprofessionals, properly trained in ER, can become the local office's "research librarian" at a very attractive billing rate. This may create an

incentive to isolate ER costs and pass them on to clients rather than to face the question of absorbing them.

From experience, when the local office in a decentralized firm places the responsibility for ER with managers or supervising seniors, there is an inclination to avoid using complex data base services if specially trained personnel are unavailable. The reasons are many. Upper level professionals with technical computer skills find their time is limited because, in addition to serving their own clients, other audit professionals within the office rely on their technical skills to serve their clients. Opening management time to be an open resource for ER is too costly in time and dollars and is thus a barrier to expanding the use of ER. Often the billing rate of management level professionals is a prohibitive cost to pass on to the client and so the local office feels it must decide either to absorb such costs or decline to engage in ER for wider research issues.

Even for the office which has research specialists with billing rates far below those of skilled management level personnel, the cost of ER is an important factor. One research librarian wrote that her views were different from those of the partners and managers in the office. She stated that she encouraged the use of ER but constantly fought "fear of the costs" which, according to her, inhibits use of ER in that office. Thus, even with research librarians there will be an underutilization of ER, whatever the purpose, unless partners are convinced that it is a cost effective tool.

Despite the foregoing statements, two suggestions for increasing an efficient use of ER as an audit tool are available. One course of action is for the national office to provide centralized access to a specialized staff as is done in some "Big 8" firms and promote its use. If, however, autonomy

is desirable, the local office should consider whether to employ and train paraprofessionals to serve, among other capacities, as the office research librarian. The para's lower billing rate can more easily be passed on to the client rather than continuing to face the question of absorbing ER costs. This, we feel, will stimulate the effective and efficient use of ER in many ways which are not presently being considered.