


Quirk's

MARKETING RESEARCH

Review

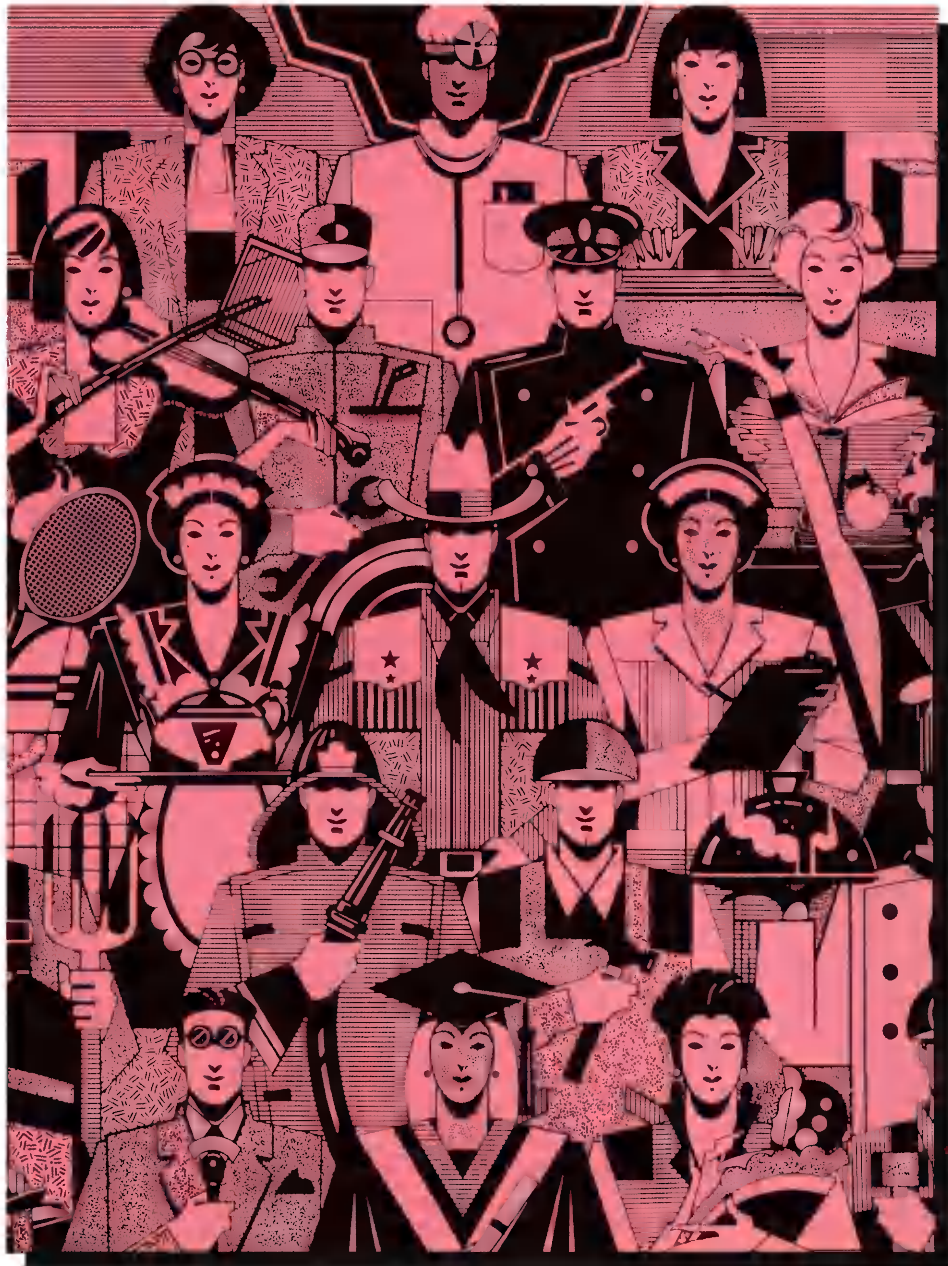


Scanning system gives Princess Cruises
quick access to survey results

1993 Directory of Telephone
Interviewing Facilities

May, 1993

IF YOU'RE NOT TALKING TO THE RIGHT PEOPLE...



TALK TO US.



WHALEY RESEARCH & ASSOCIATES, INC.

5001 RIVERDALE COURT

COLLEGE PARK, GA 30337

800-633-1652 / FAX 404-991-4904

- FOCUS GROUP FACILITIES • IN DEPTH INTERVIEWING • RECRUITING
- EXECUTIVE • CONSUMER • PROFESSIONAL

HAVE YOU GOT 1000 QUESTIONS TO ASK?

**Quancept CAPI can handle it.
The powerful software for Computer
Assisted Personal Interviewing on
laptop computers as used by leading
research agencies throughout the
world.**

**Fast and efficient. The best solution
for your largest surveys
- even 1000 questions.**

From Quantime. Who else?

**For more information
contact Joe Marinelli at:
Quantime Corporation
18th Floor
545 8th Avenue
New York 10018**

(212) 268 4800



Quirk's MARKETING RESEARCH Review

Vol. VII, No.5

May, 1993

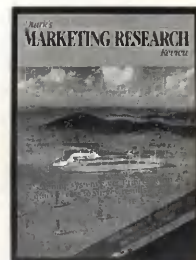
Features

- 6 Scanning the seas**
Scannable questionnaires give Princess Cruises accuracy and quick turnaround
- 8 Statistics software meets Windows**
A review of SPSS, Systat and a new non-Windows alternative
- 14 Automating the coding process with neural networks**

Departments

- 10 Data Use: Data analysis improves service of Arizona Dept. of Weights & Measures**
- 18 Survey Monitor**
- 22 Names of Note**
- 23 Research Company News**
- 24 Product and Service Update**
- 25 Product and Service Update—In-Depth**
- 48 Qualitative Research/Focus Group Moderator Directory**
- 53 1993 Directory of Telephone Interviewing Facilities**
- 93 Classified Ads/Sales Offices**
- 94 Trade Talk**

Cover
An in-house scanning system gives Princess Cruises quick turnaround of ongoing survey results. Photo courtesy of Princess Cruises.



Publisher
Tom Quirk

Managing Editor
Joseph Rydholm

Marketing Associate
Evan Tweed

Circulation Director
James Quirk

Art Consultant
Dave Hahn

Business Manager
Marlene Flohr

Quirk's Marketing Research Review, (ISSN 08937451) is issued 10 times per year—January, February, March, April, May, June/July, August/September, October, November, December—by Quirk Enterprises, Inc., 6607 18th Ave. So., Minneapolis, MN 55423. Mailing Address: P.O. Box 23536, Minneapolis, MN 55423. Telephone & Fax: 612-861-8051. Second class postage paid at Minneapolis, MN and additional mailing offices.

Subscription Information: U.S. annual rate (ten issues) \$40; two years (20 issues) \$76; three years (30 issues) \$112. U.S. single copy price \$10. Change of address notices should be sent promptly; provide old mailing label as well as new address; include ZIP code or postal code. Allow 4 to 6 weeks for change. POSTMASTER: Please send change of address to Quirk's Marketing Research Review, P.O. Box 23536, Minneapolis, MN 55423.

Quirk's Marketing Research Review is not responsible for claims made in advertisements.

Editorial policy: We invite submission of manuscripts from outside sources. Write or call for guidelines. Address press releases and other editorial material to Joseph Rydholm, managing editor. We reserve the right to edit any manuscript.

Copyright 1993 by Quirk's Marketing Research Review

Real Stats. Real Easy.

NEW!
EXTENDED
DOS VERSION
ALSO AVAILABLE
Call (800) 345-5383

SPSS for Windows gives you answers your spreadsheet or database can't.
It's a great value at \$695!

Learn Fast, Work Fast

"Stumling hlocks to statistical analysis are eliminated with SPSS for Windows. You don't have to be a programmer to use it and you don't have to be a statistician to understand it."

— Richard O'Reilly, Los Angeles Times.

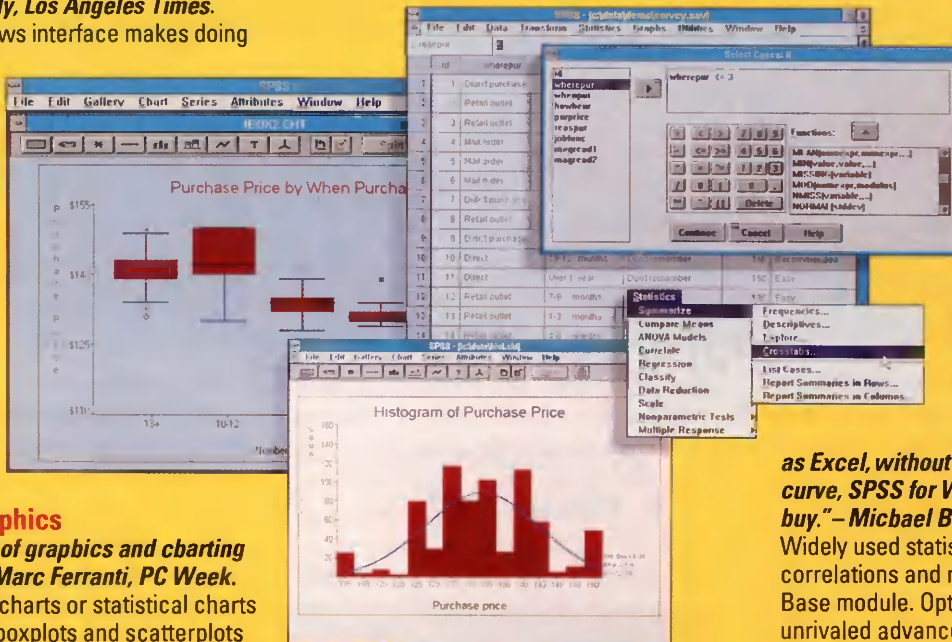
The 100% Windows interface makes doing analysis simple. Context-sensitive help and an on-line glossary of statistical terms are just a click away.

Automatic Statistical Graphics

"A complete set of graphics and charting capabilities." — Marc Ferranti, PC Week.
Create business charts or statistical charts like histograms, boxplots and scatterplots automatically. Unlike other stats packages, edit the charts directly on-screen without respesifying.

Complete Data Management and Editing

"A breakthrough in data capacity and ease of use...impressive." — Alan Fridlund, InfoWorld. There's no limit on the number of variables you can analyze. Read data directly from Excel,™ Lotus,® .dbf and SAS® transport files. Work live with Oracle® and SQL Server™ data. Edit and use data many ways, easily.



In-depth Statistics

"For more statistical analysis tools than you'll get from a spreadsheet such

as Excel, without the steep learning curve, SPSS for Windows is a great buy." — Michael Burgard, PC/Computing.
Widely used statistics such as crosstabs, correlations and regression are in the Base module. Optional modules with unrivaled advanced statistics are available. You won't grow out of this package.

When you really want answers you have to go beyond what spreadsheets or databases can offer. You need a package that is designed for real statistical analysis, reporting and charting – and is easy to use. You need SPSS® for Windows,™ the real stats, real easy combination that delivers real value.

You'll break out of the spreadsheet cell with SPSS for Windows. Do more than simple percentages and sums – subset, sample, aggregate, explore, summarize, poke and prod, slice and dice your data to get the answers you need. Analyze surveys, dig into databases, improve quality, conduct research studies, forecast sales and prepare reports with ease. All without writing complex macros or queries. Find relationships, see patterns and trends, determine significance and use the past to predict the future.

Learn fast, work fast. Prepare for your analysis quickly with SPSS' full-featured Data Editor. Choose from a broad range of statistical routines, including those in specialized add-on mod-

ules, that produce full-color charts automatically. Hot button between charts and related numerical output. Share information using DDE and OLE. Put together a great presentation with powerful and flexible business graphics and a report writer.

If you need help, the documentation is full of statistical "how to," and experienced technical support is just a phone call away.

SPSS for Windows – when you need more stats than a spreadsheet or database can offer.

Order now and get a great value — only \$695.

American Express, Discover, MasterCard or Visa accepted. Unconditional 60-day money-back guarantee.

Fax (312) 329-3668 or
Call (800) 345-5383



SPSS

Scanning

Scannable questionnaires give Princess Cruises

the

accuracy and quick turnaround

Seas

PRINCESS CRUISES

In their continuing quest to do research better and faster, many researchers are discovering that scannable questionnaires have a lot to offer. On a scannable form, instead of checking boxes or writing in answers, respondents reply by filling in dots. The completed forms are then fed into a machine that "reads" the dots.

Some large-scale users have bought their own scanning systems while others who survey sporadically send the forms to an outside firm for processing. One company, Princess Cruises, does a little of both, using an in-house system for its ongoing satisfaction survey and farming out smaller projects to Pine Company, a Santa Monica, Calif., data processing firm.

Love Boats

Princess Cruises' famous fleet of Love Boats sails to destinations around the world. The company is the third largest in the industry based on market share and carries approximately 450,000 passengers annually.

The company has had an in-house scanning system for four years. Jaime Goldfarb, Ph.D., senior market re-

by Joseph Rydholm
managing editor

searcher, Princess Cruises, says that the ability to have immediate access to the data from its on-board surveys was one of the reasons Princess made the investment in a scanning system. "Our use of scanning systems is twofold. First, to monitor on-board performance on a regular basis, we distribute a satisfaction questionnaire on all voyages. Second, in response to our operations and marketing departments, we are continually designing and implementing a number of small, custom questionnaires. In the past, we had the data keypunched. However, by farming out the questionnaires, we found that we had a lag time in processing that would last anywhere from a week to ten days. In order to reduce our processing time, we looked for a method in which we could process the forms in-house. We decided that the only feasible approach was a scannable system."

Another reason for going to scan-

nable forms was increased accuracy, Goldfarb says. "We have found scanning to be a more accurate method of data input than keypunching. When initially considering a move to a scannable system, we ran tests on a set of questionnaires we had already fielded. When we compared the data files resultant from the two methods to an internal review of forms, we found that although the scanned system occasionally missed marks because they had not been filled in properly, the scanned data file was still more accurate."

An additional plus is the public's comfort level with scannable forms, he says. "Because they have become so ubiquitous in society, from test questionnaires in school and college, in some ways people are more comfortable filling in bubbles than they are in having to complete a non-scannable questionnaire."

185,000 forms per year

The on-board survey is distributed one per cabin prior to the last day of the cruise. Passengers are asked to place the surveys in a locked box when they are completed. The 45 question survey is



very detailed, looking at opinions of pre-cruise documents and logistics such as airport transfers to the ships, airline flights, and shore excursions. It also looks at presentation of food, quality of ingredients, variety of menu, and service areas such as stateroom service, housekeeping, and front desk performance. The surveys are distributed on every voyage of each of the nine ships in the Princess fleet. Approximately 185,000 forms are processed per year, and the response rate is between 65 and 95 percent.

"The questionnaires from every voyage are processed, and a performance report is distributed to all operations departments," Goldfarb says. "We also produce a monthly summary report that examines on-board performance by cruise destination and vessel, as well as identifying any specific problem areas that need to be addressed. If we see an area that consistently shows a deficiency in performance, we will take whatever steps are necessary to fix the problem.

"Whenever changes are made in our questionnaire, we first approach our operations people for any input they may have in order to make the forms as

meaningful as possible for them. We try to make the questionnaires as actionable as possible for these operations people, so that not only can we identify problems we can also provide feedback on how these problems might be rectified."



For example, the ongoing survey has led to changes in the menu items and the on-board buffets. "At certain times during the year we've found problems with our on-board buffets in terms of presentation and variety of items that were offered. Based on that data we've changed the program of the buffets, the menus and the way the food is presented. We also found that certain food items, based on open-ended comments, tend to be less popular so we've taken those items off menus and added things that people indicated they'd prefer."

Custom projects

While Princess uses its in-house scanning capabilities for the ongoing satisfaction study, for certain surveys it has turned to Pine Company. "As I stated previously, we continually have a number of smaller custom projects that arise in response to specific operations and marketing concerns. Because of our satisfaction with scannable systems, we have wanted to continue to employ this method. However, due to time and capability constraints, we have not found it viable to design these questionnaires

continued on p. 26

Statistics software meets Windows

A review of SPSS, Systat and a new non-Windows alternative

by Steven Struhl

Editor's note: Steven Struhl is vice president and senior methodologist at the Chicago office of Total Research.

Two of the leading statistical software packages for PCs, SPSS and Systat, have recently been released in versions running under the Microsoft Windows operating environment. These new releases allow users to run large analyses once impossible using a PC and provide a host of other improvements upon previous versions. SPSS has also released a new version of its non-Windows program that "breaks the 640K barrier" traditionally restricting analyses on PCs, intended mainly for users with less powerful machines. In this article, we will take a look at these programs from the perspective of users who analyze survey and database data, including the programs' strengths, weaknesses, and the demands they are likely to put on your computing hardware.

Two minute summary

You will find both SPSS and Systat for Windows to perform accurately and nearly always reliably. They provide excellent file and data manipulation capabilities, a broad range of basic analytical tools, and many of the more advanced methods. These new releases

should serve to consolidate these two companies' strong reputations. As your needs become more specialized, though, you may start to find that each package has a few gaps—so get the literature from each company and read about them in detail before you buy.

Both programs demand a powerful PC. SPSS for Windows, in particular, is likely to perform with disappointing slowness on anything less than a 486 PC with over 4 megabytes (MB) of RAM (random access memory—the computer's working space for running programs). The new SPSS Version 5 that runs under DOS does nearly everything the Windows program does, but with a plainer screen display and a few less conveniences for the user. It also runs much more quickly on a slower machine, and so may be the package of choice for people with less powerful PCs.

SPSS for Windows is a larger program than Systat for Windows, and generally offers more options in each procedure and greater control over output. Neither program produces anything resembling a report for a management-level audience, though, and each has shortcomings in creating charts and graphics. Systat has a somewhat flashier-looking screen display, with "button bars," graphical menus, and an animated

program icon, but in spite of this SPSS is easier to use overall. Systat often makes you work a little harder to get the same result, and if you do not use the program frequently, you will probably need to refer to the manual. The on-screen help system that SPSS uses is more comprehensive—and more helpful.

Systat for Windows comes as a single program (with no add-on options running under Windows), while SPSS for Windows is sold as a "base" and "options." Adding all the options you want to SPSS may get costly, so Systat is a definite leader in pricing. Neither program would ever be called cheap, though.

Beyond this, each program has its own strengths and weaknesses. But to find out about those in more detail, you will need to read the rest of the review.

Reviewing ground rules

Areas reviewed

We looked at the packages from the perspective of users dealing with survey and database data—information of the type market researchers, marketers and planners are likely to use—evaluating each for:

- completeness;
- speed, efficiency and demands made on your PC;

- freedom from problems;
- ease and smoothness of operation;
- ability to communicate with other programs and with people:
 - transferring files;
 - graphics;
 - suitability for reports
- value for the money.

Performance in each area is summarized by a system of stars, ranging from 1 star for “poor” to 6 stars for “outstanding,” as follows:

☆	poor
☆☆	fair
☆☆☆	good
☆☆☆☆	very good
☆☆☆☆☆	excellent
☆☆☆☆☆☆	outstanding

Test equipment

We used these programs on three different IBM-compatible PCs, to see how (and if) they would run on a variety of hardware. Our test set consisted of a new 486-based machine, an older 386-based DX computer, and a 386-SX notebook.

These are the details about these machines (included because they may help you understand the comments about performance that follow). The 486 machine is a fairly up-to-date “heavy duty” (or “hot rod”) machine, with most of the latest features. It is powered by a DX-2 type chip running at 50 Mhz, has 8 MB of RAM, and a 212 MB hard drive with an access time of 12 milliseconds. Its video is handled by an ATI Graphics Ultra card, one of the faster cards for handling Microsoft Windows.

The 386 DX machine was a “hot rod” about 4 years ago. It is equipped with 4 MB of RAM, runs at 16 Mhz, has a math coprocessor, and had the programs on an 80 MB hard drive with an access time of 22 milliseconds. Video was handled by a Tseng ET-4000 card, which is now considered to run Windows at a moderate speed.

We used the 386 notebook to try SPSS version 5 for DOS. This computer runs at 20 Mhz, comes with 2 MB of RAM, and has a 40 MB hard disk, with an access time of 13 milliseconds. Video was handled by built-in circuitry, which we identified as a variant of a standard

VGA card.

All three PCs used Stacker compression software, which “squeezes down” data and programs, effectively doubling the capacity of hard drives. The 486 computer and notebook used the SmartDrive disk caching program that comes with Windows 3.1. The older 386 computer used the Super-PC Kwik disk cache.

REVIEW AREA 1: COMPLETENESS

The analytical tasks you need to perform on survey and database data can be put into two broad sets:

- the core, or basic, methods, and
- the somewhat newer (and rarer) methods.

The core procedures include the methods that have been around for some time—the ones you are most likely to encounter in a course on statistics. These include such procedures as:

- descriptive statistics;
- data exploration;
- comparison of groups by non-parametric tests (Mann Whitney U, Chi-squares, etc);
- analysis of variance;
- clustering;
- regression;
- factor analysis;
- discriminant analysis;
- time series analysis;
- multidimensional scaling.

Along with actual statistical procedures, I would also include file and data manipulation in the core methods. These capabilities include the ability to merge files, select records based on various criteria, sort data, and perform mathematical transformations on data.

The newer procedures, while really not that new, tend to be less widely understood and used. These techniques include: CHAID (Chi-squared automatic interaction detection), correspondence analysis, conjoint analysis, and discrete choice analysis.

Both packages deserve a solid “excellent” in the core methods. Both include nearly every standard method you will ever need. Drawbacks are only

minor. Systat makes you hunt for a few procedures you are likely to use (more on this in the section on “Ease of Use”), and SPSS makes repeated measures analysis of variance needlessly complicated. But you should be able to get the job done with either program.

Also, be aware that to get all these procedures from SPSS, you will need to buy the “base package” and several additional modules at additional cost. Factor analysis, discriminant analysis, clustering and multidimensional scaling are parts of the “Pro Stats” module. Time series analysis is sold as “Trends.” Systat includes all these in a single package.

SPSS does better with the newer techniques, but again at the expense of buying more modules. Correspondence analysis and conjoint are parts of the “Categories” module, while CHAID is another module on its own. Neither package (nor any other of which I am aware) does discrete choice analysis per se. (Discrete choice modeling is something like conjoint analysis, but allows each product to have its own attributes, and allows for more alternatives to be tested than is possible with conjoint analysis.) Systat offers a stand-alone non-Windows logit program that can analyze discrete choice problems, but no smoothly-integrated program, similar to the SPSS conjoint program, exists for setting up these problems and analyzing them. Systat otherwise does not offer anything to do other newer forms of analysis, except a “CART” program that is somewhat like CHAID, but without much of its flexibility. In summary, you can do more procedures useful for market research with SPSS, with the only complaint being that you need to buy so many extra “options” to do so.

Completeness: Core Procedures

SPSS: ☆☆☆☆☆

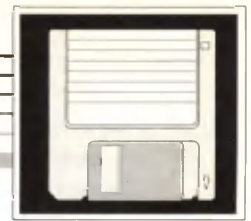
Systat: ☆☆☆☆☆

Completeness: Newer Procedures

SPSS: ☆☆☆☆

Systat: ☆☆☆ (but watch for new products)

continued on p. 28



Data analysis improves service of Arizona Dept. of Weights & Measures

by Lois W. Sayrs

Editor's note: While this month's installment of Data Use doesn't deal with a marketing research application, it is a good example of how many of the statistical techniques regularly discussed here can be used. Lois Sayrs is senior methodologist with the Office of the Auditor General, Performance Audit Division, State of Arizona. She performed the data analysis on ADWM and developed the sampling plan.

Every motorist in Arizona is familiar with the small round sticker on the gas pump at their favorite gas station. That sticker shows the consumer that the pump was inspected and is accurately delivering fuel per the price indicated on the pump. And, from October to May, the sticker also means that the octane and oxygenate levels meet state environmental quality standards. Inspecting fuel pumps is only one of the variety of functions that the Arizona Department of Weights and Measures (ADWM) performs. It also counts package contents and weighs packaged meats and poultry in grocery stores. It assesses taxi meters, propane dispensers and even oversees the disposal of used oil. Virtually any device that is used for weighing and measuring, be it mass, volume, counts or time, ADWM inspects.

ADWM has two purposes: to protect the consumer in transactions and protect the public health. Such admirable purposes, however, also harbor the potential for unlimited government intervention, a growing bureaucracy to accommodate increasing numbers of inspections and an inflated budget at a cost of millions to taxpayers. In their oversight capacity, state legislators must evaluate requests for bigger budgets, more staff, and more services to the public.

The Performance Audit Division (PAD) of the Arizona Auditor General's Office is charged with auditing the performance and compliance with state laws and regulations of all state agencies and regulatory boards under legislative oversight. Although PAD performs audits at the special request of the legislature, PAD audited ADWM as part of the normal sunset review cycle.

(The sunset review cycle establishes a review cycle schedule for all agencies over a ten year period. Agencies will terminate or "sunset" at the end of the cycle unless there is specific legislative reauthorization.)

Legislators rely on performance audits to provide the needed information to make tough decisions. The fiscal reality of the 1990s is that state agencies like Weights and Measures have to do more with fewer resources.

Our audit of ADWM focused on three questions of particular interest to the legislature: better enforcement, better management, and a self supporting used oil program.¹ From the beginning of the audit, management issues seemed to overshadow our other concerns. Through interviews and a staff survey, we found reported allegations of racism, sexual harassment and interagency conflict that touched the highest levels of the agency. We also found rather quickly that the used oil program was not self-supporting as the legislature had hoped. But even as we were uncovering serious management issues and determining the extent to which used oil was lagging in revenue generation, our preliminary survey of inspection and enforcement data revealed another vexing problem. We learned that the enforcement and inspection reports were not used for tracking noncompliers. Indeed, the agency had no idea what the compliance rate among vendors was. Multiple inspections, each of a different type, were collected on the same reporting sheet but the information was not summarized and analyzed. And none of the information was maintained in an electronic format. These data issues led the team to generate our own electronic file using the last three years of data as the file sample.

27,000 inspections

We entered over 27,000 inspections into a database file that

¹The Used Oil Program operates in conjunction with the Arizona Department of Environmental Quality (ADEQ) to insure that the used oil sold to resellers is not contaminated with hazardous waste. A portion of the monies collected from the reseller is returned to ADWM through ADEQ.

Our Service

With CfMC you'll get excellent service without having to ask before and after the sale! For large or small companies, if you need help with hardware decisions, CfMC will find the most cost effective solution to meet your needs. CfMC will also work with you to organize your data bases, phone banks, call management system for the greatest efficiency. You might say — wait a minute, CfMC is a software developer. That's true, we are. But, we're here to insure that when you use our software, you will have the total solution — one that will give you the greatest benefit. From hardware selection to software set-up; from training to your first project, to on-going support, CfMC is there to help.

Our Products

Whether you have just a single PC, or a PC-based network, or a large minicomputer operation of 500 or more stations, the same CATI software (SURVENT) and tabulation software (MENTOR), run on all these platforms. And the same specifications may be used for door-to-door interviewing with hand-held computers, or at a mall, or central facility. And the specs. and text are written only once and called in when needed. This can all be done with the newly released C software offering many benefits:

WHAT MAKES
CfMC
STAND ABOVE
ITS
COMPETITION?

SUPERIOR
PRODUCTS
AND
SUPERIOR
SERVICE.

**With Word Processor/
EZWriter.** Novices can train themselves and be producing basic questionnaires in just a day or two. Plus, when you prepare questionnaires on a word processor, the text is easily passed through EZWriter, and the CATI specs for SURVENT are also created for you.

With software integration. These SURVENT specs. also produce complete MENTOR specs. for tabulation and create marginals, hard copy, and specs. for graphics and statistical packages.

With virtually unlimited capacities. Up to 200 prior logic conditions for any question; 7,000 questions and 32,000 quota categories per study; 10,000 items in a brands list; extensive statistics, cleaning and more.

With "default output."

CfMC's powerful software provides the system produced output needed for table making and data editing/manipulation. The user can specify everything and get very elegant output, or almost nothing and get intelligible output immediately.

With innovative features.

You'll more quickly and efficiently access and manage information:

- Multiple questionnaires — During an interview SURVENT can start up a new questionnaire, for example creating one questionnaire for the head of household and another for each household member. This makes tabulation by household or member easy.
- Random response generator — You can generate completed interviews. This feature greatly reduces the time it takes to check questionnaire logic and performance.
- Efficient table manipulation capabilities

To gain superior satisfaction, try CfMC products.

To generate superior satisfaction to your customers, become one of ours.

Computers for Marketing Corporation

San Francisco
(415) 777-0470

Denver
(303) 860-1811

Dayton
(513) 228-2652

New York
(212) 627-7730

Paris
(1) 40.84.84.85

contained information on vendor, inspection frequency and type, compliance and type of violation. Generating and analyzing this data set would be the most time-consuming task of the audit, exhausting about one-half of our allotted budget hours. Initially, we had several questions guiding our analysis:

Do inspections deter non-compliance?

Who were the non-compliers?

Were inspections being performed fairly and equitably throughout the state?

Even though the data would answer these questions, it raised some new ones. For example, by using simple frequency distributions, CHI-square tests of the difference of means, and analysis of variance, we found regional effects but no effect from urbanization. So, contrary to our expectations, the rural areas were inspected as frequently as the urban areas. And, although vendors in the north region were likely to be inspected more frequently than any other region, those vendors were no more likely to be in compliance. Indeed, this latter result led us to consider the relationship between compliance and inspection frequency with greater scrutiny.

By correlating inspection frequency and compliance, we found that the more ADWM inspected, the more non-compliance was found. Frequent inspections did not appear to deter violations but they did help to ferret them out. At first glance, this result may appear to support the trend we saw in the agency: an increase from 20 to 33 staff since 1987; from a \$1 million budget in 1987 to \$2.4 million in 1992. And, the data

seemed to support a recommendation of increasing agency staff and budget (since there are more violators, they need more staff and a bigger budget to find them). But we recognized that such a recommendation would lead the legislature down a slippery slope. How many inspections does it take to find a violator? How many to deter? What kind of violations are these frequent inspections finding? How much will it cost taxpayers to find every violator?



We found that 90% of all inspections resulted in finding a vendor in compliance. Only 10% of vendors were not in compliance but surprisingly these 10% do not account for the vast proportion of repeat inspections of the same facility. Most of the repeat inspections were of facilities who were already in compliance. Relying on CHI-square tests, we found that those vendors inspected frequently were no more likely to be in compliance than those inspected only once annually. We concluded that first, most vendors are in compliance and, second, that non compliers are not targeted for enforcement actions. Valuable agency resources were being used to monitor a basically compliant population and non-compliers were not still not being brought into compliance.

Violators not deterred

Our results painted a picture of an agency that inspected frequently, that went out of its way to inspect small town gas stations and grocery stores in remote areas of the state but to no effect. Violators were not deterred. The missing ingredient, i.e., an enforcement mechanism that would deter, was not integrated into department philosophy or action. And repeat offenders were not targeted for enforcement action. So, even though the department was finding violations it was not tracking violators nor was it doing much more than inspecting to make them comply.

ADWM's philosophy of inspection had been based on the idea that finding violators alone would deter them. Our analysis, however, showed that this philosophy rested on a false assumption. Frequent inspections were not a deterrent. Deterrence requires two components: a verification mechanism and a credible threat of inflicting costs. ADWM relied upon verification alone when both verification and threat are necessary. Moreover, valuable agency resources were being wasted when the department 1) re-inspected compliers, 2) followed-up on violations but was unable to enforce compliance; and 3) did not target non-compliers for enforcement actions.

Our recommendations directly addressed the problems we found in management, the enforcement division and the used oil program. As a result of our audit work, we recommended to the Legislature that ADWM initiate a management training program, study the feasibility of raising fees on used oil collection and, for enforcement, use their statutory civil penalties to provide the missing component in deterring offenders. With civil penalties in place, the department could move to a sampling strategy (similar to the IRS) for annual inspections. The department would need to build a tracking system using data similar to the kind we generated to identify

INTERNATIONAL DATA COLLECTION

BY

TELEPHONE FROM LOS ANGELES

OVER SIXTY LANGUAGES

24 HOURS, 7 DAYS A WEEK

DATA PROCESSING

RESIDENTIAL AND BUSINESS SAMPLE

TRANSLATIONS (CULTURAL/IDIOMATIC)



Conducting International Market Research can be extremely expensive and discouraging. It's less expensive and less frustrating to conduct your international telephone studies with ISA International. For the past two years we've been saving our clients 10-15% by utilizing our capabilities in over 60 languages. All interviewers are foreign born nationals currently residing in the USA.

Let us take your headaches away. Call ISA International for a bid on your next project.

Michael Halberstam or Polly Smith at 818-989-1044

<i>Spanish</i>	<i>Hebrew</i>	<i>Korean</i>
<i>Vietnamese</i>	<i>Japanese</i>	<i>Tagalog</i>
<i>French</i>	<i>Arabic</i>	<i>Armenian</i>
<i>German</i>	<i>Mandarin</i>	<i>Cantonese</i>
<i>Russian</i>	<i>Italian</i>	<i>Portuguese</i>

Plus Many More

and track non-compliers. Our office offered to relinquish our 27,000 case data bank to the agency for its own use.

Benchmark audit

Our innovative approach has become a benchmark audit for our division. The Federal Clearinghouse on Weights and Measures was unaware of any state using a sampling strategy but informed us that most states did not have the necessary data or the analytical resources to develop and monitor a database for inspection sampling purposes. We believe that a good database, a desktop computer and a small commitment of resources to a data manager/analyst is all that is necessary to move to a sampling strategy. Most agencies have some data and some type of data manager in place already. So, improving the agency's service is only a matter of upgrading the quality of the data and the skills of the data analyst.

Some legislators feared that moving to a sampling strategy might cause currently compliant vendors to try and cheat. Or, the public, not seeing the familiar sticker on the pump might assume the pump is not operating fairly and go to another gas station. We confirmed for the legislators that deterrence requires a two-fold approach and with civil penalties in place, the sampling strategy should have a stronger effect in deterring non-compliance than the previous strategy.² The public will still see the familiar sticker on the gas pump but now this sticker will be sent to all vendors as part of their registration process with the agency. Information on the sampling strategy will be sent to vendors in their registration packet. Our recommended changes will result in saving ADWM almost \$500,000 annually in reduced staffing levels, resources will be more efficiently and effectively spent on non-compliers and the public will be better protected through a targeted inspection process. A legislative committee accepted our recommendations and they were incorporated into the 1994 budget.

Robust conclusions

The success of our audit work rested squarely on our ability to generate, manage and analyze data from a variety of sources. And, we were able to draw robust, if not definitive, conclusions about inspection activities through the use of multiple statistical techniques. Although these techniques were fairly simple (frequency distribution analysis, crosstabulations, correlations, ANOVA), they led to powerful results. But perhaps the real power of our findings lies in the recommendations they allowed us to make, and ultimately the savings to the taxpayers and the improved protection of the public. At a time when the threat of lost service is as real as a state budget deficit, it doesn't get any better than that. □

² However, we recommended that ADWM oversample (one-third of the total population) so as not to move too quickly for the public and vendors. After two years of oversampling the department can decide, on the basis of our three years of data and their two years, how much the sample size can be reduced.

Hispanic Marketing Communication Research

SPANISH LANGUAGE

Qualitative and Quantitative Research



A full service research supplier:
Focus groups, in-depth interviews,
surveys, and tracking studies.

Copy and execution testing
Motivational discovery
Perceptual positioning
Product development
Use and attitude studies
Cross-cultural analysis
Documentation testing
Quality service research
Diversity research

We operate nationwide

HMCR proudly introduces its
Asian division

Asian Marketing
Communication Research

Headed by
Dr. Sandra M.J. Wong

Our known standards of
excellence now available in
most major Asian languages

Hispanic and Asian
Psycho-Socio-Cultural Research[®]

Please call:

Felipe Korzenny, Ph. D.
Betty Ann Korzenny, Ph. D.
Sandra M.J. Wong, Ph. D.

Voice 415 595 5028 • FAX 415 595 5407

1535 Winding Way, Belmont, California 94002

Automating the coding process with neural networks

by Raymond Raud and Michael A. Fallig

Editor's note: Raymond Raud is chief engineer of Smart Software Company. Michael A. Fallig is vice president of Audits & Surveys. The authors are particularly grateful to Joel Dorfman of Audits & Surveys for introducing R. Raud to the problems of open-ended coding and continuing patronage of the project, to the colleagues in Smart Software Company for their help in preparing the article, to Irv Roshwalb for his numerous suggestions of improvement, to Robert Ruppe and his team in C.T.I.S. for patience and diligent work in testing the program.

Abstract

The cost and accuracy disadvantages of manually coding open-end questions can be overcome by the application of computer algorithms based on neural networks, an aspect of artificial intelligence which simulates the human brain's ability to learn. This article describes such a program and a field test's results.

For nearly 50 years researchers have been debating the advantages and disadvantages of eliciting survey responses with open versus closed-end questions (e.g., Blair, Sudman, Bradburn, Stocking 1977; Bradburn 1983; Bradburn, Sudman, and Associates 1979; Dohrenwend 1965; Dohrenwend Richardson 1963; Lazarsfeld 1944; Schuman, Presser 1981; Sheatsley 1983; Sudman Bradburn 1982). Perhaps because the

body of research suggests that one form of question is not clearly superior to the other in every situation, most investigators conclude that both forms have their place in survey research.

Findings from their nationwide field experiment led Blair, Sudman, Bradburn, and Stocking (1977) to conclude that open questions reduce the amount of under reporting of the frequency respondents reported engaging in threatening or socially sensitive behaviors (e.g., alcohol consumption, drug use, masturbation, sexual intercourse). But as Bradburn (1983) and Bradburn, Sudman, and Associates (1979) note, question form (i.e., open versus closed-end) did not appear to affect reports of whether or not the respondents actually ever engaged-in the behaviors which were measured.

Sheatsley (1983) has argued that closed-end questions have several other disadvantages when compared to open questions: They suggest answers that respondents may not have thought of before; they force respondents into what may be an unnatural frame of reference; and they do not permit them to express the exact shade of their meaning (p. 207).

But, in part, because of the time and expense involved with using current methods to code open questions, both Sudman and Bradburn (1982) and Sheatsley (1983) suggest that open end questions be limited to the following situations:

(a) when there are too many catego-

ries to be listed or foreseen

(b) when one wants the respondent's spontaneous, uninfluenced reply

(c) to build rapport during the interview, following a long series of closed questions that may make respondents feel they have no chance to express themselves

(d) in exploratory interviewing and pretesting, when the researcher wants to get some idea of the parameters of an issue, with the view to closing up the questions later. (Sheatsley, 1983, p. 208)

According to Schuman and Presser (1981) the common feeling has been that "open questions avoid the possibility of a response-order effect" (p. 61) while such a possibility exists with closed-questions. However, after conducting a series of field experiments using open and closed forms of the same questions they could find no evidence to support this claim for the variables they measured. Nor could the investigators find any clear evidence that open questions in general were superior to the closed-end form (Schuman & Presser, 1981, Chapter 3).

It is important to note that while Schuman and Presser could find no differences supporting the superiority of open questions, in the course of their investigations, they indeed found significant univariate differences between the responses obtained by asking questions in an open versus parallel closed fashion. More important, in the course of conducting their experiments and devising their survey instruments, they

The "Center" of Attention.

Paria Group's CATI Center

With more than 50 CATI stations, quality control monitors, and an economically sound location, *Paria Group's CATI Center* is the "center" of attention among world-wide research buyers.

Included in the *CATI Center* is the quality control office. Here, quality control supervisors monitor the interviewers for accuracy and professionalism. If concerns arise during a survey, these supervisors are quick to assist the interviewer. The supervisors and the interviewer work together to resolve the concern before the respondent loses interest.

Paria Group is located in Orem, Utah. This location is economically sound so that *Paria Group* is able to receive equipment and services at lower costs than in most other states. In turn,

Paria Group passes on those savings to their clients.

Paria Group's CATI Center is also near the world's #1 language training center. Interviewers who are practicing linguists, including natives, enable *Paria Group* to conduct surveys in 54 different languages any place in the world.

Interviewers are recruited from the several universities and colleges in the area. Each interviewer is tested and completes a thorough training

session before conducting his/her first telephone interview. All interviewers are compensated based on quality rather than on production.

See why *Paria Group's CATI Center* is today's "center" of attention. Call a *Paria Group* representative today for a free estimate on your next research project.

P A R I A  G R O U P

MARKET RESEARCH • BEHAVIORAL STUDIES • OPINION POLLING

(801) 226-8200 or 1-800-346-0255

Orem, Utah

Actionable information for successful business decisions.

confirmed, by serendipity, one of the more important reasons for using the open form of a question: "closed questions constructed in an a priori way may fail to provide an appropriate set of alternatives meaningful in substance or wording to respondents" (p. 80). Just prior to fielding parallel forms of a question about the most important problems facing the U.S. today, parts of the country had been hit with an unusually cold and hard winter. The media, at the time, according to Schuman and Presser, gave heavy coverage to some of the debilitating effects of the weather.

Although the closed form of their question had been developed from open end responses (generated by respondents sampled at some earlier period of time), it did not provide closed categories about weather-related issues. According to Schuman and Presser, inspection of the answers to their February 1977 questionnaire fielding revealed why it is important to make certain, before closing a question, that the closed form has appropriate answer categories. Their finding also seems to argue for when it might be key to use an open form of a question.

About 22% of the respondents exposed to the open form of the question during their February 1977 experiment were coded into a "food and energy shortages" code. And although the closed form provided an "other specify" category, most respondents exposed to this form selected answers from among those provided on the closed-end list—which had not included a "food and energy" code. Note that this experiment also reveals that providing an "other specify" category to an otherwise closed form of a question does not replace asking the question in its open form. Their own research, supported by findings of Belson and Duncan (1962), led Schuman and Presser to conclude:

"There is probably no adequate way to obtain a full array of responses by combining closed and open methods in a single question, because the very provision of closed alternatives discourages spontaneous responses that do not fit the listed alternatives." (p. 87)

Before continuing, it should be noted that researchers do not entirely agree on the precise definitions of open and closed questions. The general consensus is that

the definition of open questions goes beyond the simple notion that these are questions "answered in the respondent's own words" (Sudman & Bradburn, 1982). A key aspect of open questions is that the interviewer records, verbatim, in respondents' own words, the answer to the question (c. Sudman & Bradburn, 1982). In essence, for open questions, all that is provided to the interviewer is "white space" (or the computer equivalent) on which the answer is to be recorded. Then, generally after field work is completed, coders review the open end questions, "write-off" responses on to index cards or the like, sort the responses into broader categories which encompass a set of verbatims and develop a set of categories in which the verbatim answers eventually are coded. More will be said about this later.

A form of question that many may argue is an open question is the "field" coded question, which Sudman and Bradburn (1982) and others have argued is really a closed question. The question itself may be asked just like an open question, "what is your occupation," that is, without giving respondents a set of alternatives to choose from—but instead of providing "white space" it provides a list of categories not revealed to the respondent, from which the interviewer is to "on-line" code the response generated by the respondent. Many researchers, Sudman and Bradburn (1982) included (also see Sheatsley, 1983, p. 208), argue that "field" coded questions should be avoided whenever possible because there is a host of inherent problems associated with using interviewers as coders. As Sudman and Bradburn (1982) note, "the pressure of the interview situation makes it likely that greater coder error will be introduced in a field-coding situation than in office coding." (p. 153)

But office coding as it is traditionally done today in commercial research firms has potential drawbacks as well. It can be a time-consuming, labor-intensive, expensive operation developing codes, coding responses into categories, and maintaining a professional coding department. Furthermore, as coding is accomplished today, there is the potential of reliability problems—particularly with tracking studies in which different

waves of the study have been field coded at considerably different periods of time.

While office coding of open-end responses has been looked on as an expensive operation, the advent of relatively cheap computer power and with advances in an aspect of artificial intelligence known as neural networks, newer and considerably less expensive methods for coding responses have recently been developed. The remainder of this article describes this new form of coding and a series of tests which were conducted to examine the response codes developed using this new method.

Using neural networks for coding

Abstraction and learning are typical features of human brain. Corresponding algorithms are required for an open-ended questions coding program. Artificial intelligence, a recent direction in computer engineering, derives its algorithms from the simulation of functioning of human brain. Expert systems (an artificial intelligence approach) rely on the pragmatic relationships between events and objects in the application area. These relationships are usually expressed in the form of rules, hence the other name: rule-based systems. The rules represent the practical knowledge of experts in the field. Expert systems have found extensive applications in various areas combining the "common sense" of experts with the conventional mathematical models and data processing algorithms (for example, Keon 1991). The major effort in building an expert system goes into capturing and organizing the expert's knowledge. In many cases the knowledge is on a deep intuitive level and difficult to formulate in precise terms. This complicates the task even further. An earlier project to automate the coding process with computers has been reported by Pratt, Mays (1989). Expert systems technology was partially used in this project.

Neural network, another strategy of artificial intelligence, simulates the human brain's ability to learn and draw abstractions from the data. Thus, neural network does not require the participation of a domain expert in the learning process. The technology is applicable also in areas without experts or where

continued on p. 40



GENESYSTM
SAMPLING SYSTEMS

IF SAMPLING COUNTS...

This should be your only choice.

The GENESYS Sampling System was developed for researchers who are serious about telephone sampling. GENESYS does it all, from sample design through generation with real probability sampling methods. NO BLACK BOXES, just explicit sampling processes.

A full array of RDD sample methodologies including:

The industry's only single stage EPSEM telephone probability sample; Modified Non EPSEM methods; Mitofsky-Waksberg methodology

All samples are completely replicable with exact probabilities of selection

Demographically Targeted RDD or Listed Samples

Exchange Level demographic estimates; Dual Frame Sampling; Listed Household and Business Samples

Available through Custom Orders or in-house installation

In-House platforms include IBM/compatible PC's; Apple Macintosh PC's; DEC-VAX and HP mini computers

Full compatibility with all census geography down to the tract/block group level

National, State, County MSA, DMA, ADI; Small area sampling including Zip Codes, Congressional Districts, Tracts, etc.

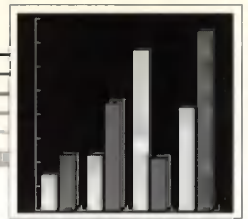
Post Sample Generation Processes that will Identify and Purge Non-Productive Numbers

Maintains statistical integrity while increasing efficiency and Data Collection Productivity

On-Site Statistical and Sampling Expertise

The staff at MSG is comprised of Researchers. We've been there. We know what works, what doesn't and why!

The Marketing Systems Group • (215) 521-6747 • Scott Plaza II • Suite 630 • Philadelphia, PA 19113



Consumers wrote more checks early in '93

According to Equifax Check Services Division, Telecredit, consumers spent 2.2% more via check during January and February 1993 than during the same period in 1992. This includes consumer spending at more than 100 of the nation's largest retail chains in various categories including toys, jewelry, apparel, department stores, sporting goods, auto parts, auto repair, and hardware. January's increase was greater than that of February. Contributing factors are the severe weather in much of the country and decreased consumer confidence during February. Florida represented the largest gain with a 20% increase; California and Texas represented a decline of 5.1%. The results by region are:

- Eight state northeast region was up 1.5%
- Ten state midwestern region was up 2.7%
- Ten state mountain region was down 5.2%
- Five state western region was down 4.9%
- Seventeen state southern region was up 6.6%

If the public could dictate economic policy...

What priorities do Americans want government officials and economists to consider in establishing economic policies? Low prices, a criterion favored by many economists, or some other criteria?

These questions are addressed in a study by an Indiana University marketing professor and NFO Research, Inc., of Greenwich, Conn. This study, conducted in November 1992, asked 5,000 representative households throughout the country to assign priorities on what the government should consider in setting economic policies. Those partici-

pating in the survey were asked to assign a number from "5" (highest priority) to "1" (lowest) for each of several factors such as "job security for Americans" and "ability to compete internationally."

Number one priority: job security, with a "highest priority" (a rating of 5) score of 61%. Pride in country is second with a score of 52%. Next: lowest price for consumers (51%), self-sufficiency for military needs (49%), self-sufficiency for all essential goods (46%), ability to compete internationally (38%), preservation of U.S. technology (37%), and high wages/salaries for Americans (27%).

Priorities for most factors are the highest among those in the oldest age groups. For example, the priorities assigned to pride in country rises from 42% among those under 35 to 62% among those 55 and over. The priorities assigned to job security rise from 57% among those under 35 to 62% among those 55 and over.

An exception to the age trends is lowest prices, more likely to be assigned the highest priority by those in the younger than those in the older age groups (54% to 49%).

Priorities tend to drop with annual household income. Thus, 65% of those in the under \$15,000 income group assign the highest priority to job security compared to 56% among those whose income is at least \$50,000. A major exception to this income trend is international competitiveness: 31% of the lowest income group assign this factor the highest priority compared to 44% in the highest income group.

Study profiles tennis players

Males account for nearly six out of

every ten (59%) tennis players aged 12 and over, but a slightly greater percentage of female players say tennis is their favorite sport: 25% for females, 22% for males.

These were among the facts that emerged from a national study of recreational tennis players sponsored by the Tennis Industry Association (TIA). Following are some of the characteristics of tennis players the study uncovered. (Note: Data from compatible studies conducted in 1988 and 1989 by TIA is also included. "Players" refers to those who played at least four times in 1992; "heavy players" played 21 or more times.)

The study found that 22.6 million Americans 12 and over (11% of the total) played tennis at least once in 1992 and that 13.7 million (7%) played four or more times.

The average 1992 household income of players aged 18 or over was \$55,400, up from \$52,000 in 1989. Household income for heavy players in 1992 was \$60,800, up from \$55,100 in 1989.

Nearly three of four (71%) players over the age of 35 hold a college or higher degree.

For most players, tennis is not expensive. Most (68%) play most frequently on public courts; 60% play for free.

The recession has not reduced memberships in private clubs or centers but it seems to have sharply impacted how much is spent to play there. The percentage of players who were members was 17% in both 1989 and 1992, but the average amount spent dropped from \$643 in 1989 to \$381 in 1992. About 30% of heavy players belong and their average expenditure fell from \$691 to \$426.

The average age of players is 31.6 years, up from 30.1 in 1989. The per-

READER SERVICE CARD  05/93

FREE INFORMATION ON PRODUCTS AND SERVICES IN THIS ISSUE.

Send me more information on the items circled

900 901 902 903 904 905 906 907 908 909 910 911 912 913 914
915 916 917 918 919 920 921 922 923 924 925 926 927 928 929
930 931 932 933 934 935 936 937 938 939 940 941 942 943 944
945 946 947 948 949 950 951 952 953 954 955 956 957 958 959
960 961 962 963 964 965 966 967 968 969 970 971 972 973 974
975 976 977 978 979 980 981 982 983 984 985 986 987 988 989

Name _____ Title _____

Please Print

Company _____

Address _____

City _____ State _____ Zip _____

Tel. No. _____

Place
Postage
Here

Quirk's
MARKETING RESEARCH
Review

P.O. Box 23536
Minneapolis, MN 55423

centage of players 50 years or more has grown to 13% from 7% in 1988.

41% of players have been active in the sport for more than 10 years.

Only one in four played in a competitive match in 1992, while 13% took a paid lesson and 16% hit against a ball machine. For heavy players, the figures were 44%, 20% and 23%.

Four in ten players (39%) purchased a new racquet within the past three years, spending an average of \$94. Only 22% had their racquet restrung in the past year (37% for heavy players).

Asked in an open-ended question what they like most about tennis, 40% mentioned exercise, 28% mentioned competition against oneself or others and 21% said it was "just fun."

Six in ten (62%) said they would like to have played more tennis last year and 40% players plan to play more in 1993. Lack of time is the most frequently cited (79%) impediment to play, followed by a preference for other activities (61%) and difficulty in finding suitable partners (56%).

This is the third national study of recreational tennis participation conducted by Audits & Surveys for the Tennis Industry Association. An initial sample of 4,000 households was interviewed to obtain data on the incidence of tennis playing in the population as a whole. Then, 1,000 tennis-playing households were interviewed to discover attitudes and activities of those who played four or more times in 1992. The surveys were conducted during September and October.

Americans say companies should stay in touch with customers

Most Americans think it's important for companies to stay in touch with their customers, according to a new national survey released by Maritz Marketing Research Inc. Staying in touch could pay big dividends. Seventy percent of respondents in the telephone study rated maintaining contact with customers high in importance (ratings of 8, 9 or 10 on a scale of 1-10). However, most customers never actually receive any communication.

Industries included in the survey were automotive, financial, insurance, long-

distance providers, and utilities. In addition to asking how important is it for companies to stay in touch, respondents were asked if they had been contacted in the past year to announce new products, check on satisfaction, or seek input about future products. They were also asked if they expect companies to approach them about these subjects.

Across all industries, the level of people expecting contact is always greater than the level of those actually receiving contact. There were also significant variations by industry. For example, 72% of automotive customers expect to be approached about satisfaction; but only 29% are contacted. As a contrast, regarding new products 67% of long distance customers expect to be contacted and 65% are notified. Long distance providers led all industries in actual contact with customers, including communications about satisfaction (36%) and future products (31%).

In general, the percentage of customers who expect announcements about new products (57-67%) is about equal to those who expect contact about satisfaction (62-72%). In reality, companies are more likely to contact customers about new products (32-65%) than about satisfaction (12-36%).

"Companies probably view contacting customers about new products as a direct sales activity, so it may be given more importance," says Maritz' Rick Cottrell, who directed the study. "However, many American firms are also discovering that assuring customer satisfaction is a proven strategy for increasing revenues.

"The survey shows it's important for companies to stay in touch with customers and that many customers expect contact," says Cottrell. "The results of two additional questions suggest a competitive advantage can be gained by maintaining contact with customers."

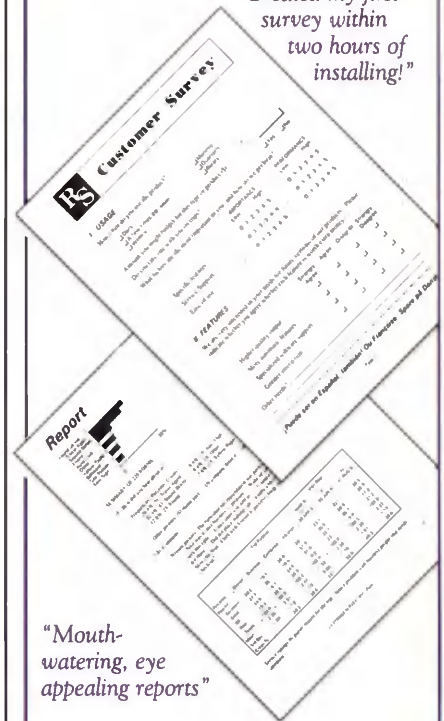
In the automotive portion of the survey, respondents were asked if they would choose a company known for staying in touch with customers or choose another firm. Eighty-seven percent would choose a company that stays in touch. Additionally, 68% would go out of their way to find a dealership who sells that company's product. "This indicates that ongoing contact is likely to build customer loyalty," Cottrell says.

SURVEY PRO

Fast, Easy, Powerful

SURVEY PRO. is a growing family of professional, easy-to-use integrated survey products that need no database programming!

"Created my first survey within two hours of installing!"



"Mouth-watering, eye appealing reports"



"Its ease of use and impressive survey- and report-publishing features earn it the Analyst's Choice." Standard Edition Revision 1.01 7/1/91

SURVEY PRO Advanced Edition for Windows 3.1 is designed for marketing professionals who need high quality without busywork.

Type your questions, select scales, and get desktop publishing quality automatically. Create report figures by clicking on the questions and statistics. Cross-tabs, multiple answer and open-ended answers included. Industry standard data import and export.

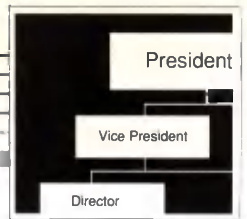
ENTRY PRO provides data entry for 5 users. Screens automatically generated to match the printed form. Or print scannable forms and import the data.

Limited-time — both products only \$695!

Call 800-237-4565 x307
or Fax 415-694-2904

 Apian Software
Practical tools for modern management

NAMES OF NOTE



Bonnie Berland has joined *Stanford H. Odesky and Associates*, Toledo, OH, as vice president.

James Ploog has been promoted to executive vice president at Madison, WI-based *Chamberlain Research Consultants*.

David Leach has been named western region vice president of *SRG International Ltd.*, based in White Plains, NY. Leach will work from the Los Angeles area.

Gene Topper has been named senior vice president of the Chicago-based *Blackstone Group*. Topper will oversee new business development and project management.

Karen Malecha and **Don Koenig** have joined *Rockwood Research*, St. Paul. Malecha joins the analysis group as senior project director; Koenig has



Malecha



Koenig

been named spec writer in the firm's data processing department. The firm also has announced several promotions: **Kathy Henry** to administrative assistant; **Lisa Morse** to research consult-

ant; **Mark Sirek** to special projects



Henry



Morse

director; and **Jodie Wehrspann** to



Sirek



Wehrspann

project director/editor.

Ian McLagan has joined Los Angeles-based *C.A. Walker and Associates Inc.*, as project manager. The firm also

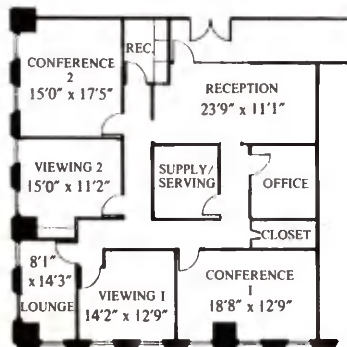


McLagan

continued on p. 52

NEW ORLEANS...

Hygeia Marketing Associates' upscale focus group facility!



- **RECRUITING**—medical, executive and consumer
- **UNIQUE**—the **ONLY** facility in New Orleans—walk to convention center, French Quarter, hotels and restaurants
- **FACILITY**—two focus group rooms with viewing areas, and an adjacent, comfortable client lounge



The Lykes Center • 300 Poydras Street, 17th Floor
New Orleans, LA 70130 • (504) 524-1311



Audits and Surveys, New York, has been named a 1992 quality supplier of the year by Shell Oil Co. This was the first year for which the firm was eligible for the award. Fred Winkel, Audit and Survey senior vice president, director of customer satisfaction, accepted the award. Shell presented the award for Audits and Survey's "mystery shopper" program, which is the measurement tool for Shell's "You Make the Difference" program. Mystery shoppers evaluate customer interaction, service time, island amenities or car care, and station appearance at 4,000 service stations nationwide.

Clarion Marketing & Communications has spun off its qualitative market research division to form **Groups Plus Inc.** The new company offers focus group research, one-on-one in-depth interviews and the Ideonics idea-generation methodology. Thomas Greenbaum, who developed Ideonics, will head the new company. Greenbaum was formerly executive vice president of qualitative research at Clarion. Clarion, an independent subsidiary of D'Arcy Masius Benton & Bowles, will concentrate on long-term growth strategic marketing. Groups Plus is located at 23 Hubbard Road, Wilton, CT. Phone 203-834-1126.

Harmon Associates has moved its offices to Suite 10, second floor, 111 Washington Ave., Dumont, NJ 07628.

Phone 201-439-0009. The firm also has added a new cross-tabulation feature to its Point-of-View software. The feature allows users to sort and print results by any question (variable) in the survey.

Chamberlain Research Consultants has relocated to 4801 Forest Run Drive, Madison, WI. Phone 608-246-3010; fax 608-246-3019. The firm's Wisconsin Interviewing Services facility address and phone number are unchanged.

International Consultants on Targeted Security, (ICTS) an Israeli consulting firm with offices in 16 cities worldwide, has opened an information center in New York City. ICTS provides consulting services on physical, aviation and operations security, and international investigations. The New York office offers courier, market research and information services; can access on-line databases nationwide and information services worldwide; provides samples of products and information, catalogues and advertising materials, price surveys, industry reports and shelf mapping; monitors advertising campaigns; locates statistical information and preliminary market research; locates visiting companies; finds agents and distributors; and gathers commercial information. For more information, contact Alex Einemer, ICTS (USA) Inc., 250 W. 57th St., Suite 1730, New York, NY 10019. Phone 212-247-4753; fax

212-333-2371.

Suburban Associates Marketing Research of Ridgewood, NJ, has opened a new focus group facility at East Meadow, Long Island. The facility features wall-to-wall mirrors, tiered seating and a private client lounge. For more information, contact Barbara Van Grover at 516-794-3030 or Robin Epstein at 201-447-5100.

Business to Business MARKETING RESEARCH

American Business Information is the leading compiler of business information with a comprehensive database of 10 million businesses. Our telephone verified information includes: name of key executive, franchise information, phone numbers, SIC codes, and much more. Our services include:

- **Market Potential Analysis**
Analyze your market potential by SIC, Size of Business, Zip Codes, or any combination.
- **Customer Profiles**
Profile your customers to help you zero-in on your best prospects.
- **List Enhancements**
Add to your customer file by overlaying SIC Code, Phone Number, Employee size, and other information.

For more information, contact:
Jeff Ferris, Marketing Research Division

American Business Information, Inc.
P.O. Box 27347 • Omaha, Nebraska 68127
Phone: (402) 593-4646 • Fax: (402) 331-6681

Dept # 08-203



Service streamlines research report writing

Communication Technology Group International is offering a new service that streamlines the writing process for market research reports. Customers furnish CommTech with the raw data from diverse sources like on-line databases, CD-ROM, spreadsheets, word processing programs and printed documents. Using proprietary software CommTech will prepare a customized report, in as little as 24 hours. For more information call 203-786-5451 or send faxes to 203-786-5449.

SPSS for UNIX

SPSS Inc. is offering a new UNIX version of its SPSS statistical software. The new package features a Motif user interface for greater ease of use and learning, and integrated capabilities for data access, analysis, graphics and reporting. SPSS for UNIX is now shipping for the IBM RS/6000. It will be available on additional UNIX platforms, including SCO Open Desktop and the Hewlett-Packard 9000/700 by mid-year. SPSS for UNIX for Sun Solaris 2.0 and Digital's ALPHA will be released later this year. For more information, call 800-543-9262.

New ad copy testing method draws from NFO panel

ASI Market Research Inc., and National Family Opinion Research (NFO) are jointly producing a new advertising copy testing method. The new system combines NFO's single-play videotape technology with ASI's validated testing methodology and normative databases. The method will be administered through targeted samples of consumers drawn from the 425,000-household NFO panel. Using the NFO panel, specific samples of consumers can be selected for copy testing. For more information, call Roger Fleschsig at 513-247-2048.

Evaluation measures in-store media

Market Decisions has added In-Store Media Evaluation (ISME) to its custom sales research services. The ISME is designed to enable manufacturers to achieve testing accuracy for successful program implementation. The service measures cost effectiveness of any in-store medium compared with normal shelf conditions, with matched panel testing incorporated into the design and conducted in a concurrent

time frame. Pre- and post-reads are excluded to avoid time or seasonal shifts and other variances in merchandising activity that might skew measurement; matched market testing is also excluded. Frequent store visitations are included for quality control and to detect extraneous factors that might influence readers. Market Decisions will assist in developing action standards, analysis and report formatting. For more information, call David Montondo at 513-745-9450.

Service tracks brand performance on a continuous basis

Market Facts has introduced its Continuous Brand Monitor for brand and advertising tracking research. The continuous Brand Monitor allows marketers to understand the performance of their brands and those of their competitors by tracking the effects of advertising, promotion, and competitive influences on an ongoing basis. The Continuous Brand Monitor can be used in tandem with other Market Facts services. For more information, call 708-590-7000.

Updates of MapInfo

MapInfo Corp. is shipping MapInfo Version 2.1 for Windows desktop mapping software, along with MapBasic 2.1, an upgrade to its programming language for custom desktop mapping applications. The company is also announcing the MapInfo SQL DataLink, an optional module for MapInfo Version 2.1 for Windows, that allows users and developers to query and retrieve data from remote corporate databases. MapInfo 2.1 new features include new on-line help that uses Microsoft Windows engine for fast, comprehensive, context-sensitive support; faster performance with fewer screen redraws; and greater file support and handling with support for dBASE IV and Excel 4.0 file formats. MapBasic 2.1 has added 20 new development commands, new dialog commands and SQL DataLink commands. SQL DataLink can access to data from a broad range of databases, including Oracle, Sybase, Paradox and Novell's Netware SQL. For more information, call 518-274-6000.

Windows interface for news retrieval

Trax Softworks Inc. has made available Cypress, a Microsoft Windows-based interface to Dow Jones News/Retrieval. Cypress offers News/Retrieval users an alternative to the slash commands normally used for the on-line information service; lists that eliminate the need to memorize symbols; and a user-customizable toolbar for one-step execution of commands and capture facility. For more information, call 310-649-5800.

Kit introduces marketers to PRIZM

Claritas/NPDC has released PRIZM Planner, a starter kit to help marketers understand and use PRIZM. PRIZM Planner helps marketers identify their current customers and best prospects using the PRIZM consumer segmentation system and national databases. The kit includes interactive PRIZM demonstration software for PCs with a high density disk drive, including PRIZM data on zip codes; descriptions of PRIZM clusters, with lifestyle and product preferences; and a slide presentation about using PRIZM. For more information, call 800-234-5973.

Manual helps choose best approach for industrial research

New York City-based Van Derveer Industrial Research is now offering The Van Derveer Industrial Marketing Research Training Manual, a 165 page manual for industrial marketers that covers topics such as how to select the best methodology for your project, how to write questionnaires to measure customer satisfaction, estimate new product potential and market size/share, evaluate product usage patterns and service/warranty issues, and track advertising. For more information call Chris Van Derveer at 800-531-9025.

Plant expansion lists from Elsevier

Elsevier Business Lists is offering its plant expansion database. The database covers all the manufacturing and scientific/research marketplaces and reaches managers and other professionals with current plant expansion responsibilities. Special selections are available by product, active buyer, area of work, employee size and dollar volume. Minimum orders are 5,000 names or a \$450 flat fee. For more information, contact Val DeGeiso, 201-292-5100, fax 201-539-9060.

Products target purchasing habits

Ruf Corp. has released Smart Targets and Smart TargetsPlus. The two-tiered methodology uses 500 indicators of brand preferences and purchasing habits to link 85 million households with products, services and brands they are most likely to buy. The products were developed using demographic and behavior-oriented characteristics, which eliminate privacy concerns associated with credit-based information. Ruf Corp. developed the products in cooperation with national list and information provider TRW Target Marketing Services, and Simmons Market Research Bureau.

continued on p. 52

Product & Service-In Depth

Creative Research Systems and Advanced Research Services develop digital audio to capture voice responses

As a method of increasing the dynamism of presentations Creative Research Systems of Petaluma, Calif., and Advanced Research Services of Malibu, Calif., have jointly developed a system of obtaining audio responses to interview questions through the use of digital audio.

Scott Tallal, founder of Advanced Research Services, was looking for a way to integrate the impact of the sound bite with the statistical validity of the research interview. Since starting his own company five years ago Tallal has made a major effort to make his client presentations as appealing as possible. These have included sophisticated graphics and color charts to illustrate key points. But since most of the interviews were conducted by phone, the sound content which held the detail and nuances of answers to open-ended questions was lost when transcribed to paper questionnaires or computer screens. Tallal believed adding the actual voice of the respondent to the report would add substantial value to the interpreta-

tion of data and impact to his presentations.

As a long time user of the PC based THE SURVEY SYSTEM tabulation package, Tallal approached its creator, Dr. Hank Zucker of Creative Research Systems to see if voice recording could be incorporated into the program. The SURVEY SYSTEM already had the capacity to record typed verbatim text from surveys and this seemed to be a logical expansion. Zucker began working on this development in 1989.

After three years Zucker was able to introduce the Voice Capture Module in 1992.

Upon completing the development phase the product was taken into the field for testing and further refinement. Included was the introduction of the product to Tallal's clients, who became enthusiastic supporters.

A major benefit is its ability to group "voice verbatims" by content and demographics for playback purposes. Some of Advanced Research Services clients have ordered their own sound kit

to regroup and playback voice verbatims on their own PC's.

According to Tallal, an unanticipated bonus has been the improved efficiency of interviews. Voice recording open-ended questions saves about 30 seconds a question, when compared to writing or typing in the answer. Over the period of a year, that can add up to a lot of telephone time and money saved. For more information contact Bill Eaton of Creative Research Systems at 707-765-1001.

Immediate Quality Data

coding
keypunch
tables
statistics
cross-tabs

Data on floppy or
telecommunicated

(315) 458-9327

Priuccess Cruises

continued from p. 7

in-house. Pine Company has been a great resource for us in conducting these types of studies," Goldfarb says.

One of those smaller studies looked at satisfaction with booking of shore excursions, the trips and tours passengers can take when their vessel reaches port. Passengers book shore excursions two ways, either prior to the cruise through their travel agent or Princess or through the shore excursion office on each Princess vessel. "From our standard on-board surveys we've gotten some feedback that (the booking process) is one of our weaker areas. In response we designed a survey that looked in detail at the various attributes affecting shore excursions to try to remedy any problems we might be having."

Coding open-ends

One way Princess is seeking to make the questionnaires more valuable is by coding the open-ended comments passengers make on the satisfaction questionnaire. "With Pine Company's help

we have recently begun to code the open-ended comments we receive on our on-board satisfaction questionnaires. We have found that this coding adds to the reliability of our scanned data, as well as providing insight into the actual cause of problems."

In general, Goldfarb says there aren't really any special things to consider when writing a questionnaire that will be scanned, although certain kinds of questions may take up a lot of room on the form. "If you're going to do any kind of age or geographic segmentation, scannable systems do tend to take up a lot of space on your questionnaire because you have to give a full array of numbers for people to fill in. Whereas on a keypunch form you can just ask them for their ZIP code and it only takes up a line. That is something that we've contended with although there are some new scannable systems that can now read hand written material and we're looking at these systems in order to avert these limitations."

Ben Pine, president of Pine Company, says that the next advances in scanning will be in improving the sys-

tems' intelligent character recognition, to allow for reading open-ended questions.

Pine says that his company usually sticks to handling the printing and processing of the forms and doesn't develop the questionnaires but will offer suggestions if clients need help. "Generally we want our clients to develop the questions. We'll type them in and print them out and make them look good. But most of our customers are sophisticated research people and they know how to develop a questionnaire.

"We don't get into the analysis of the data but we help them to see things and make suggestions on how they might look at their data so they get something that's actionable and not just stacks and stacks of paper."

Tips for prospective buyers

For researchers considering buying

"When we went through our last round of purchasing this new scanner we had the companies lend us their machine for two week periods. Otherwise, it's very difficult to differentiate, because when the companies come in and do their demos all the machines look great. Having them there for a longer period of time gives you a better feel for how the machine performs."

an in-house scanning system, Goldfarb recommends asking manufacturers to do a test processing run of survey forms on their machines. "There are a number of different scanning systems on the market, ranging widely in cost. Although most are very similar in their operation, there are differences. You should opt for the scanner that you feel most comfortable with and, obviously, the one that best fits within your price range."

Goldfarb also suggests that researchers buy a system that appears to have

etc

Erlich
Transcultural
Consultants

Latino & Asian
Qualitative & Quantitative
Research

- Focus Group Moderating and Reporting Services
- Simultaneous Translation
- In-depth Individual Interviews
- Quantitative Studies
- Computer Tabulations
- Instrument Translation into Familiar, Readily Understandable Language
- Careful and Insightful Analysis and Interpretation
- Highly Experienced Research Staff

Transcultural Consultants

Contact: Andrew Erlich, Ph.D.

Phone (818) 228-1333

FAX: (818) 228-1338

more features than may be needed initially. Chances are you'll grow into it. "The features of scanners vary across makes and models. Although we don't necessarily recommend that you purchase the most expensive machine—we certainly didn't—we do recommend that you consider buying a machine that has more features than you might see an immediate use for, because your appreciation of these features will grow as you become more familiar with the advantages of scanning technologies."

And, if possible, try it before you buy it. "When we went through our last round of purchasing this new scanner we had the companies lend us their machine for two week periods. Otherwise, it's very difficult to differentiate, because when the companies come in and do their demos all the machines look great. Having them there for a longer period of time gives you a better feel for how the machine performs."

"The initial setup of a scanning system can be somewhat frustrating as it involves a number of complexities," Goldfarb continues. "For example, scanners themselves basically all produce a

similar type of data file. Generally this is an ASCII file that can be read by whatever type of software you use to process data. We have had an application written for us that produces our performance reports at the touch of a button. However, it took us a bit of time to have the application tailored so that it

gave us exactly what we were looking for. Further, in addition to the scanner itself, each scanning company has its own software package that is used to define the way that the questionnaires are read. Insuring that this form definition is correct is sometimes a difficult process." □

"They didn't just tell me how my customers felt about our service, they showed me how to improve it."

"I see."

"No... ICR."

A satisfied customer is a repeat customer. ICR's Customer Satisfaction research gives you the information you need to improve the quality of your products and services in ways that are truly meaningful to your target market.

ICR

We do more than excel.

AUS Consultants • ICR Survey Research Group
605 West State Street • Media, PA 19063 • (215) 565-9280 • FAX (215) 565-2369

Circle No. 908 on Reader Card

SIGNIFICANTLY LOWER YOUR CPI AND MAINTAIN MARGINS

Our new Ci3 CATI System offers the first and only *Proactive Dialing System* for computer-aided telephone interviewing. *Proactive Dialing* is an automated form of dialing that can dramatically increase your dialing efficiency.

Proactive Dialing is superior to "predictive dialing" in the following ways:

- No "nuisance" calls for respondents
- No extra phone lines or special sample servers
- No over-pacing of interviewers
- Less than one-third the cost!

To learn more about Ci3 CATI's *Proactive Dialing* option, call or write for brochures and a free demo disk.



Sawtooth Software

1007 Church Street, Suite 402, Evanston, IL 60201

708/866-0870 FAX: 708/866-0876

Circle No. 909 on Reader Card

Software Review

continued from p. 9

REVIEW AREA 2: SPEED, EFFICIENCY, AND DEMANDS MADE ON YOUR PC

SPSS is a large program. The base and two or three extra modules will take up about 20 MB of hard disk space, and it needs a lot of RAM to run well. SPSS advises that you set up a large "permanent Windows swap file" on your hard

disk to reach peak performance. They recommend 8 MB of RAM and a 10 MB swap file. They probably should also recommend a 486-based PC. SPSS will run on an older 386-based machine with 4 MB of RAM, but it can be maddeningly slow. For instance, on our 386 running at 16 Mhz, it took 90 seconds from the time of clicking on the program's icon—signaling to Windows that we wanted to start it—until it loaded and was ready to run. SPSS Inc. says in its literature that you can run the pro-

gram on a 286-based "AT" machine, but this must be in theory only—given that it will take an "AT" anywhere from 4 to 100 times longer than a 386 computer to perform most tasks.

Systat is comparatively more compact, although not a small program in absolute terms. It takes about 7 MB of hard disk space, and includes nearly all the procedures in the SPSS base package and "Pro Stats" modules, with a few extras such as time series analysis and canonical correlation. On the older 386-based PC, it loaded more quickly and seemed somewhat more responsive in redrawing the screen than did SPSS for Windows. It still was not speedy overall, though, and took about the same time for difficult calculations as did SPSS.

We did speed tests, keeping careful track of timings for such procedures as discriminant analysis, factor analysis, and clustering, using the different programs on the different machines. Because of the great differences in speed we observed, it is really not necessary to show a table of results. The bottom line is simple:

- SPSS for Windows and Systat for Windows on a large 486-based computer: very fast.
- SPSS for Windows and Systat for Windows on an older 386-based computer: very slow.
- SPSS version 5 for DOS: very fast on a large 486-based computer, fairly fast on a slower 386-based computer.

The more calculations required, the worse the Windows programs fared on the older 386-based machine. For instance, as a kind of torture test, we gave all the machines a factor analysis problem that included a Varimax rotation of the factors requiring 99 iterations to converge. Even if you are not overly familiar with factor analysis, you can probably guess that having the PC run through the procedure 99 times—and test the results each time—is likely to take a while. On the 486-based machine, both Systat and SPSS for Windows got through the entire analysis in 1 to 1-1/2 minutes. On the 386-based machine, the time was about 17 min-

sers

Sorkin-Enenstein
Research Service, Inc.

500 North Dearborn Street, Chicago, Illinois 60610
Telephone (312) 828-0702

For over 30 years, SERS has performed creative full service quantitative and qualitative market research for major corporations throughout the U.S. and Canada. Our research is action-oriented and results are communicated in business English.

We are specialists in strategic competitive positioning research, customer satisfaction research, market structure and segmentation, new product evaluation, product benefit analysis, product modeling, new concept generation, and advertising effectiveness.

SOME OF OUR SERVICES ARE:

1. Strategic Research
2. Brand Name Image Research
3. GAP Research: Need Priority and Strategic Positioning
4. Market Segmentation/Market Structure
5. Motivational/Lifestyle Research
6. Customer Acquisition and Retention
7. IMPACT: Advertising Effectiveness Research
8. Awareness/Trial/Use Studies
9. Pricing Research
10. Product/Concept Research
11. Product Modeling Research: Hybrid Conjoint
12. Product Commitment Index: Hard-Core Purchase Intent
13. Customer Satisfaction Research
14. ANALYST: Computer-Aided Data Interpretation
15. Multivariate Statistical Analysis
16. Full Fielding Capabilities: Focus Groups, One-on-One's, Door-to-Door, Central Site, Executive, Telephone, Mail

WE TURN IDEAS INTO RESULTS!

Please send me information on the service topic numbers circled below:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

Name (Mr., Ms.) _____ Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Telephone (____) _____

QK593

utes. SPSS for DOS took much less time than either Windows-based program on the older machine, finishing in about seven minutes.

More computationally efficient procedures, such as discriminant analysis, can be completed on a 486-based PC almost immediately. For instance, a complete discriminant analysis with 2220 cases and 40 variables took about 20 seconds of computation on the 486-based machine, including generating about 30 pages of output.

Memory management

The two programs take different approaches, with the one chosen by SPSS for Windows the more unusual. Systat for Windows automatically uses all available RAM, including the "swap file" that Windows can set up on the hard disk as if it were extra memory—as do many other Windows programs. For instance, Systat reported that the 486-based computer—with 8 MB of hard disk space set aside as a "permanent Windows swap file," and 8 MB of RAM—had 14 MB of work space free. This is enough for all but the most enormous of computational problems.

SPSS, though, reports it is setting aside a portion of RAM for a work space, with the default amount one-half a megabyte, or 512K. On our 486-based computer with 8 MB of RAM, I overrode this default and set aside 5 MB as work space. You can instruct the program in advance to set up a work space bigger than the actual amount of memory (RAM) your computer has. However, on our test 486-based computer with 8 MB of RAM, the absolute most we could squeeze out was a 9.0 MB work space. Since I have encountered only one problem in the last 15 years that required more than 9 MB of memory, this should still be plenty. In fact, SPSS, Inc. says 1 MB to 2 MB will handle nearly all the problems related to survey data that you are likely to encounter. In practice, the number of variables you are analyzing matters much more than the number of cases (or observations, or people) in determining how much memory you will need. Factor analysis and some clustering methods (the non-iterative or hierarchical methods) are

most memory-hungry.

It may seem like most of the advantages fall on Systat's side at first. But the SPSS method has its benefits as well: assuming you have a reasonable-size problem, you can keep working in the "foreground" while SPSS processes

a big batch of commands you submitted in the "background." For instance, I edited some command files and output while SPSS was busy executing a long list of repetitive commands, with no apparent slowing down of the 486-based computer. While Systat for Windows is

"My research company applies multivariate analyses to give me information I can really use."

"I see."

"No... ICR."

Today's marketing strategies can't be formulated with yesterday's methods. ICR's Advanced Research Technologies Group provides state-of-the-art Multivariate Analytic techniques, to help you get the most from your research data.

ICR

We do more than excel.

AUS Consultants • ICR Survey Research Group
605 West State Street • Media, PA 19063 • (215) 565-9280 • FAX (215) 565-2369

Circle No. 910 on Reader Card

Cross Tabulations & Data Entry on the Mac®? TabHouse® 1.5 Now Shipping!

- TabHouse® is cross tabulations software designed and written by a statistician to take full advantage of the Apple Macintosh® user interface.
- Pericles Data Entry utility (PDE)! TabHouse® will read the questionnaire and fill in variable names and locations and create LabelSets!
- Directly tab character as well as numeric data, without recoding.
- Available statistics now include Row Percents & Total Percents.
- TabHouse® easily handles multiple response variables.
- Display weighted and unweighted statistics within the same table.
- Quickly define multi-level variables (e.g. age by gender by income).
- Random sampling of data.
- Grouping of frequencies and percents by associated value.
- Now with option to include a "total" column for each column variable.
- Confidence intervals and significance testing for means and percents.
- Additional page breaking options include 1 table per page vertically and/or horizontally.
- Now column widths can be individually set.
- Automatic de-rotation of "grid" data layouts with new feature - Stacked Variables
- A single TabHouse® project can include 32,000 variables, 32,000 banner columns and an unlimited number of records or cases.

Pericles Software

210 1/2 Louisiana Avenue • Perrysburg, OH 43551
(419) 872-0966 or (419) 872-0441

SOURCES FOR RESEARCH INC.

**The definitive resource
to consistently access
the difficult-to-identify-
and-reach respondent in
the business-to-business
market nationwide!**

**FOCUS GROUP RECRUITMENT
MODERATING
EXECUTIVE-IN-DEPTH AND
TELEPHONE INTERVIEWS**

(800) 777-0670

NEW YORK CITY

Copyright © 1993 Sources for Research, Inc.

busy, your computer is tied up and cannot do anything else.

With less RAM, the work space SPSS for Windows sets aside is not very capacious. We were able to squeeze out something under 1 MB from our 386-based system (about 700K) by decreasing the size of the memory-based SmartDrive disk cache. This is about three times the work space that the old DOS-based SPSS managed, but you may find problems too large for this, as we did. Using this computer—with 4 MB of RAM and a 3 MB swap file—a factor analysis with 150 variables needed more than the available memory. The new SPSS/PC+ Version 5 for DOS sets up its own disk-based swap file each time it runs. It created a much larger work space on this same PC than did SPSS for Windows—over 2 MB in total.

If you have an immense problem and need the most efficient use of memory in your PC, either Systat or SPSS 5 for DOS would be your best choice. Either of these use less memory for their operation than does SPSS for Windows. You may like the SPSS for Windows method of allocating a portion of memory as work space, though, if your computer has plenty of memory, since it effectively allows you to do two (or more) things at once.

Because SPSS for Windows and SPSS 5 for DOS differ in speed and demands on your system, ratings for them appear separately below.

Processing speed

SPSS for Windows:	☆☆☆☆
Systat for Windows:	☆☆☆☆
SPSS 5 for DOS:	☆☆☆☆☆

Demands placed on your PC

SPSS for Windows:	☆☆☆
Systat for Windows:	☆☆☆☆☆
SPSS 5 for DOS:	☆☆☆☆☆

REVIEW AREA 3: FREEDOM FROM PROBLEMS

The news is all good here. Both SPSS for Windows and Systat for Windows were among the most reliable releases for Windows I have yet encountered.

Windows programs have been notoriously poor in this regard, though, with even solid companies releasing products that were almost impossible to use. WordPerfect, for instance, needed three releases to clean up the serious problem areas in its Windows product—and it still does not match the preeminence of its non-Windows forerunner. Some other programs (which will remain nameless) showed a lot of promise, but after six months to a two years on the market still do not work properly.

Neither SPSS nor Systat was flawless, but even their initial releases caused few problems. Within a few months, each brought out a "maintenance release" (also known as a "bug fix"), to address the few problem areas each had.

Once SPSS for Windows was running, we found it caused no problems, aside from occasional annoyances with the screen display. Corners of windows occasionally "disintegrated," leaving the once-square edges a mess of fragments on the screen, and text sometimes seemed to disappear until the window holding it was moved or redrawn. Returning to a window after visiting another might land you far in the middle where no text was to be found.

SPSS for Windows had some sporadic but serious problems getting started on our test 486-based PC. These may be problems specific to PCs based on Micronics "motherboards" (main boards), and could be a Windows, rather than SPSS-based, problem. Nonetheless, I observed it at least six times, and so it merits a warning. If SPSS for Windows seemed to start very slowly—requiring 3 to 5 times as long as in previous sessions—then reported it could not find all the work space memory it previously had, that was a signal for serious trouble. If this ever happens to you, you must exit the program at once, save any work in any other programs open, and then exit Windows entirely. Trying to run SPSS for Windows when it starts this way can crash your entire system, losing any work you have not saved.

I could not find any systematic reason for SPSS behaving this way on start-up, and it could be caused by many things—hardware or Windows itself as men-

tioned above, or even a problem with other applications not releasing memory when they exit and SPSS starts. Since Gateway 2000 PCs and several other popular brands use Micronics motherboards, this caution may apply to them. Whatever the cause of the problem, be on guard for it.

Systat for Windows fell sway to a few non-repeatable errors, some of which shut down the program entirely. We once managed to get Systat to crash Windows entirely by deliberately mistreating it (all in the name of science). We entered the same variable name on both sides of an analysis of variance procedure when it could only exist on one, then told Systat to run the problem. Our advice based on this experience: exercise some caution about how you specify models in Systat.

The packing materials that came with Systat had some stern warnings about other programs, including Stacker (a program that uses on-the-fly data compression to double the effective capacity of your hard disk), which Systat says is not fully compatible with Windows. Systat, Inc., says this is a standard warning that Microsoft recommends, but we found Systat to have no discernible problems with this or any other program.

We had only one or two non-repeatable errors with SPSS 5 for DOS. Not a perfect record, but nearly so.

Freedom from errors

- SPSS for Windows: ☆☆☆☆☆
- Systat for Windows: ☆☆☆☆☆
- SPSS 5 for DOS: ☆☆☆☆☆

REVIEW AREA 4: EASE AND SMOOTHNESS OF OPERATION

"Real Stats. Real Easy," advertisements for SPSS announce. Systat makes similar, but more grammatical, claims for its software. As is the case so often, the real answer to the question of ease is: "Yes, but . . ."

SPSS for Windows and Systat for Windows have gone far, far from the world of their distant forebears, programs that ran on the room-sized computers of the 1960s and 1970s. For instance, I can remember the marvelous experiences inherent in punching decks of computer cards to run SPSS analyses

in the handy "overnight batch" mode at the computer center (just shortly after Roman gladiator times). I also can remember the great relief I felt (joy almost, if this feeling can exist in the context of computers) when hardware advanced to the point where it could

send error messages back to you on the screen, often after a wait of mere minutes. (Of course, the messages were all things like "804R: A FILE CANNOT BE OPENED, ERRORS IN PARAMETERS, HANDLES," when what they really meant was, "You forgot the pe-

"Very creative...they combined EXCEL omnibus and full custom capabilities to save me big dollars!"

"I see."

"No... ICR."

ICR is uniquely positioned to provide you with the best of both custom and omnibus worlds. The cost-efficiency of an omnibus study, the overall precision and reliability of a full custom survey: our services are tailored to your specific needs.

ICR

We do more than excel.

AUS Consultants • ICR Survey Research Group
605 West State Street • Media, PA 19063 • (215) 565-9280 • FAX (215) 565-2369

Circle No. 913 on Reader Card

TMR ^{CU} _{INC}

**NEW FACILITY
OPENED
IN NEW JERSEY**

For all your interviewing needs:

- Consumer
- Industrial
- Executive
- Medical
- Mall Intercept

- National and Local coverage
- Complete CRT Interviewing Services
- 120 Telephone Interviewing Stations
- Computerized Least-Cost Routing
- Off-premise monitoring
- In-house computer generated sample
- Permanent suburban Philadelphia mall location
- Full kitchen facilities
- In-store interviewing



Call Tom Ramsburg, Barbara Felderman or Dan Margherita
(800) 888-1190 • (215) 359-1190
FAX: (215) 353-5946

TMR, Inc.
1974 Sproul Road, Broomall, PA 19008

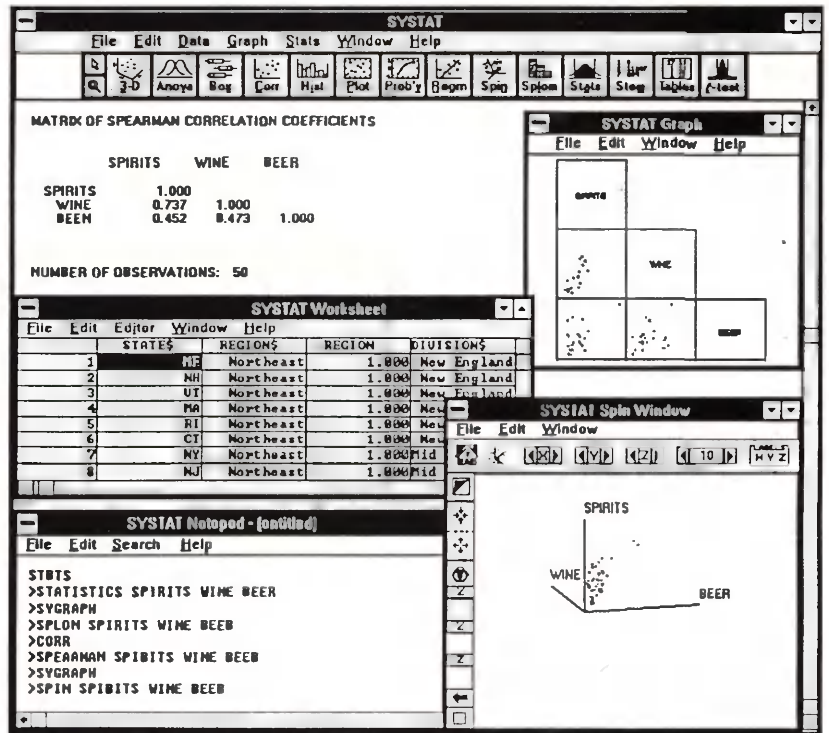
Circle No. 914 on Reader Card

riod in the file name, again, you big dummy.”)

As I said, things have really changed. The Windows interface of the two programs are both handsome, in different ways, and give you the ability to see data, investigate patterns and relationships, and perform rapid “what-if” analyses with unprecedented ease. Somewhat more advanced analyses may leave you more or less frustrated, though, depending on your level of statistical expertise and familiarity with each program.

Let’s start with Systat for Windows. If you stick to the basics, you can do everything by pushing buttons and pulling down slick-looking graphical menus. Results appear automatically in an output window, which you can edit and save as an ASCII file. Request a chart, like a histogram, and a graphics window appears with a high-resolution chart. You can annotate the chart on-screen and save it for later use. (See the accompanying Systat screen shot for an idea of what Systat looks like with several of its windows open.) You can get

SYSTAT FOR WINDOWS SCREEN



Seattle

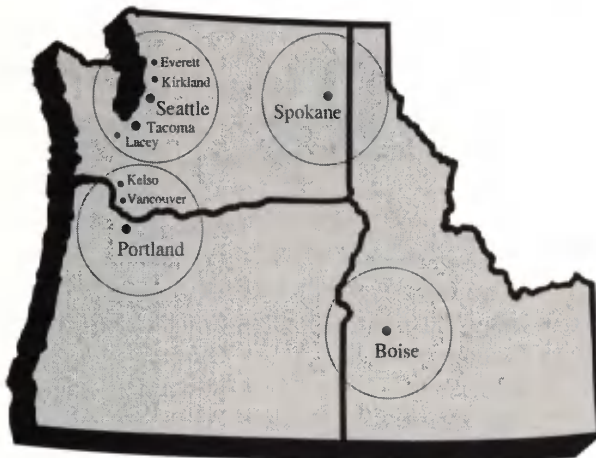
Portland

Spokane

Boise

- Mall Intercepts
- Focus Groups
- Central Telephone
- Pre-Recruits
- Audits
- Distribution Checks
- CRT Interviews
- Product Purchases
- Mystery Shopping
- Medical
- Executive

We Cover The Northwest



We’ve been collecting data and keeping clients happy in the Northwest for over 30 years. Call us.

Consumer Opinion Services

We answer to you

12825 1st Ave. South · Seattle, WA 98168
206/241-6050 ask for Jerry, Dorothy or Greg Carter

your data into view at any time, and edit it on-screen as needed. Systat saves all commands you issued, even buttons you pushed, in the form of a command log that you can recall, edit, and reuse, in a “Notepad” window.

The problem is that you will probably not want to buy as powerful a program as Systat if all you care about is the basics. Try to do something not on the menus or button bars, and you will find the “learning curve” can become relatively steep. A few aspects of the program almost seem designed to frustrate the infrequent user. For instance, if you want to do a discriminant analysis, you will not find it on any of the menus, nor will you find it listed in the on-screen help. Turning to the manual, you find that discriminant analysis is performed by a specific set of procedures done in analysis of variance (ANOVA). It is entirely possible to do discriminant analysis as a part of ANOVA, and SPSS even offers this as an option in its ANOVA module. Systat says its procedure is better than “canned routines,” and perhaps it is for an experienced

Systat user with some statistical expertise, but it most assuredly is not otherwise.

Trying to do a canonical correlation leads to similar complaints, but here the usually excellent Systat manual will let you down. The example, which has been carried through several generations of Systat, gives the inexperienced user absolutely no idea that you must use plus signs or commas on the right (independent) side of the equation, while these are strictly verboten on the left (dependent) side. The error messages Systat sends you when you make this "mistake" unfortunately are on the order of "804R: A FILE CANNOT BE OPENED . . ."

Many of Systat's best features are not found on the menus, as well. For instance, you cannot access any of its awesome file and data manipulation capabilities except by typing them as commands.

The manuals that come with Systat's programs, like those with the SPSS programs, have long and deservedly enjoyed a reputation for excellence. Their

writing styles are clear, and each contains many interesting and useful pieces of information. Sometimes, though, Systat seems to assume you know a lot. For instance, try to get a "frequency distribution" for a variable. This seems easy enough, but you cannot find this term in the on-screen help system, or in any of the three Systat manuals. You will not even find a hint on the order of: "Frequencies, frequency distributions: See 'Tables' for information." Instead, you thumb through the index, perhaps trying "counts," "distributions," "statistics," "tabulate," and "tables" (nothing listed there). At last, you begin to page through the manuals, where finally, in the Statistics volume, under "Tables," you can find the information you need, in the form of a complete discussion of tabulation.

Systat also seems to assume a ready familiarity with statistical concepts they deem important. For instance, if you are a little rusty about the meaning of the "A Matrix" and "C Matrix" in linear models, you will keep paging through the manual until you find the one place

"Most effective all round cross tab program on the market"

- actual user comment

The Survey System

Analyzes marketing, public opinion, customer satisfaction, employee attitude surveys. Handles mail, personal, phone, scanner, disk-by-mail or computer interviews. Records verbatim text and actual voice answers. Powerful, flexible, user friendly. Free support.



Creative Research Systems

15 Lone Oak, Dept. Q
Petaluma, CA 94952
Phone (707) 765-1001
Fax (707) 765-1068

Circle No. 916 on Reader Card

HOW MUCH CAN YOU SAVE AT A NICKEL A NUMBER?



PLENTY.

If you buy random digit samples, our standard price of a nickel a number can really add up to big savings. Like 37% to 68% over your current sampling supplier. The best part is there's no sacrifice of quality or service. Ask around. We even

STS
SCIENTIFIC
TELEPHONE
SAMPLES

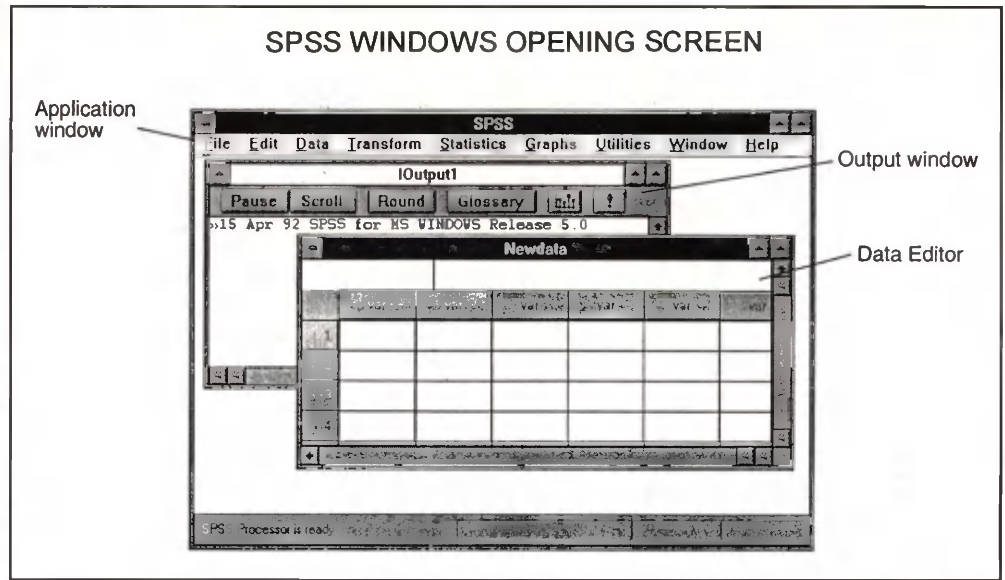
remember little niceties. Like a 100% guarantee. Professional advice. 24 hour service. An aggressive discount policy. Free record coding and sampling reports. No contracts to sign. Even an 800 number. Call STS now at 1-800-944-4-ST5.

where these are discussed in some detail. More explicit guidance about where to find such explanations, in the index and the text—and possibly even explaining such concepts more than once in the manuals—would prove highly helpful to many users.

Once you page through the manual as needed, Systat will usually do whatever you require. It has some intriguing features, like an option to state how many factors in a factor analysis (or how many functions in a discriminant analysis) you want to rotate. You can go from simple analysis of variance to repeated measures analysis of variance just by checking a box that appears on the screen—a remarkably elegant method. Sometimes Systat makes you do extra work, though. For instance, every time you run a procedure that generates new variables—cluster groups, or discriminant scores, or factor

scores, for instance—these must be saved into a new file. Unlike SPSS, Systat does not append these variables onto the end of the file you have open.

ment of cluster centers from one iteration to the next. Presumably, you could cut out the output produced by Systat, massage it, and feed it back into the



You must later go back and append the variables manually. This is not hard in itself, but can lead to a proliferation of tiny files during, for instance, a segmentation analysis. Since file manipulation cannot be done from Systat's menus, if you are an infrequent user of Systat, you will need to look up and type in the required file-merge commands. High on my "wish list" for Systat, then, is the ability to append new variables to the end of your open working file at all times—just as you can do with SPSS.

The common procedure I found weakest in Systat was its implementation of K-means (iterative) clustering. Systat does not provide any test for stopping the procedure. Instead, you must type in some number of iterations that you guess will be enough for the solution to become stable, and let the program run. The familiar Windows hour-glass then appears, and you wait until Systat is done, during which time you get no clue as to its progress (such as a counter showing which iteration the program is busy attacking). Finally, a raft of case-by-case statistics fly by, which you cannot stop or suppress. In the form presented, these numbers seemed less than useful for evaluating the goodness of a solution. Unfortunately, Systat does not provide such useful summary statistics as the size of each cluster generated (unless you count cases by hand), or a statistic testing the separation of cluster centers, or some description of move-

program as a data file, and so derive some of this information yourself. This seems like stretching the do-it-yourself ethic past its limit, though, particularly if you need to evaluate five or ten alternative clustering schemes.

My wish list for Systat also includes case counters or iteration counters in all procedures, so that (using a slower machine, anyhow) you do not start to worry that the program has "frozen." Knowing what is happening also has the subjective effect of making the procedure seem to take less time.

Now on to SPSS for Windows. This program is organized around three basic windows: data, commands, and output. (The accompanying screen shot gives you an idea of what you will see when you open SPSS for Windows.) Once you get the hang of switching windows, operations are quite simple. You can do nearly all procedures, from simple to fairly complex, using the menus SPSS provides. (About the only helpful option I found missing from the menus and their accompanying pop-up "dialogue boxes" is the rotation of discriminant functions. This serves to clarify the identity of the discriminant functions as the does the rotation of factors in factor analysis.) You can select items from menus, then select a box saying "paste" to put the SPSS command-language equivalents into the command window. You then can select any portions of the command you like,

**A database of
10 Million Businesses
...on one CD-ROM!**

Business America — on CD-ROM® is the ultimate marketing tool for anyone who sells to businesses. Ideal for:

- Market Research & Planning** — develop more effective sales and marketing strategies, determine what types of industries to sell to, and what geographic markets to target
- Sales Territory Assignment** — determine the size of potential markets and deploy your sales force more effectively
- Lead Generation** — identify high-potential prospects and provide timely information to your sales force and distributors
- Direct Mail** — target exactly the right markets and make your mailings more responsive with key decision-makers' names
- Telemarketing** — identify the right prospects to call and have our software do the dialing for you—the ultimate in productivity

Select by company name, type of business (SIC codes), number of employees, sales volume, even decision-makers' title! All you need is an IBM®PC or compatible, and a CD-ROM drive. Experience the power of Business America — on CD-ROM® for yourself.

Call Steve Bergeron: 1-402-503-4555

American Business Information, Inc.
5711 South 86th Cir. • P.O. Box 27347 • Omaha, NE 68127
Phone (402) 593-4565 • Fax (402) 331-6681 #15-443

Circle No. 918 on Reader Card

edit commands as you like, and run them—or save the whole file of commands for later use.

Anytime you want to see all available analytical options, you can highlight a command and select a menu item saying "Syntax." The complete command appears in a "Help" window, and can then easily be copied—in whole or in part—into the command window. SPSS treats the "help" window as a separate application, so it has an annoying tendency to disappear behind the windows with your work in them. This is the standard procedure for "help" in Windows programs, but it still can be frustrating. (Microsoft, are you listening?) Otherwise, the help is almost always to the point and helpful. (About the only glaring exception is the help item that tells you the syntax of the TEMPORARY command is "Temporary." You do not get the information you really need, i.e., that if you use "temporary" before a transformation or selection command, that transformation or selection will affect only the one command following. That explanation appears in the manual, but not on the screen.)

I found repeat measures analysis of variance to be the weak link in SPSS procedures. To do something as simple as, say, testing pre-to-post changes in responses to a concept, while controlling for the number of packages of test product each respondent has used, you must go to the MANOVA procedure, which means buying the "Advanced Stats" module. MANOVA models are never that easy compared to most other analyses, and in SPSS these analyses have sometimes been harder than they had to be. High on my SPSS wish list would be including simple repeated measures analyses along with other simple ANOVA problems, where they belong, and augmenting and improving examples of MANOVA analyses.

With this exception, you should find a lot to like in the operation of SPSS for Windows, even if you do not use it often—and especially if you have a fast computer. More experienced users who take the time to get used to Systat likely will rate it nearly as fast and straightforward as SPSS for Windows, but others may find it somewhat frustrating, especially going beyond the basics.

What about SPSS/PC+ Version 5 for DOS? This program still has the same "look and feel" as the old SPSS PC



Pine Company's new optical scanning service. Now cost effective for small samples.

Whether your sample size is 500 or 50,000, Pine Company has made optical scanning a technological advantage you can't afford to pass up. With data entry at speeds up to one hundred times faster than keypunch, the cost benefit for large surveys is obvious. Now Pine Company makes it possible for smaller studies to benefit from optical scanning. We can significantly improve your survey's accuracy and turnaround time, too. Because these days, more than ever, time is money.

We've added optical scanning to our in-house full-service capabilities because it makes enormous sense. With every step of your data processing under one roof, you have greater control and confidence.

To see the benefits of optical scanning for your next survey, just fax us a page from the questionnaire. We'll show you what it looks like in scannable form. And with a follow-up call, we'll review your potential savings—in dollars, time and accuracy.

PINE COMPANY

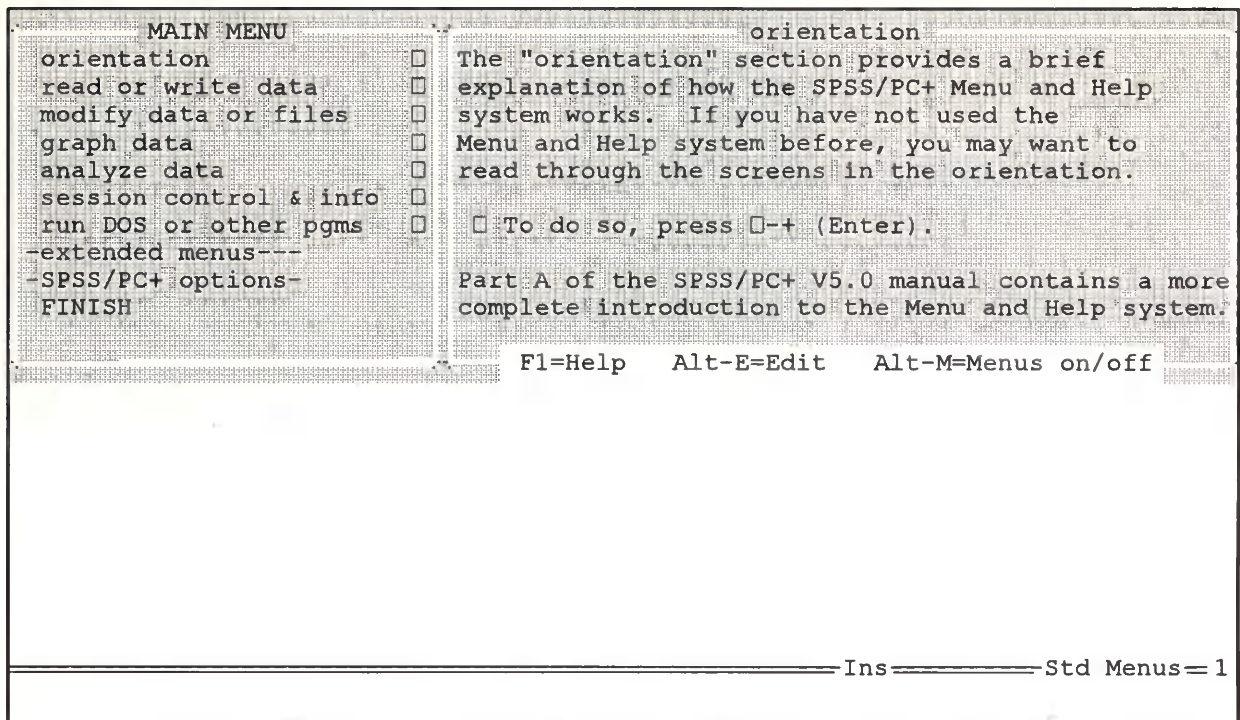
Data Processing for Marketing Research

1607 16th Street • Santa Monica, California 90404

(800) 969-PINE • FAX (310) 453-3969

**coding • optical scanning • data entry • tabulation
multivariate analysis • presentation graphics**

SPSS/PC+ VERSION 5 OPENING SCREEN



programs—although you may notice that it seems to be running more quickly and smoothly. (See the accompanying screen shot, which will be familiar to all established SPSS users.) It does not have all the nice amenities of SPSS for Windows and Systat for Windows. For instance, this program will not prohibit you from selecting a variable of the wrong type for your analysis (such as a character or “string” variable in a regression), as the two Windows programs will. Rather, it will try to run the analysis, then tell you something (not too well specified) went wrong. Functionally, though, this program and the full Windows versions are very similar. About the only real difference I found: SPSS 5 for DOS makes you do iterations in its K-means clustering procedure “by hand,” while the Windows program has this automated. The DOS program now keeps track of the “convergence” of your solutions, though, which itself is a vast advance over old versions of SPSS—you now have a handy way to know when to stop running more iterations. The biggest single improvement, in my opinion, is that SPSS/PC+ Version 5 for DOS allows you to call up and edit your data file, just as in the Windows program. In older versions of SPSS for PCs, this was not possible. The SPSS/PC+ 5 for DOS

screen interface is perfectly adequate—but once you have seen the Windows program, it is hard to go back.

In the ratings below, you will find two ratings for Systat, because it is a program that expert users should take to quickly. Others likely will find it a mixture of nice time-saving ideas and frustration.

Ease and smoothness of operation

SPSS for Windows: ☆☆☆☆☆

Systat for Windows:
☆☆☆☆ (for expert users)

☆☆☆ (for infrequent users)

SPSS 5 for DOS: ☆☆☆☆☆

RATING AREA 5: ABILITY TO COMMUNICATE WITH OTHER PROGRAMS AND WITH PEOPLE

Transferring files

Both SPSS and Systat have come far from their earlier days—when transferring files to and from other programs was rarely a consideration. Still, (relying on their standard built-in capabilities) both have some distance to go. Each program still saves data in a proprietary file format unlike anything else. Each program can import files from leading database and spreadsheet programs (like Lotus and dBase), assuming these files do not violate implicit

rules for formats. For instance, both programs will get confused by two-line (or longer) spreadsheet column labels; even a blank row after spreadsheet column headings will cause similar problems. Systat seemed to do a little better importing ASCII data files than did the SPSS programs—but none handled irregularities well.

Both programs still do not recognize the existence of other statistics programs. Trying to open a Systat file with SPSS or an SPSS file with Systat leads to an “error” message like the old standby: “804R: A FILE CANNOT BE OPENED . . .” Do not expect the wizardry you find in programs such as Microsoft Word, which guess (usually correctly) what type of file you are trying to open.

If you are willing to spend more, both SPSS and Systat offer highly similar, and exceptional, file transfer programs. Using one of these programs you can read and write over 60 file formats, and so send files back and forth to associates loyal to the competition, or who think Y-Stat or RATS or INGRES is the only way to go. These add-on transfer programs also have great facilities for reading ASCII data, and allow you to define the locations of labels and data in spreadsheet programs. If SPSS and Systat had these capabilities built in, I would not hesitate to give them “outstanding” rat-

ings in file transfer abilities. As it is, you will need to increase your software budget by \$300 to \$400 to reach this level of performance. Unadorned, both SPSS and Systat fall a little short of the mark compared to the most up-to-date programs in ability to transfer data.

Graphics

Systat for Windows graphics will look highly familiar to users of the most recent DOS version of Systat. You will have essentially the same capabilities, with the addition of better on-screen annotation abilities. Systat creates "vector"-based charts, and can use the True Type fonts built into Windows 3.1, so its charts will print at the best resolution your printer can manage.

People who did not mind a command-driven graphing package like Systat graphics in the DOS package and will like the graphics in Systat for Windows. My bias has always been to have as complete control as possible by "tweaking" the chart on-screen, so I quickly lose patience with programs that expect me to write a description of the chart I want, then rewrite as needed. (If, for instance, I do not like where the title of the graph falls by default, I expect to be able to drag it to a preferable spot on-screen.) The charts you get from Systat are acceptable, but not nearly the superb quality that a number of Windows-based charting packages can provide. You can save Systat's charts as Windows Metafiles (.WMF) graphics format, and later import them into other applications, such as Micrografx Draw, that give you precise control over touching-up operations.

SPSS for Windows graphics seem somewhat slicker at first, but you run into trouble when you try to do anything with them. You can change many things on-screen (such as colors and type faces), but you can reposition fewer—and certain options you select may simply refuse to do anything. (For instance, you can select 3-D effects for the bars on histograms, but nothing happens.) Perhaps least conveniently, the SPSS chart format (.CHT) is not compatible with any other program. To get an SPSS chart into a presentation or report, you must open the entire SPSS program, then use the Windows clipboard to cut and paste between applications. Because SPSS is a big program, having it and another application open at the same time can tax your PC. Even the 486-based PC,

DATA
COLLECTION

EXPERTS

FOR

THE

NY

TRI-

STATE

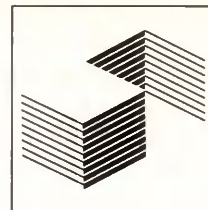
AREA.

WE

FOCUS

ON

QUALITY



SCHLESINGER
ASSOCIATES

We offer total data collection services encompassing all aspects of quantitative and qualitative research.

•
Complete focus groups facilities

One-on-one's

Central location interviewing

Mall intercepts

Door-to-door interviewing

Executive/Medical In-depth interviewing

Central location taste tests

Telephone interviewing

Mystery shoppers

In-store merchandising and distribution

Product testing

Store audits

Couponing and demonstrations

CALL
OR WRITE FOR
OUR
BROCHURE

Levinson Plaza, Suite 302, 2 Lincoln Hwy., Edison, NJ 08820
908-906-1122 FAX 908-906-8792

running at 50 Mhz, with 8 MB of RAM, strained while cutting and pasting 5 SPSS charts. Use of a completely proprietary file format, and inability to export charts to any known format, both are throwbacks to the bad old days of computing. In addition, some useful types of charts, like the discriminant territorial map, remain "character-based," i.e., they look like they were made on a typewriter. You probably will like SPSS graphics if you need only a few charts, and you are not very picky about chart layouts. I use graphics extensively, and want my charts "just so," so this is one area in which I found SPSS for Windows disappointing.

SPSS Version 5 for DOS links to Harvard Graphics and another charting program called Axum. Axum is perhaps the most powerful charting program that has not migrated to the Windows environment, and you can, with some patience, get it to do remarkable things. SPSS sells a special version of this charting program, and they say that their DOS graphics module will link to a copy of Axum that you already own. Windows-based programs have surpassed Axum in ease of use, and in quality of text, but Axum still can give you some fine charts in two and three dimensions. Axum also will export charts to a fair number of formats—and so is far more flexible in this regard than SPSS for Windows.

None of these programs has built-in all the charting options particularly useful to market researchers. For instance, none can automatically put labels near points on a scatter-plot (useful for multivariate mapping), as Delta Graph Professional almost can do. Similarly, none of them can automatically put labels along vectors—but then this is still a "by-hand" operation in all other programs.

Suitability for reports

These programs mainly do calculations, run procedures, and then give you all the information you will ever need to know about what happened. In most cases, all you will ever need to know is far more than you will want to put into a formal report, or presentation. SPSS usually gives you a little more control over output than Systat, but you will need to do plenty to the pages of material you get before it is presentable to any non-technical audience. SPSS, at least, has plans to do far more to make

output flexible and customized. But for now, there is still a large, and critical, gap between the data that come out and the meaning of the data to most audiences who need to use the information. Sometimes it seems as if statistics programs still have an implicit model of their users as solitary workers struggling in isolated towers for the truth—and this simply is not so. Results are useless if not communicated intelligibly. There is plenty of room for work here. Let's hope some of it gets done soon.

Transferring files

SPSS for Windows: ☆☆☆
Systat for Windows: ☆☆☆
SPSS 5 for DOS: ☆☆☆

Recall that both SPSS and Systat have add-on (i.e., extra cost) file transfer programs that increase their performance to the exceptional range (all six stars, or ☆☆☆☆☆☆!) If your budget can stand the extra expense, you will find these file transfer programs outstanding, if not indispensable.

Graphics: for more casual users

SPSS for Windows: ☆☆☆☆*
Systat for Windows: ☆☆☆☆☆
SPSS 5 for DOS: ☆☆☆☆☆

Graphics: for "picky users"

SPSS for Windows: ☆☆☆
Systat for Windows: ☆☆☆
SPSS 5 for DOS: ☆☆☆

* (mainly because of poor compatibility with other programs)

Suitability for formal reports

SPSS for Windows: ☆☆☆
Systat for Windows: ☆☆☆
SPSS 5 for DOS: ☆☆☆

RATING AREA 6: VALUE FOR THE MONEY

Here I tread into dangerous territory. After all, Systat for Windows costs nearly as much as a mail-order entry-level 486-SX computer, while SPSS for Windows with a few options added will come to about the price of a powerful, fully-loaded 486-based system. SPSS/PC+ version 5 for DOS with options will cost nearly as much. Yet I am prepared to call all these programs at least "good" values. Most likely you are asking the logical question, namely, "Why?"

The answer lies in what these programs can do. As a first point, statistical analyses, done by anybody (competent) other than you will cost plenty on the open market. The ratio of expense of these programs to the expense of having analyses done elsewhere is all in favor of buying the programs. If you can do one entire segmentation study yourself, you will pay for any of these programs at least twice over. Then there is the question of substitutability. If you know how to use these programs, they will give you answers that you cannot get anywhere else.

I could also give you the arguments sometimes offered by software companies (not necessarily these two): writing software is still done largely "by hand," even with recyclable, modular programs on the rise. Plenty of development time goes into a large, specialized application—ten "person-years" of time, twenty person-years, or more. If markets for a program are relatively small, the cost of developing the software must be spread over fewer buyers. These arguments are all interesting, supposedly, but the point remains that the manufacturers would not sell a single copy (all person-years invested notwithstanding) if the software did not do things that justify its cost. This is the real essence of this software. If you are a professional who must answer hard questions about data, you cannot go to Lotus, or dBase, or Quattro Pro, and so on, to get all answers you need. You must use a program like one of these. Before new programs like these, you always faced severe limitations in the size of problems you could handle on a PC. Now you should be able to tackle any question that arises from survey data—and nearly all that arise from any data base. Is this worth the expenditure? The first time you encounter a problem too large for your old PC programs, you will be very likely to say "yes."

A last word should follow about SPSS/PC+ Version 5 for DOS and notebook or lap top computers. At first, this program seems almost too good to be true for owners of such PCs. Again, the answer is that it almost is. It takes less space on your hard disk than the last version of SPSS, runs better, can use extended memory, and does more things than any previous SPSS PC program. So, what's the catch? Unfortunately, to use extended memory, this program needs a 386-based machine with a full 2

MB of RAM. This means that if you have a notebook computer with 2 MB of RAM, to get SPSS version 5 to run, you will need to disable any other program using any part of that RAM.

For instance, on the test notebook computer, we had to turn off the SmartDrive disk cache program entirely before SPSS had enough memory to run. The program was still fairly speedy without the disk cache, but the un-cached hard drive spent a lot of time grinding away, and as a result, the computer's battery ran down quickly. Also, you need to turn the disk cache on or off at the time you turn the computer on, so to use SPSS 5 and other programs, we installed two different start-ups (two sets of CONFIG.SYS and AUTOEXEC.BAT files) that we switched between. It is really a much better idea to expand your notebook computer's memory beyond 2 MB if you want to run this program. It worked very comfortably on another computer with 4 MB of memory—and this probably is what you will need to reach good performance. Unfortunately, the cost of extra memory for lap top and notebook

computers has still not dropped in many cases—so you may well face another expense if you want to use this program on such a computer.

As a reminder, if your notebook comes with 4MB of RAM, Systat for Windows will run comfortably with this much memory at hand as well. Speed is another matter. You most likely will need at least a 486-SLC type notebook for Systat for Windows to run at a good speed.

Let's close this review with the last ratings. I finally felt that SPSS just missed an "excellent" rating for value, mainly because you need to buy 3 modules to get the analytical tools I find essential, and 5 or 6 modules in total to get a nearly complete suite of analytical tools for survey and database data. You cannot get quite as much with Systat, but the "cost per tool" is somewhat better.

Value for the money

- SPSS for Windows: ☆☆☆☆
- Systat for Windows: ☆☆☆☆☆
- SPSS 5 for DOS: ☆☆☆☆

These programs are available directly from the manufacturers and from a few discount mail-order houses (e.g., CompuClassics). □

SPSS for Windows. *Base package \$695. Advanced Statistics, Professional Statistics, Categories, CHAID, Tables, and Trends modules available; call for prices.*

SPSS/PC+ Version 5 for DOS. *Base package \$295. Advanced Statistics, Professional Statistics, Categories, CHAID, Tables, LISREL, and Trends modules available; call for prices.*

Special pricing offers may be available. Site licenses and academic pricing also available. SPSS, Inc. 444 North Michigan Avenue, Chicago, IL 60611. 312/249-3200.

Systat for Windows. *Complete package \$895. Site licenses volume discounts, and academic pricing also available. Systat, Inc., 1800 Sherman Avenue, Evanston, IL 60201-3793. 708/864-5670.*

Check out the latest market intelligence in your industry

Just check the boxes for any of the FIND/SVP and Packaged Facts reports that you're interested in. Then, attach your business card and we'll send you a complete, free table of contents.

Food

- Children's Prepared Foods
- Condiments
- Cookies
- Fat Substitutes
- Frozen Novelties
- Frozen Yogurt
- Gourmet/Specialty Foods
- Health & Natural Foods
- Healthy Snacks
- Ice Cream & Frozen Desserts
- Infant Formula/Baby Food
- Low-Fat/Low-Cholesterol Dinners & Entrees
- Low-Fat/Low-Cholesterol Foods
- Mexican Foods
- Mexican Sauces
- Premium Sweet Baked Goods
- Prepared Refrigerated Foods
- Refrigerated Light Dairy Products
- Salted Snacks
- Sauces & Gravies
- Soup

Beverages

- Bottled Water
- Fruit & Vegetable Juice
- Microbreweries
- New Age Beverages

Drugs

- Antibiotics
- Alternative Drug Delivery
- Liposome Drug Delivery
- Mail Service Pharmacy
- Psychotropic Drugs
- Respiratory Drugs
- Vitamins, Minerals & Supplements

Healthcare

- Cancer Therapeutics & Diagnostics
- Home Care Products
- Home Care Services
- Home Medical Diagnostic Products
- Long-Term Care
- Skin Ulcer Treatment & Prevention
- Sports Medicine

Water & Waste Management

- Hazardous Waste Site Remediation Services
- Post-Consumer Plastics Recycling
- Residential Water Purification
- Reverse Osmosis
- Underground Storage Tanks

Consumer Durables

- Athletic Footwear
- Home Sewing
- Non-Prescription Sunglasses
- Pet Accessories & Supplies

Retailing

- Getting Your Products Into Supermarkets
- Warehouse Membership Clubs

Demographics

- Asian-American
- Emerging Lifestyles of the 1990s
- Green Consumer
- Hispanic Market
- New Baby Boom
- Youth

Personal Care/Household

- Children's Health & Beauty Aids
- Ethnic Haircare, Skincare & Cosmetics
- Heavy-Duty Detergent
- Household Specialty Cleaners
- Infant Diaper
- Non-Prescription Contraceptives
- Shampoo & Conditioner
- Toilet Soap

Transportation

- Automotive Aftermarket
- Service Specialists in the Automotive Aftermarket

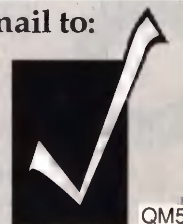
Attach your business card & mail to:

Find/SVP

625 Avenue of the Americas
New York, NY 10011

For even faster service, call

1-800-346-3787



QM5



Now the world's most powerful CATI system is also the most affordable

Bellview is widely recognized throughout the world as the single most flexible and powerful CATI system around. Just some of its many advantages include:

- Automatic call management which handles appointments and time zones with ease.
- Powerful sample management and administration gives your supervisors time to supervise.
- Unlimited number of quota cells.
- Runs on a PC network or as a standalone system.
- Easy for interviewers to learn and use.
- Unique real-time tabulation gives up-to-the-minute reports to supervisors and clients.

And now it's available on a powerful machine that can economically support as few as 4 stations or as many as 100 for as little as \$9950. Integrate this with your existing PC network or add terminals for \$400 per station, plus a low monthly rental for software, and it all adds up to the CATI system you really want — at a price you can afford.

Choose from other modules of The Research Machine and you have an integrated tailor-made solution to all your telephone survey research needs.

For a demonstration diskette and a custom quotation, contact Pulse Train today. There has never been a better time to switch to Bellview.



THE RESEARCH MACHINE *from Pulse Train*

6232 North Pulaski Road
Chicago IL 60646
(312) 794-8900

Neural Network

continued from p. 16

only intuitive knowledge is available. A typical application for a neural network is pattern recognition. Optical character recognition is a perfect example. Starting from some level of education, we all know how different characters look. We are often able to recognize them relatively fast even from very obscure handwriting. Yet, we cannot explain how we do that. Neural networks are trained to recognize the characters using the graphical representation of the text. Once trained, the network is able to recognize a similar font or handwriting quickly.

Open ended question coding is similar to pattern recognition. First, the coder records the word patterns and abstracts the repetitive concepts (ideas) they express. Then he or she applies this knowledge to the classification of responses. This similarity led to the idea of building a neural network for open ended question coding.

The search for an efficient learning algorithm for word patterns and the results of this effort are described below in the form of a case study. The feasibility of neural network technology for the open-ended coding is the topic of discussion.

Learning in neural networks

Before getting into the details of the learning algorithms, let's review briefly the general terminology of neural networks. A neural network consists of equal basic processing units—neurons. All neurons of a network operate in parallel. They process the data in units meaningful for the application. Being equal it also takes them the same time to process the same amount of data—a processing cycle. The neurons are connected to the outside world and to each other by data channels. Each channel carries one data unit for each processing cycle. A neuron has many input channels and a single output channel. The neuron calculates its reaction to the data units in its input channels and forwards it into the output channel in one processing cycle. The internal state of the

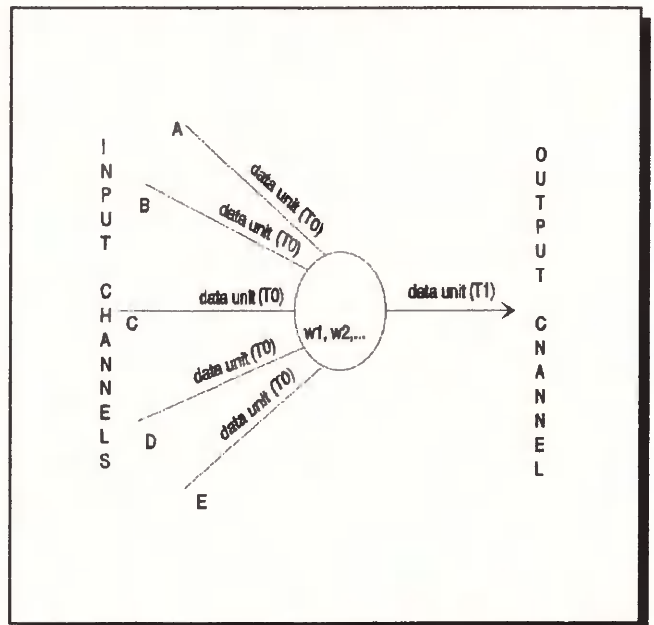


Figure 1 A neuron

neuron is defined with the values of its state variables. They are involved in the calculation of output. The neuron on figure 1 at the moment T0 has data in its input channels A, B, C, D and E and it puts out the reaction at T1—a processing cycle later.

The neurons in the network are organized in layers. A neural network also has its input and output channels. The neurons fed directly from the input channels of the network are called the input layer. The neurons feeding the output channels of the network are called the output layer. The layers between the input and output layers are not directly visible from the inputs or outputs of the network. They are called hidden layers. The data from each input channel of the network is fanned out into the input channels of the network's input layer. See figure 2 for an example. The output channels, in turn, are fanned out into the input channels of the next

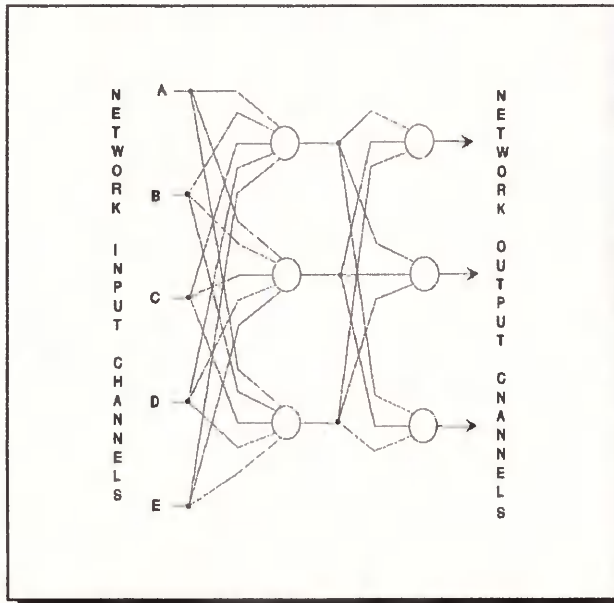


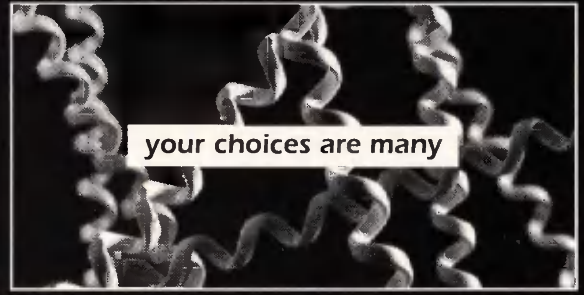
Figure 2 A two layer Neural Network

layer. The number of layers of the network is theoretically unlimited. In practical applications, up to three layers are used. The processing in the network occurs in parallel. For the network in figure 2 it takes one processing cycle for the input layer to calculate its reactions and another for the next layer to get the network's reactions out. Although the data units in the input of all neurons of a layer are the same their reactions will vary because the internal variable's values are different. The state variables of all the neurons in the network constitute the memory of the network.

There are two phases in the data processing with a neural network. First, the learning (or training) phase, in which the network is processing data and at the same time the neurons are adjusting their reactions so that certain combinations of data units in the input (data patterns) will induce certain reactions in the output of the network. Learning occurs by changing the network's memory—internal variables of the neurons. Second, the data processing phase, in which the network's memory remains stable. Consequently, the same reactions will appear in the output of the network in response to the same data patterns in the input.

When you require telephone interviewing that yields...

Accurate Data



Neural network technology incorporates several different ways to simulate the human learning process. New algorithms are announced weekly. A full explanation of all variations is outside the scope of this article. A popular overview of some variations can be found in Caudill, 1990. We will analyze two main approaches to the learning process from the aspect of applicability to the open ended question coding. Those are: learning from the examples and learning



Tragon

Providing
Worldwide Research

Consumer Research

- Sensory Evaluation
- Focus Groups
- Telephone Recruiting and Interviewing
- Children's Testing
- Home-Use Tests
- Central Location Testing

Business To Business Research

- Customer Satisfaction
- Relative Quality
- In-depth Interviewing

Tragon Corporation

365 Convention Way
Redwood City
California 94063
TEL: 415.365.1833
FAX: 415.365.3737

from the data.

For further discussion, we need to associate some terms of neural networks with the terms of the coding process. The answer text serves as input to the neural network. It consists of words, which are the individual data units. The reaction of the network is a code corresponding to the particular text in the input of the network. The learning phase of our neural network corresponds to the development of the code list. The neural network's data processing is the actual coding of the answers.

Learning from examples

The first approach, learning from the examples, is one of the most developed classes of learning algorithms. The training set (the examples) contains the input as well as correct reactions to the input—the output. The learning process starts with a randomly initiated memory of the neural network providing randomly correct reactions to the input. As in the human learning process, correct “guesses” are rewarded and the incorrect ones “penalized.” The best known back propagation type of learning means modification of the neuron's memory according to the expected reaction to the input. In other words, the knowledge about the correctness of the output is propagated back through the network layer by layer, starting from the output layer. Each neuron will modify its memory according to the feedback given to accommodate expected reaction to the known input from the source data.

The method assumes that the real data contains the same (or similar) combinations of input data. Obviously, the speed and quality of learning depend heavily on the volume and composition of the training set. The method works well for applications where such sets can be compiled with a reasonable effort. It assumes also that the distribution of various input patterns is stable and predictable.

Good application examples are the character recognition programs where the set of possible input is relatively stable and predictable. The construction of the training set is straightforward also. To be useful for open ended question coding, a representative subset of answers should be coded manually first. That subset would serve as the training sample for the rest of the coding process. Effectiveness of learning and quality of coding would depend on the composition of the training sample. The automated process would include: representative training sample selection and manual coding of the selected sample. The training sample selection for our application is complicated: the sample has to include word patterns with low number of occurrence, the unique ideas, and the common ideas expressed with unique words.

Learning from the data

The second approach suggests un-supervised learning from the data. The corresponding networks are called self-organizing or Kohonen-type networks after the name of the first researcher in that domain. The method is based on the idea that similar input data patterns are saved in the memory of neurons through repetitive occurrence and thus cause the same reactions. A similar process is probably going on in the newborn child's brain while he or she is learning to distinguish the surrounding objects. Note that the child is able to recognize the objects much earlier than he or she learns their names in the language. Correspondingly, exact reaction (its value) of a neural network to an input data pattern can not be

pre-determined. Matching and similar patterns, if they occur frequently, are saved in the network's memory. They are recognized next time in the input and the network returns the same output. The reactions to the different input patterns are different too. That reaction (output) will thus identify the input.

Here's how the self-organizing network operates and learns. A neuron saves in its internal memory a data pattern it considers its “own.” In each processing cycle the neuron determines the “similarity” of the pattern in its input to its “own” pattern. The “similarity” is a value proportional to the distance between its “own” pattern and the input pattern. The network arbiter collects the “similarity” values from the neurons and determines the most similar neuron—the winner. The winner has the privilege of learning and generating the network's output. Learning in general terms means adjusting its “own” pattern so, that the “similarity” with the current input pattern increases.

Since the same input data is used for learning, the training set selection problem does not exist. In addition, the distinction between learning and processing phases becomes fuzzy. While calculating its reactions to the input data the network is also continuously learning from it. Thus, the learning speed depends on the composition of the input data and on the desired quality of processing. The algorithm is statistical in nature. Therefore, patterns with a low number of occurrences may not create sufficient trace in the network's memory to be distinguishable.

Our learning approach

Learning from data is appealing due to its practical characteristics—a fully automatic training process without the need for the complicated training sample selection and manual coding phases. The self-organizing network works in open ended coding as follows. First, the network scans the text of answers and saves the repetitive word patterns in its memory. It saves the patterns so that groups of answers with similar word patterns are recognized by distinct output values—codes. Besides learning, the network codes the answers in parallel. The learning phase can be interrupted as soon as the desired coding quality level is reached. Learning speed depends on the number of different word patterns (codes in the code list) one would like to count, the frequency of those patterns in the text, desired quality of coding.

The algorithm works well for the patterns that appear frequently in the text. Conversely, the network has trouble coding responses with unique ideas and also with the answers where common ideas are expressed in unique word patterns. Unique ideas can be ignored as statistically meaningless. Unique word patterns with common ideas are typical for open-ended studies. Therefore, a solution has to be found for them.

The program

The features of the program with the self-organizing learning algorithm tailored to the open ended questions coding are described in this section. The first challenge is building a meaningful bridge between the terms of the application and the terms of the technology. An effective and practically useful algorithm for the goal, we studied the characteristics of the data. The results provide for an efficient algorithm with a self-organizing neural network in the core of automatic

code list generation and coding operations.

Building the algorithm

Identification of data units in the input channels of the neuron and the neuron's data processing algorithm are the key issues of the algorithm. To find the efficient assignment of data units we experimented with a simple scheme on many open ended answer files. Each word was treated as an autonomous entity discarding the semantic structure of the sentence. Analysis of results showed that the coding error due to this simplification was generally below one percent and never exceeded 1.5 percent. We decided to ignore the semantic structure of the sentence for the first version of the program.

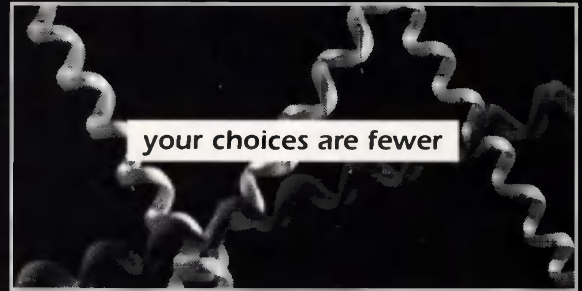
A simple scheme follows from this decision. All different words from all answers of a file of answers make up the dictionary. Each word of the dictionary represents a particular in the inputs of the neural network. The value of this word in an answer is "true" if the word is present and "false" otherwise. A closer look at the mix of words shows the following: majority of the words are present in the text only once, thus useless for coding, prepositions, pronouns, substantives, articles—functional words, are also useless for coding, there are a number of misspelled variations of the same word in the text and there is no simple way to recognize them automatically, a set of words are aliases, thus only one could represent the group, a number of words can be considered aliases in the context of the particular open ended question.

A common set of functional words, aliases and even common misspellings can be compiled. Using this syntactic knowledge the program automatically eliminates the functional words, replaces the synonyms with one form and replaces the misspelled forms with correct ones. The operator's help is required to identify the remaining misspelled words and, most important, the context dependent aliases.

The operator in the role of an expert is introducing new syntactic and semantic knowledge of the language as well as the application domain of the study. Automatic and human assisted operations on words are called dictionary operations. The words remaining in the dictionary after the dictionary operations are called the selector words. The algorithm uses only selector words as input for the neural network.

The network's structure and operation for open ended coding is discussed next. Each neuron in the network has its unique identification number. The neuron's internal memory contains a word pattern the neuron considers its "own." Our neural network has one hidden (processing) self-organizing layer. Each neuron gets all the network's inputs. For each processing cycle the text of one answer is fed into the network. All neurons compare themselves to the input. The network returns the identification number of the most similar neuron—the winner. The similarity is defined as a ratio of matching words to the total number of words in the answer text. In order to increase the similarity in the learning phase, the winner adds words to its short term memory or replaces less useful ones. There are several other processes active concurrently as well. They simulate the human brain's forgetting process as well as the anchoring of significant words in the neuron's long-term memory. In technical terms they eliminate the insignificant word associations and manage neuron's memory. During the learning process each neuron

Accurate Data . . . Quickly



becomes the representative of a word pattern. The word patterns are the potential codes on the code sheet.

The coding process and neural network

Done with the general algorithm, we will discuss the coding process with the program and the role of the neural network. All tasks of a coding project: dictionary generation and manipulation, code list generation, code list editing and printing, coding of answers, coded file review and editing, are supported by the program.

First, the program builds the dictionary as a list of different words from the answer text. It flags the common non-selector words and joins common alias words before presenting the dictionary for review and editing by the operator. The dictio-

STAY FOCUSED



CALL US ABOUT OUR

1. Quality, focused, quantitative research & telephone field service.
2. Spacious focus group room with superb sound insulation and noise-free audio recording capability.

DECISION DATA INC
Seattle (206) 827-3234

Circle No. 924 on Reader Card

nary appears in the form of two lists. Both the non-selector list and the selector list may contain sub-lists of aliases. The operator can move words from one list to another, join words to alias group sub-lists or break them out if required.

Code list generation normally follows the work with the dictionary. Least similar answers in the set are used to initialize the neural network for the code list generation. The program trains the network, processing all answers in the file once in each training run. It keeps track of the learning activity over the run calculating a training index. Stabilization of the index signals the end of the learning process. Finally, the program translates the network's memory into a code list. Each code in the list is defined as a boolean expression of words associated with a code number. Semantically these are the words used to express a concept in a set of answers. The words of the code definition are joined with the boolean operations "and" and "or." The operator can review and edit the code list in this format. The operator can by-pass the code list generation if a previously developed code list should be used for coding. This is typically the case for continuing studies.

The neural network assigns codes to the word patterns, but coding of ideas and concepts is usually required. Abstraction of concepts from the word patterns by the operator is expected at this point. Besides the verbatim of the study, it depends also on the goal of the study, level of detail required and other aspects not explicitly present in the answers. Therefore, we opted for an interactive approach. The operator has to review the code list, identify the word patterns of the same concept and assign the same code number to those patterns.

Once the code list is finalized the coding is fully automatic. The program loads the network with edited code definitions from the list. A modified processing algorithm is loaded into the neurons as well. The new algorithm is evaluating the boolean expression of the corresponding code in addition to the quantitative "closeness" measure calculated by the earlier algorithm. For processing, the program reads the answers and each neuron calculates its boolean value and the similarity. The coding operation is supported in two modes: Single code per response mode selects only the most similar code if several neurons return "true"; Multiple codes per response counts all neurons with the boolean value "true" as relevant.

Finally, the coded file is available for the review and editing by the operator. Here the operator can overwrite the codes assigned

by the program if he so chooses. The program collects also some code distribution statistics. Those are the number of

Feature	Manual	Semi-automatic	Automatic
Identification of aliases and misspelled words		✓	
Identification of selector words		✓	
Identification of repetitive phrases and word patterns			✓
Word pattern based code list development			✓
Abstraction of word patterns into concepts	✓		
Code label development	✓		
Coding for the best code			✓
Coding for multiple codes			✓

answers in the code group and maximum dissimilarity of the answers under the code.

In summary, the program uses a neural network for both key phases—code list development and coding. Although significant operations are automated by the program, full automation is not achieved. The automation of operations is summarized in table 1.

The field trial

In order to determine the potential impact of the automation to the open ended questions coding a set of field tests was conducted. The evaluation of following characteristics was set for the goal of the field study: autocoding quality and

Characteristics	Coder 1 (Lilly)	Coder 2 (Pat)	Coder 3 (Robert)
Professional coding	None	None	None
Computer	General	None	Programmer
Autocoding program	2 Months	1 day lecture 1 day practice	1 Month
English Language	2 Years	Native	2 Months

speed in comparison with manual coding; the influence of previous computer and coding skills; the significance of special training.

The experiment

The answers to three questions were used for the field test.

Test Files	Number of responses	Manual		Coder 1 (Lilly)		Coder 2 (Pat)		Coder 3 (Robert)	
		Hours	Resp/hour	Hours	Resp/hour	Hours	Resp/hour	Hours	Resp/hour
ABC	440	10	44	1	440	5	88	3.5	126
XYZ	352	8	44	1.5	235	6	59	4	88
BOTH	588	10	60	N/A	N/A	1	588	1	588

The first file was compiled from the answers to the question

"Why did you choose ABC as your soft drink supplier?" (referred to below as file ABC). The second one asked the same question from XYZ customers (referred to as XYZ). The third file included the responses to the question "What were your primary reasons for selecting your supplier?" (referred to as BOTH). The code list developed for the first two questions was used for the third file.

Three people coded the files independently. Their experience, relevant to the test is summarized in table 2.

Table 3 compares the time spent on the code list development and coding of the test files. The data in the manual coding column includes 2.5 hours of code list development for each of the first two files. The productivity of coding increased from 1.3 up to 10 times on first two files of the test.

Manual Code Sheet	Coder 1 (Lilly)	Coder 2 (Pat)	Coder 3 (Robert)
Previous supplier; Always there; Preceded me	They were supplier already	ABC was already at location; I was not there at the time of decision	I wasn't there at the time; ABC was here when I started
Low cheaper rates; offer discounts	Good prices	Good; lower; cheaper; better prices	Low; good prices, cheaper, best offer
Popular, well known, universal;	Popular, good product	Popular; well known	Good; popular, customer demand; request; major brand
High customer demand	Customer demand Customers like ABC	Customer like; prefer; request; demand	NOT USED
National account; contract with the supplier;	National account; contract	National contract; account; owner; corporate decision	Corporate decision; national account; owner's decision; contract
Decision made at corporate office	Corporate decision	NOT USED	NOT USED
Good, top quality	NOT USED	Good quality product	NOT USED
Prompt service; efficient	Good service	Good; prompt; efficient service	Good; excellent; efficient; prompt service
Courteous employees; good customer service	NOT USED	NOT USED	NOT USED
NOT USED	Variety of goods	Variety of goods	Variety of goods
Good variety of services offered	NOT USED	NOT USED	NOT USED
Convenient, good location	Convenient; No choice (Only game in town)	Convenient; convenient location; service	NOT USED
Better than other suppliers	Well known vendor	NOT USED	NOT USED
Satisfy needs; no reason the change to another supplier	NOT USED	NOT USED	NOT USED
Service Machines	ABC supplies the machine	ABC supplies machine	Machines - size, money changer, etc.
% of commission	NOT USED	NOT USED	NOT USED
Other	Other	Other	Other
Don't know; no comment	Don't know	Don't know; no reason don't remember	Don't know; no reason; can't remember;

Table 4 Comparison of Code Lists for ABC File

Strong linear correlation with the experience of working with the program is noticeable.

The third file, "BOTH" represents a tracking study. Coder 1 was not asked to code the third file, but the productivity increase was significant (almost 10 times) for coders 2 and 3.

Detailed characteristics of automated coding

The code list development and coding results of the ABC file are covered in detail in this section. Table 4 summarizes the code labels produced by the participants and compares to the labels from the manual process. We boxed the groups that were labeled differently by the participants but were based on the same word patterns.

Table 5 shows the summary statistics of coding. Same code groups are boxed again for easier comparison. Due to the semi-automatic operations the differences in the results are from fractions of percentage points up to 4 percent. The variations of the results are in the same range between the participants of the test and the manual coder. Since the automatically generated code list is open for editing each coder introduces his personal view into the results. In our

Accurate Data, Quickly... At a Competitive Price

your choice is CCI

Accurate data, fast turn-around and competitive pricing are more than just marketing promises... they're our daily operational commitments to clients.

For more information on becoming an "enthusiastically satisfied" client of CCI, or for an estimate on your next telephone study, call Mike Mermelstein at 202/223-4747.



Communications Center, Inc.

Washington, D.C. 202/223-4747
Louisville, KY 502/452-1095
Indianapolis, IN 317/781-9009

Circle No. 925 on Reader Card

STATPAC GOLD IV- PROFESSIONAL'S CHOICE FOR SURVEY & MARKETING RESEARCH

New
Update
Now
Available

User-friendly, comprehensive & dependable. Camera ready tables & graphics. Basic & advanced statistics. CRT & telephone interviewing. Easiest to learn. Guaranteed.

StatPac Inc.

4532 France Ave. S. • Minneapolis, MN 55410
(612) 925-0159 • Fax (612) 925-0851

StatPac®

#1 Choice for Survey & Marketing Research

Circle No. 926 on Reader Card

tests a subset of answers contained several ideas. The multicode mode of the program was not used in the tests. Therefore, the

Code Label	Manual	Coder 1 (Lilly)	Coder 2 (Pat)	Coder 3 (Robert)
Previous supplier, Always there; Preceded me	26.90%	31.36%	29.77%	31.14%
Low cheaper rates; offer discounts	6.37%	6.14%	6.14%	6.14%
Popular, well known, universal, High customer demand	12.32% 9.65%	21.36% 2.27%	10.68% 8.86%	23.41% 0.00%
National account; contract with the supplier; Decision made at corporate office	2.67% 7.39%	2.73% 6.14%	11.14% 0.00%	9.55% 0.00%
Good, top quality	5.54%	0.00%	5.45%	0.00%
Prompt service; efficient	6.37%	9.55%	7.95%	11.36%
Courteous employees; good customer service	2.46%	0.00%	0.00%	0.00%
Variety of goods	0.00%	1.36%	1.59%	1.36%
Good variety of services offered	1.85%	0.00%	0.00%	0.00%
Convenient, good location	1.44%	2.05%	1.59%	0.00%
Better than other suppliers	1.64%	2.05%	0.00%	0.00%
Satisfy needs, no reason the change to another supplier	2.87%	0.00%	0.00%	0.00%
Service Machines	1.64%	2.50%	3.18%	2.50%
% of commission	0.62%	0.00%	0.00%	0.00%
Other	1.64%	3.41%	2.95%	4.55%
Don't know; no comment	8.62%	9.09%	10.68%	10.00%

Table 5 Coding Statistics

participants had to guide the program to choose the most important concept from the answer. Subjective priorities explain most of the differences among the test participants.

In general, the test participants seem to have difficulties in isolating relatively small groups (less than 2 percent from the total). All the test participants failed to isolate one significant group "Satisfies needs; no reason for change to another supplier" with 2.87% of responses. Later analysis did not reveal the cause of these phenomena. The algorithm posi-

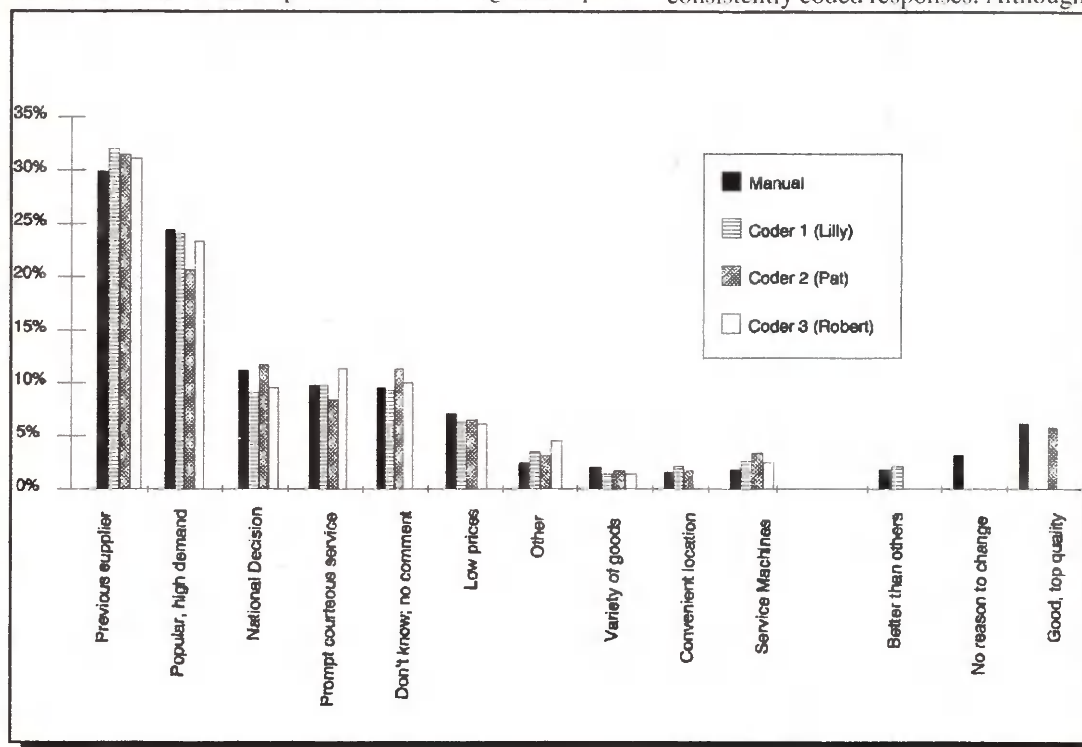


Figure 3 Code List Consistency
46

tively isolated the word patterns even if they were present only in two responses. The participants chose to join it with other, similar word patterns. This could be due to the lack of previous training in open ended questions coding.

The consistency of code development is illustrated with figure 3. The codes boxed in table 4 (same concept, different labels) are combined for the charting purposes. The groups of codes with high correlation are on one end of the chart. The variation in the code development among them is in the order of single percentage points. Inconsistent code groups are on the other side of the chart. Some of the reasons for these variations were discussed earlier. Reasons for the differences between manual coding and automatic coding are addressed

Answers coded under "Previous supplier".

- 22 THE PAST OWNER WAS ORDERING, & WE JUST CONTINUED USING THEM
- 55 WASN'T MANAGER DURING THE TIME OF PURCHASING
- 56 THEY WERE ALREADY USING THEM WHEN I STARTED
- 69 SUPPLIER WAS AT HOTEL WHEN I STARTED WORKING HERE
- 77 I WASN'T THE MANAGER AT THE TIME OF PURCHASING
- 87 THEY HAVE ALWAYS BEEN THERE AND I WASN'T GOING TO CHANGE
- 89 WASN'T THE MANAGER AT THE TIME OF PURCHASING
- 107 WHEN WE BOUGHT THE MOTEL THEY WERE HERE AND WE JUST KEPT THEM

Answers coded under "Good price":

- 641 THE PRICES WERE GOOD, AND THE DEMAND FOR THE PRODUCT WAS HIGH
- 648 THEIR PRICES WERE CHEAPER THAN MOST COMPETITORS
- 808 THEIR PRICES ARE CHEAPER THAN MOST COMPETITORS
- 823 ABC OFFERED A BETTER DEAL
- 833 GOOD PRICE
- 853 THEIR PRICES ARE CHEAPER THAN MOST COMPETITORS
- 858 NAME RECOGNITION OF THE PRODUCT. PRICING IS COMPETITIVE
- 919 BECAUSE THEY WERE A LOT CHEAPER THAN XYZ

Panel 1 Consistent Coding Results

below.

Finally, the actual coding results. As mentioned earlier, the coding is practically instantaneous with the program. In addition, as we discovered in the tests, it is also more consistent with the code list. Thus, leading to higher quality results. To support this statement, we included some examples from the ABC file. Panel 1 shows a sample of consistently coded responses. Although the wordings of the

code labels do not match exactly, the results line up nicely. Panel 2 lists some of the responses where the participants ended up with different codes than the manual coder. In some cases, all assigned codes are relevant, but different concepts were considered to be primary. In other cases the errors of manual coder are obvious.

Conclusions of the test

Although the test can not be considered conclusive, some of the practical aspects of the program are evident: favorable automated coding appears to be more consistent (higher quality) than manual coding. Automated coding is significantly faster. Training and experience in the use of the program significantly increases the productivity. Computer literacy is not a prerequisite. Neutral: Some errors are inevitable whichever method is used. Both methods are subjective in creating the code labels. Negative: It requires re-orientation of current coding staff.

Conclusions

Neural network technology is mature enough to be used in various complex applications thus far considered to be unapproachable for computers. Building the applications some-

Coding inconsistencies:

118 BEST PRODUCT GREAT PRODUCT

Manual *better than other suppliers*
Lilly *popular/good product*
Pat *good/quality product*
Robert *good/popular product, customer demand request*

1048 BECAUSE OF THEIR PROMPT AND VERY EFFICIENT SERVICE TOWARDS OUR COMPANY

Manual *previous supplier/has always been there/not mgr. at time of purchasing*
Lilly *good service*
Pat *good/prompt/efficient service*
Robert *good/excellent/efficient/prompt service, convenient*

938 PRIOR HISTORY. IT WAS HERE AND WE CARRIED IT OVER

Manual *popular/well known/universal*
Lilly *they were the supplier already*
Pat *ABC already at location/not here at time of purchase*
Robert *wasn't there at time/previous supplier/was her when I started*

Different primary concepts and interpretation:

120 VERY LOW PRICE. LEASING EQUIPMENT IS CONVENIENT AND DELIVERY IS PROMPT

Manual *prompt service/efficient*
Lilly *good price*
Pat *convenient/convenient location/service*
Robert *good/excellent/efficient/prompt service, convenient*

246 WE BELIEVE IT'S BETTER THAN XYZ.

Manual *better than other suppliers*
Lilly *popular/good product*
Pat *good/quality product*
Robert *other*

922 TO GIVE THE CUSTOMERS A VARIED SELECTION

Manual *good variety of services offered*
Lilly *wide variety*
Pat *variety/varies selection*
Robert *wide selection variety*

times takes creativity and innovation, but it pays off with significant support to the intellectual performance of a human operator. Better results in the code list development can probably be expected from a multi-layer network and from an algorithm taking the consideration the semantical structure of the sentences. □

References

Blair, E., S. Sudman, N. M. Bradburn and C. B. Stocking (1977), "How to Ask Questions About Drinking and Sex: Response Effects in Measuring Consumer Behavior," *Journal of Marketing Research*, 14.

Bradburn, N.M. (1983), "Response Effects," in *Handbook of Survey Research*, P.H. Rossi, J.D. Wright and A.B. Anderson, eds. New York: Academic Press.

Bradburn, N.M., S. Sudman (1982), *Asking Questions*. San Francisco: Jossey-Bass.

Bradburn, N.M., S. Sudman, and Associates (1979), *Improving Interview Method and Questionnaire Design: Response Effects to Threatening Questions in Survey Research*. San Francisco: Jossey-Bass.

Caudill, Maureen. (1990) "AI Expert. Neural Networks Primer," San Francisco: Miller Freeman Publications.

Dohrenwend, B.S. (1965), "Some Effects of Open and Closed Questions on Respondents' Answers," *Human Organization*, 24, 175-184

Dohrenwend, B.S., S. A. Richardson (1963), "Directiveness and Non-directiveness in Research Interviewing: a Reformulation of the Problem," *Psychological Bulletin*, 60, 475-485.

Keon, John W. (1991) "Point of view: Understanding the Power of Expert Systems in Marketing," *Journal of Advertising Research*, 6, 64-71.

Lazarsfeld, P.E. (1944), "The Controversy Over Detailed Interviews—an Offer for Negotiation," *Public Opinion Quarterly*, 8, 38-60.

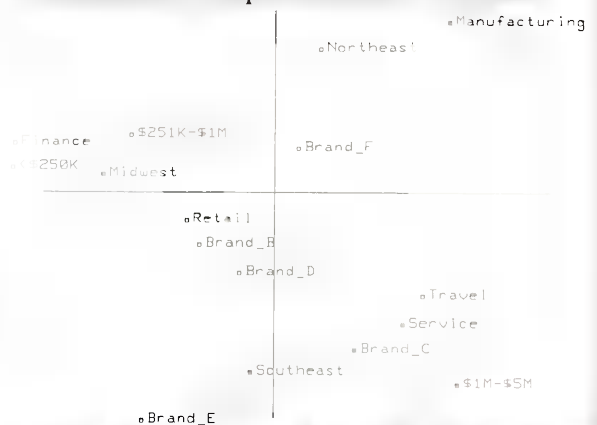
Pratt, D. J., W. Mays, (1989) "Automatic Coding of Transcript Data for a Survey of Recent College Graduates," *Proc. of the Section on Survey Methods of American Statistical Association Annual Meeting*, 796-801.

Schuman, H., S. Presser (1981), *Questions and Answers in Attitude Surveys*. New York: Academic Press.

Sheatsley, P.B. (1983) "Questionnaire Construction and Item Writing," in *Handbook of Survey Research*, P.H. Rossi, J.D. Wright and A.B. Anderson, eds. New York: Academic Press.

VISUALIZE your Data with MCA+

Create Presentation-Quality Perceptual Maps from data ranging from cross-tabs thru conjoint. Communicate complex relations with ease.



Bretton-Clark

89 Headquarters Plaza (201) 993-3135
North Tower, 14th Floor FAX (201) 993-1757
Morristown, NJ 07960

DIRECTORY OF QUALITATIVE RESEARCH/ FOCUS GROUP MODERATORS

Listed below are names of companies specializing in focus groups. Included are contact personnel, addresses and phone numbers. Companies are listed alphabetically and are also classified by state and specialty for your convenience. Contact publisher for listing rates: Quirk's Marketing Research Review, P. O. Box 23536, Minneapolis, MN 55423. 612/861-8051.

Access Research, Inc.

8 Griffin Road North
Windsor, CT 06095
Ph. 203-688-8821
Contact: Gerald M. O'Connor

Action Research, Inc.

230 Western Avenue
Boston, MA 02134
Ph. 617-254-0360
Contact: Steven Davis
Advert., Consumers, Publishing
New Prod. Dev., Small Business.

ADI Research, Inc.

(See Matrixx Marketing)

Analysis Research Limited

4655 Ruffner St., Ste. 180
San Diego, CA 92111
Ph. 619-268-4800
Contact: Arline M. Lowenthal
All Qual. Needs: Eng. & Span.
Recruit/Moderate/Analysis.

The Answer Group

4665 Cornell Rd., Ste. 150
Cincinnati, OH 45241
Ph. 513-489-9000
Contact: Lynn Grome
Consumer, Health Care, Prof.,
Focus Groups, One-On-Ones.

Answers Research

225 Stevens Ave., Ste. 108
Solana Beach, CA 92075
Ph. 619-792-4660
Contact: David Farlow
Business-to-Business, Hi-Tech,
Medical, New Product, Biotech.

**Asian Marketing Communication
Research/Division of HMCR**

1535 Winding Way
Belmont, CA 94002
Ph. 415-595-5028
Contact: Dr. Sandra M.J. Wong
Qual./Quant. Rsch. in Cantonese,
Mandarin, Japanese,
Korean, Tagalog, etc. U.S. & Intl.

Auto Pacific Group, Inc.

12812 Panorama View
Santa Ana, CA 92705-1340
Ph. 714-838-4234
Contact: George Peterson
Auto Marketing & Product Experts.
700+ Groups Moderate & Recruit.

Brand Consulting Group

17117 W. Nine Mile Rd./Ste. 1020
Southfield, MI 48075
Ph. 313-559-2100
Contact: Milton Brand
Consumer, Advertising Strategy,
New Product Strategy Research.

Calo Research Services

10250 Alliance Road
Cincinnati, OH 45242
Ph. 513/984-9708
Contact: Nick Calo
Extensive Technology, Bus.-Bus.,
Positioning Experience

Cambridge Research, Inc.

5831 Cedar Lake Rd.
St. Louis Park, MN 55416
Ph. 612-525-2011
Contact: Dale Longfellow
High Tech, Executives, Bus.-To-
Bus., Ag., Specifying Engineers.

Chamberlain Research Consultants

12 East Olin Ave.
Madison, WI 53713
Ph. 608-258-3666
Contact: Sharon Chamberlain
Full-Service Marketing Research/
Business & Consumer Studies.

The Clowes Partnership

P.O. Box 791
South Norwalk, CT 06856
Ph. 203/855-8751
Contact: Rusty Clowes
New Product/Advertising/All Ages/
Focus & Mini Groups

Communications Workshop, Inc.

168 N. Michigan Ave.
Chicago, IL 60601
Ph. 312-263-7551
Contact: Lisa J. Hougsted
Consumer, Executive, Technical &
Children Grps.

Consumer Opinion Services

12825-1st Ave. South
Seattle, WA 98168
Ph. 206-241-6050
Contact: Jerry Carter
Consumer, Business Groups and
One-On-Ones.

Corporate Research Center, Inc.

106 Fairidge Ct.
Jamestown, NC 27282
Ph. 919-884-8614
Contact: John Deuterma
Dual Moderating; M + F Modera-
tors; Video N/C; Kids.

Creative & Response Svces., Inc.

500 N. Michigan Ave., 12th Fl.
Chicago, IL 60611
Ph. 312-828-9200
Contact: Sanford Adams
Thirty Years of Leadership in
Qualitative Research.

Cunninghis Associates

6400 Flotilla Dr., #56
Holmes Beach, FL 34217
Ph. 813-778-7050
Contact: Burt Cunninghis
37 Years Exp., Moderator &
Moderator Training.

Daniel Associates

49 Hill Rd., Ste. 4
Belmont, MA 02178
Ph. 617-484-6225
Contact: Stephen J. Daniel
FOCUS/IT Understanding the High
Tech Buying Process.

The Davon Group

10 W. Broad St.
Columbus, OH 43215
Ph. 614-222-2548
Contact: Barry J. Mastrine
Specialize in Focus Groups and
Executive Interviews.

Diener & Associates, Inc.

200 Park Bldg., Ste. 111
Research Triangle Park, NC 27709
Ph. 919-549-8945 or 800-467-8945
Contact: Mary E. Diener
Business/Communications/
Environmental/ Health/Medical/Ed.

DMSC Research

3790 El Camino Real, #398
Palo Alto, CA 95448
Ph. 415-969-5475
Contact: Donna Schaffer
Extensive High Tech. Expertise
and Capabilities.

Dolobowsky Qual. Svcs., Inc.

94 Lincoln St.
Waltham, MA 02154
Ph. 617-647-0872
Contact: Reva Dolobowsky
Experts In Ideation & Focus
Groups. Formerly with Synectics.

Doyle Research Associates, Inc.

919 N. Michigan/Ste. 3208
Chicago, IL 60611
Ph. 312-944-4848
Contact: Kathleen M. Doyle
Specialty: Children/Teenagers
Concept & Product Evaluations.

D/R/S HealthCare Consultants

3127 Eastway Dr., Ste. 105
Charlotte, NC 28205
Ph. 704-532-5856
Contact: Dr. Murray Simon
Specialists in Research with
Providers & Patients.

Ebony Marketing Research, Inc.

2100 Bartow Ave.
Baychester Bronx, NY 10475
Ph. 718-217-0842
Contact: Ebony Kirkland
Spac. Conf./Viewing Rooms/Client
Lounge/Quality Recruiting.

Erlich Transcultural Consultants

21241 Ventura Blvd., Ste. 193
Woodland Hills, CA 91364
Ph. 818-226-1333
Contact: Dr. Andrew Erlich
Full Service Latino and Asian
Marketing Research.

Find/SVP

625 Avenue of the Americas
New York, NY 10011-2002
Ph. 212-645-4500 x208
Contact: Ann Middleman
Mktg. Consulting & Rsch. Health
Care, Telecomm., & Technology.

First Market Research Corp.

2301 Hancock Drive
Austin, TX 78756
Ph. 800-FIRST-TX (347-7889)
Contact: James R. Heiman
High Tech, Publishing,
Bus.-To-Bus., Colleges.

First Market Research Corp.

121 Beach St.
Boston, MA 02111
Ph. 617-482-9080

Contact: Linda M. Lynch
New Product Development, Health
Care, Advertising, Retail.

First Market Research Corp.

121 Beach St.
Boston, MA 02111
Ph. 617-482-9080

Contact: Jack Reynolds
Business To Business, Execu-
tives, Banking.

Focus Plus

79 5th Avenue
New York, NY 10003
Ph. 212-807-9393

Contact: Elizabeth Lobrano
Impeccable Cons. & B-B
Recruiting/Beautiful Facilities.

Focus Research

1828 Audubon Street
New Orleans, LA 70118
Ph. 504-865-1687

Contact: Kirsty D. Nunez
Qualitative/Quantitative Research
& Consultation.

D.S. Fraley & Associates

1205 East Madison Park
Chicago, IL 60615
Ph. 312-536-2670

Contact: Diane S. Fraley
Full Qual. Specialty: Child/Teen /
In-Home/Observational Rsch.

Frieden Qualitative Services

14802 Addison Street
Sherman Oaks, CA 91403
Ph. 818-789-6894

Contact: Gary Frieden, Ph.D.
Blends Soc. Psych. & Mkt. Rsch.
for Dynamic Sessions.

Gault Associates

2006 Exeter Rd., Ste. 104
Germantown, TN 38138
Ph. 901-756-3958

Contact: Chris Gault
Consumer Products/Home
Services.

Grieco Research Group, Inc.

743 North Avenue 66
Los Angeles, CA 90042
Ph. 213-254-1990

Contact: Joe Grieco
Marketing and Advertising
Focus Groups.

GRM & Associates

8807 Kingston Pike, # East E
Knoxville, TN 37923
Ph. 615-693-3500

Contact: Christopher Wise
Quality Focus Facility/Recruit by
Lifestyle Groups.

Groups Plus

23 Hubbard Road
Wilton, CT 06897
Ph. 203-834-1126

Contact: Thomas L. Greenbaum
Clarion Offers Unique Approach To
Groups; Call to Find Out Why.

Hammer Marketing Resources

179 Inverness Rd.
Severna Pk. (Balt./D.C.), MD 21146
Ph. 410-544-9191

Contact: Bill Hammer
23 Years Experience - Consumer,
Business & Executive.

**Hispanic Marketing
Communication Research**

1535 Winding Way
Belmont, CA 94002
Ph. 415-595-5028

Contact: Dr. Felipe Korzenny
Hisp. Bi-Ling./Bi-Cult. Foc Grps.
Anywhere In U.S./Quan. Strat. Cons.

Horowitz Associates

2 East Avenue
Larchmont, NY 10538
Ph. 914-834-5999

Contact: Howard Horowitz
Cable/Video Marketing-Program-
ming-Advertising Strategy.

INFOCUS Group Services

5101 Cleveland St., #304
Virginia Beach, VA 23462
Ph. 804-490-1351

Contact: Grace Fuller-Stanton
Full Qual. & Facility. Consumer &
Bus-to-Bus. Training. Seminars.

Intersearch Corporation

132 Welsh Rd.
Horsham, PA 19044
Ph. 215-657-6400

Contact: Robert S. Cosgrove
Pharm.-Med./High-Tech/Bus.-to-
Bus./Consumer/Telecomm.

JRH Marketing Services, Inc.

29-27 41st Avenue
New York, NY 11101
Ph. 718-786-9640

Contact: J. Robert Harris, II
Experience Counts: Check out the
rest but USE THE BEST.

KidFactsSM Research

34405 W. 12 Mile Road, Ste. 121
Farmington Hills, MI 48331
Ph. 313-489-7024

Contact: Dana Blackwell
Qual. & Quan: Specialty Kids/
Teens. Prod./Pkg./Advrtg.

KS & R Consumer Testing Center

Shoppingtown Mall
Syracuse, NY 13214
Ph. 800-289-8028

Contact: Lynne Van Dyke
Qualitative/Quantitative, Intercepts,
CATI, One-on-One.

Leichliter Associates

252 E. 61st St., Ste. 2C-S
New York, NY 10021
Ph. 212-753-2099

Contact: Betsy Leichliter
Innovative Exploratory Rsch./Idea
Development. Offices NY & Chicago.

**Management Research
& Planning Corp.**

303 Blake St., #200
Raleigh, NC 27601
Ph. 800-347-5608

Contact: John Watkins
FQRT.100 Elec., Comp., Intl. Food &
Chem, Pol., Sprts., Pub., Cons. Pdcts.

Market Navigation, Inc.**Teleconference Network Div.**

2 Prel Plaza
Orangeburg, NY 10962
Ph. 914-365-0123

Contact: George Silverman
Mod., Bus.-to-Bus., Hi-Tech, Indust.,
Ideation, New Prod., Tel. Groups.

Marketing Perspectives, Inc.

535 127th Lane NW
Minneapolis, MN 55448
Ph. 612-755-4227

Contact: Donna Naeve
Medical/Consumer Experience-
USA/International.

Matrixx Marketing-Rsch. Div.

Cincinnati, OH
Ph. 800-323-8369

Contact: Michael L. Dean, Ph.D.
Cincinnati's Most Modern and
Convenient Facilities.

Mature Marketing Research Div.**Consumer Sciences, Inc.**

245 Federal Rd., Ste. B-22
Brookfield, CT 06804
Ph. 203-797-0666

Contact: Dr. Leslie Harris
Reg., Nat'l. Studies. Full Svce.
Qual. & Quan.

MCC Qualitative Consulting

Harmon Meadow
700 Plaza Dr., 2nd. Flr.
Secaucus, NJ 07094

Ph. 201-865-4900 (NJ)
800-998-4777 (Outside NJ)
Contact: Andrea C. Schragger
Insightful, Results-Oriented
Research. Local or National.

Susan McQuilkin

1117 Evergreen Court
Indianapolis, IN 46240
Ph. 317-846-9753

Contact: Susan McQuilkin
Moderating For Medical or
Consumer Goods Industries.

MedProbe Medical Mktg. Rsch.

7825 Washington Ave. S., # 745
Minneapolis, MN 55435
Ph. 612-941-7965

Contact: Asta Gersovitz, Phrm.D.
MedProbe Provides Full Service
Custom Market Research.

Moosbrugger Marketing Rsch.

901 West Hillgrove Ave.
LaGrange, IL 60525
Ph. 708-354-5090

Contact: Mary C. Moosbrugger
Moderation with Physicians,
Nurses, and Consumers.

Nordhaus Research, Inc.

20300 W. 12 Mile Rd.
Southfield, MI 48076
Ph. 313-827-2400

Contact: John King
Full-Svce. Qual. and Quant., Fin.,
Med., Util., 3 Discussion Rms.

PACE, Inc.

31700 Middlebelt Rd., Ste. 200
Farmington Hills, MI 48334
Ph. 313-553-4100

Contact: Peter J. Swetish
Full Service Vehicle Specialist-
OEM & Aftermarket Experience.

Research Data Analysis, Inc.

450 Enterprise Court
Bloomfield Hills, MI 48302
Ph. 313-332-5000

Contact: Sanford Stallard
Full Svce. Qual./Quan. Analysis/
Auto./Adv./Comm.

Rockwood Research Corp.

1751 W. County Road B
St. Paul, MN 55113
Ph. 612-631-1977

Contact: Scott Murphy
Full Svce Qual/Quant., Consumer,
Bus-To-Bus, High-Tech, Ag.

Rodgers Marketing Research

4575 Edwin Drive, NW
Canton, OH 44718
Ph. 216-492-8880

Contact: Alice Rodgers
Creative/Cost Effective: New
Product/Consumer, Etc.

Pamela Rogers Research
2525 Arapahoe Ave., #E4-174
Boulder, CO 80302
Ph. 303-494-1737
Contact: Pamela Rogers
Environmental Issues-Healthy
Food/Products/Packaging.

Rudick Research
One Gorham Island, 3rd Floor
Westport, CT 06880
Ph. 203-226-5844
Contact: Mindy Rudick
10+ yrs Experience Utilizing
Innovative Techniques.

James Spanier Associates
120 East 75th St.
New York, NY 10021
Ph. 212-472-3766
Contact: Julie Horner
Focus Groups And One-On-Ones
In Broad Range Of Categories.

Dwight Spencer & Associates
1290 Grandview Avenue
Columbus, OH 43212
Ph. 614-488-3123
Contact: Betty Spencer
4x16' Mirror Viewing Rm. Seats
8-12. In House Audio/Vid. Equip.

Spier Research Group
1 Lookout Circle
Larchmont, NY 10538
Ph. 914-834-3749
Contact: Daisy Spier
Advtg./Dir. Mktg./Prod. Dev./
Cons./Business/FGI's/1 on 1's.

Jane L. Stegner & Ascts.
2215 Penn Ave. So.
Minneapolis, MN 55405
Ph. 612-377-2490
Contact: Jane Stegner
Bus-To-Bus/Medical/Fncl. Svcs./
Agric., Groups/1:1's.

Strategic Research, Inc.
4600 Devonshire Common
Fremont, CA 94536
Ph. 415-797-5561
Contact: Sylvia Wessel
400 Groups, Hi-Tech/Medical/
Financial/Transportation Svcs.

Sunbelt Research Associates
1001 U.S. Highway One, Ste. 310
Jupiter, FL 33477
Ph. 407-744-5662
Contact: Barbara L. Allan
20+ yrs. Exper; Business &
Consumer Studies; Svce. Oriented.

Sweeney International, Ltd.
221 Main St.
Danbury, CT 06810
Ph. 203-748-1638
Contact: Timm Sweeney
Qualitative Research. Member:
QRCA/AMA/Advt. Club.

Thorne Creative Rsch. Svces.
65 Pondfield Rd., Ste. 3
Bronxville, NY 10708
Ph. 914-337-1364
Contact: Gina Thorne
Ideation, teens, New Product
Ad Concepts, Package Goods.

The Travis Company, Inc.
509 Cathedral Parkway, Ste. 8E
New York, NY 10025
Ph. 212-222-0882
Contact: Jerry Travis
Qualitative Research and
Consultation.

TrendQuest
16959 Bernardo Ctr. Dr., #216
San Diego, CA 92128
Ph. 619-674-1031
Contact: Ann C. Klimowicz
Health Care: Focus Groups, In-
Depth One-on-Ones.

Visual Research Comm, Inc.
441 Main St.
Metuchen, NJ 08840
Ph. 908-906-6556
Contact: Ricardo A. Lopez
10 Yrs. Exper. in Hispanic Mkt. Bi-
ling., Focus Grp. Anywhere in U.S.

Dan Wiese Market & Research
Direction
2108 Greenwood Dr., S.E.
Cedar Rapids, IA 52403
Ph. 319-364-2866
Contact: Dan Wiese
Highly Experienced: Farmers,
Consumers, Business.

The Winters Group, Inc.
14 Franklin St., Ste. 920
Rochester, NY 14604
Ph. 716-546-7480
Contact: Nancy Volkmuth
Qual./Quan., Secondary, CATI,
Cnsltng., Ethnic Rsch.

Yarnell Inc.
147 Columbia Tpke., #302
Florham Park, NJ 07932
Ph. 201-593-0050
Contact: Steven M. Yarnell
New Product Development &
Positioning. HW/SW Cos.

STATE CROSS INDEX OF MODERATORS

Refer to Preceding Pages For Address, Phone Number and Contact Name

California

Analysis Research Ltd.
Answers Research
Asian Marketing
Auto Pacific Group, Inc.
DMSC Research
Erich Transcultural Consultants
Frieden Qualitative Services
Grieco Research Group, Inc.
Hispanic Marketing
Strategic Research, Inc.
TrendQuest

Colorado

Pamela Rogers Research

Connecticut

Access Research, Inc.
The Clowes Partnership
Groups Plus
Mature Marketing Research Div.
Rudick Research
Sweeney International, Ltd.

Florida

Sunbelt Research Associates

Illinois

Communications Workshop, Inc.
Creative & Response Rsch. Svcs.
Doyle Research Associates
D.S. Fraley & Associates

Leichliter Associates
Moosbrugger Marketing Rsch.

Indiana

Susan McQuilkin

Iowa

Dan Wiese Mkt. & Rsch. Direction

Louisiana

Focus Research

Maryland

Hammer Marketing Resources

Massachusetts

Action Research, Inc.
Daniel Associates
Dolobowsky Qual. Svcs., Inc.
First Market Rsch. (L. Lynch)
First Market Rsch. (J. Reynolds)

Michigan

Brand Consulting Group
KidFacts Research
Nordhaus Research, Inc.
PACE, Inc.
Research Data Analysis

Minnesota

Cambridge Research, Inc.
Marketing Perspectives, Inc.
MedProbe Medical Mktg. Rsch.
Rockwood Research Corp.
Jane L. Stegner and Ascts.

New Jersey

Cunninghis Associates
MCC Qualitative Consulting
Visual Rsch. Comm., Inc.
Yarnell Inc.

New York

Ebony Marketing Research, Inc.
Find/SVP
Focus Plus
JRH Marketing Services, Inc.
Horowitz Associates, Inc.
K S & R Consumer Testing Ctr.
Leichliter Ascts.
Market Navigation, Inc.
James Spanier Associates
Spier Research Group
Thorne Creative Research
The Travis Company
The Winters Group

North Carolina

Corporate Research Center, Inc.
Diener & Associates, Inc.
D/R/S HealthCare Consultants

Management Rsch. & Plng. Corp.

Ohio

The Answer Group
The Davon Group
Calo Research Services
Matrixx Marketing
Rodgers Marketing Research
Dwight Spencer & Associates

Pennsylvania

Intersearch Corp.

Tennessee

Gault Associates
GRM & Associates

Texas

First Market Rsch. (J. Heiman)

Virginia

iNFOCUS Group Services

Washington

Consumer Opinion Services

Wisconsin

Chamberlain Research Consultants

SPECIALTY CROSS INDEX OF MODERATORS

Refer to Preceding Pages For Address, Phone Number and Contact Name

ADVERTISING

Action Research, Inc.
Analysis Research Ltd.
Brand Consulting Group
Cambridge Research, Inc.
Chamberlain Research Cnsltnts.
The Clowes Partnership
Creative & Response Rsch. Svcs.
Dolobowsky Qual. Svcs., Inc.
Doyle Research Associates
Erlich Transcultural Consultants
First Market Research (L. Lynch)
D.S. Fraley & Associates
Management Rsch. & PIng. Corp.
PACE, Inc.
Research Data Analysis
Rockwood Research Corporation
James Spanier Associates
Spier Research Group
Sunbelt Research Associates
Sweeney International, Ltd.
Thorne Creative Research

AFRICAN-AMERICAN/BLACK

Ebony Marketing Research, Inc.
JRH Marketing Services, Inc.
The Winters Group, Inc.

AGRICULTURE

Cambridge Research, Inc.
Market Navigation, Inc.
Rockwood Research Corporation

ALCOHOLIC BEV.

Access Research, Inc.
Creative & Response Rsch. Svcs.

APPAREL/FOOTWEAR

Brand Consulting Group
Corporate Research Center, Inc.

ASIAN

Asian Marketing
Communication Research

AUTOMOTIVE

Auto Pacific Group, Inc.
Creative & Response Rsch. Svcs.
Erlich Transcultural Consultants
iNFOCUS Group Services
Matrixx Marketing-Research Div.
PACE, Inc.
Research Data Analysis

BIO-TECH

Calo Research Services
Intersearch Corporation
Market Navigation, Inc.
MedProbe Medical Mktg. Rsch.
TrendQuest

BUS.-TO-BUS.

Access Research, Inc.
Answers Research
Calo Research Services
Cambridge Research, Inc.
Chamberlain Research Cnsltnts.
Consumer Opinion Services
Creative & Response Rsch. Svcs.
The Davon Group
Diener & Associates, Inc.
First Market Research (J. Heiman)
FirstMarketResearch(J.Reynolds)
Intersearch Corporation
Management Rsch. & PIng. Corp.
Rockwood Research Corporation
James Spanier Associates
Spier Research Group
Strategic Research, Inc.
Sweeney International, Ltd.
Yarnell Inc.

CANDIES

D.S. Fraley & Associates

CHILDREN

Creative & Response Rsch. Svcs.
Doyle Research Associates
D.S. Fraley & Associates
KidFacts Research
Matrixx Marketing-Research Div.

COMMUNICATIONS RESEARCH

Access Research, Inc.
Diener & Associates, Inc.
D.S. Fraley & Associates
James Spanier Associates
Sunbelt Research Associates

COMPUTERS/MIS

Answers Research
Calo Research Services
Creative & Response Rsch. Svcs.
Daniel Associates
DMSC Research
Find/SVP
First Market Research (J. Heiman)
Market Navigation, Inc.
James Spanier Associates
Strategic Research, Inc.
Sweeney International, Ltd.
Yarnell Inc.

CONSUMERS

Action Research, Inc.
Chamberlain Research Cnsltnts.
Consumer Opinion Services
Creative & Response Rsch. Svcs.
Diener & Associates, Inc.
Doyle Research Associates
D.S. Fraley & Associates
Intersearch Corporation
Management Rsch. & PIng. Corp.
Rodgers Marketing Research

Thorne Creative Research

CUSTOMER SATISFACTION

Strategic Research, Inc.

DIRECT MARKETING

Spier Research Group

ENTERTAINMENT

D.S. Fraley & Associates
Sweeney International, Ltd.

ENVIRONMENTAL

Diener & Associates, Inc.
Pamela Rogers Research

EXECUTIVES

Chamberlain Research Cnsltnts.
Creative & Response Rsch. Svcs.
Dolobowsky Qual. Svcs., Inc.
First Market Research (J. Heiman)
FirstMarketResearch(J.Reynolds)
iNFOCUS Group Services
Intersearch Corporation
PACE, Inc.
James Spanier Associates
Sunbelt Research Associates
Sweeney International, Ltd.

FINANCIAL SVCS.

Access Research, Inc.
Cambridge Research, Inc.
Creative & Response Rsch. Svcs.
The Davon Group
Dolobowsky Qual. Svcs., Inc.
Intersearch Corporation
Matrixx Marketing-Research Div.
Nordhaus Research, Inc.
The Research Center
Rockwood Research Corporation
James Spanier Associates
Sunbelt Research Associates
Sweeney Int'l. Ltd.

FOOD PRODUCTS

Creative & Response Rsch. Svcs.
Doyle Research Associates
D.S. Fraley & Associates
Gault Associates
KidFacts Research
Leichliter Associates
Rockwood Research Corporation
James Spanier Associates
Thorne Creative Research

HEALTH & BEAUTY PRODUCTS

The Answer Group
D.S. Fraley & Associates
Thorne Creative Research

HEALTH CARE

Access Research, Inc.
Chamberlain Research Cnsltnts.
Diener & Associates, Inc.
Dolobowsky Qual. Svcs., Inc.
D/R/S HealthCare Consultants
Erlich Transcultural Consultants
Find/SVP
First Market Research (L. Lynch)
First Market Research (J. Reynolds)
Intersearch Corporation
Market Navigation, Inc.
Matrixx Marketing-Research Div.
MedProbe Medical Mktg. Rsch.
Moosbrugger Mktg. Rsch.
Nordhaus Research, Inc.
James Spanier Associates
Sunbelt Research Associates
TrendQuest

HISPANIC

Analysis Research Ltd.
Ebony Marketing Research, Inc.
Erlich Transcultural Consultants
Hispanic Marketing
Communication Research
Visual Research Comm., Inc.

IDEA GENERATION

Analysis Research Ltd.
Brand Consulting Group
Creative & Response Rsch. Svcs.
Dolobowsky Qual. Svcs., Inc.
D.S. Fraley & Associates
Leichliter Associates
Matrixx Marketing-Research Div.
Sweeney International, Ltd.
Thorne Creative Research

INDUSTRIAL

First Market Research (J. Heiman)
Intersearch Corporation
Market Navigation, Inc.
Sweeney International, Ltd.

INTERNATIONAL

Marketing Perspectives, Inc.

MEDICAL PROFESSION

Answers Research
Diener & Associates, Inc.
D/R/S HealthCare Consultants
Intersearch Corporation
Marketing Perspectives, Inc.
Matrixx Marketing-Research Div.
MedProbe Medical Mktg. Rsch.
Nordhaus Research, Inc.

MODERATOR TRAINING

Cunninghis Associates

NEW PRODUCT DEVELOPMENT

Action Research, Inc.
Answers Research
Brand Consulting Group
The Clowes Partnership
Creative & Response Rsch. Svcs.
Daniel Associates
Dolobowsky Qual. Svcs., Inc.
D.S. Fraley & Associates
First Market Research (J. Heiman)
First Market Research (L. Lynch)
Intersearch Corporation
KidFacts Research
Leichliter Associates
Management Rsch. & Plng. Corp.
James Spanier Associates
Strategic Marketing Svcs.

PACKAGED GOODS

The Answer Group
Creative & Response Rsch. Svcs.
Doyle Research Associates
D.S. Fraley & Associates
Gault Associates
Thorne Creative Research

PARENTS

Doyle Research Associates

PET PRODUCTS

Calo Research Services
Cambridge Research, Inc.
Rockwood Research Corporation
Thorne Creative Research

PHARMACEUTICALS

The Answer Group
Creative & Response Rsch. Svcs.
D/R/S HealthCare Consultants
Intersearch Corporation
Market Navigation, Inc.
MedProbe Medical Mktg. Rsch.
TrendQuest

POLITICAL RESEARCH

Chamberlain Research Cnsltnts.
Management Rsch. & Plng. Corp.

PUBLIC POLICY RESEARCH

The Davon Group
Leichliter Associates

PUBLISHING

Action Research, Inc.
First Market Research (J. Heiman)
D.S. Fraley & Associates
iNFOCUS Group Services
Thorne Creative Research

RETAIL

Brand Consulting Group
First Market Research (L. Lynch)
iNFOCUS Group Services

SENIORS

Diener & Associates, Inc.

Erlich Transcultural Consultants
Mature Marketing Research Div.
Sunbelt Research Associates

SMALL BUSINESS/ENTREPRENEURS

Action Research, Inc.
Yarnell Inc.

SOFT DRINKS, BEER, WINE

Access Research, Inc.
Creative & Response Rsch. Svcs.
Grieco Research Group, Inc.
Thorne Creative Research

TEACHERS

D.S. Fraley & Associates

TEENAGERS

Creative & Response Rsch. Svcs.
Doyle Research Associates
D.S. Fraley & Associates
KidFacts Research
Matrixx Marketing-Research Div.
Thorne Creative Research

TELECOMMUNICATIONS

Answers Research
Cunninghis Associates
DMSC Research
Find/SVP
First Market Research (J. Heiman)
Horowitz Associates, Inc.

iNFOCUS Group Services
Intersearch Corporation

TELECONFERENCING

Cambridge Research, Inc.
Rockwood Research Corporation

TELEPHONE FOCUS GROUPS

Answers Research
Creative & Response Rsch. Svcs.
Intersearch Corporation
Market Navigation, Inc.

TOYS/GAMES

KidFacts Research

TRANSPORTATION SERVICES

Sweeney International, Ltd.

TRAVEL

James Spanier Associates
Spier Research Group
Sweeney International, Ltd.

UTILITIES

Chamberlain Research Cnsltnts.
Nordhaus Research, Inc.

YOUTH

Doyle Research Associates
D.S. Fraley & Associates

Product & Service Update

continued from p. 25

For more information, contact Kurtis Ruf, 913-782-8544.

Software assembles multimedia presentations for Windows

Q/Media Software Corp. has announced two multimedia presentation programs, Q/Media for Windows, and Q/Media Professional for Windows. Both programs enable users and multimedia developers to create high quality presentations on Windows 3.1-capable PCs. The programs integrate video, animation, audio, imaging, graphics and text from Windows, DOS and Macintosh applications. Q/Media for Windows also supports Microsoft Video for Windows digital video software; Q/Media Professional for Windows supports Microsoft Modular Windows operating system and features an animation editor, royalty-free runtime and MCI device driver. For more information, call 800-444-9356 in the United States, 604-879-1190 in Canada.

Names of Note

continued from p. 22

has announced the following promotions: **Ian Cesa** has been promoted from



Cesa



Rosario

vice president to senior vice president; **Al del Rosario** has been promoted from



Weinstein



Romero

vice president to senior vice president of operations; **Billie Weinstein** and



Weinstein

Audrey Romero have been promoted from senior project director to vice president; and **Samuel Weinstein** has been promoted from director of The Telephone Center to vice president.



1993

TELEPHONE
INTERVIEWING
FACILITIES
DIRECTORY

CQDES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

ALABAMA**BIRMINGHAM**

Connections, Inc.
#4 Office Park Circle, Suite 310
Birmingham, AL 35223
Ph. 205/879-1255
Fax 205/868-4173
Contact: Rebecca Watson
25-0-25-0

Polly Graham & Ascts., Inc.
3000 Riverchase Galleria, #310
Birmingham, AL 35244
Ph. 205/985-3099
Fax 205/985-3066
Contact: Jim Jager
20-6-20-1

New South Research, Inc.
700 So. 28th St., Ste. 106
Birmingham, AL 35233
Ph. 205/322-9988 or 800/289-7335
Fax 205/322-8608
Contact: Louis Wilhite
20-0-20-0

ALASKA**ANCHORAGE**

Dittman Research Corporation
8115 Jewel Lake Road
Anchorage, AK 99502
Ph. 907/243-3345
Fax 907/243-7172
12-0-12-0

ARIZONA**PHOENIX**

Arizona Market Research
Ruth Nelson Research Svcs.
Executive Park Offices
10220 North 31st Ave., #122
Phoenix, AZ 85051
Ph. 602/944-8001
Fax 602/944-0130
15-0-15-0

Ask Arizona/Bergo & Ascts.
1948 W. Main
Mesa, AZ 85201
Ph. 800/999-1200
Fax 602/464-9284
Contact: Beth Aguirre
10-10-10-10

Behavior Research Center, Inc.
1117 No. 3rd St.
Phoenix, AZ 85004
Ph. 602/258-4554
Fax 602/252-2729
Contact: Jennifer Page
20-0-12-0

DataSource

4515 S. McClintock Dr., Ste. 101
Tempe, AZ 85282
Ph. 602/831-2971
Fax 602/838-8856
Contact: Nancy Hayslett
80-61-80-80
(See advertisement on p. 66)

Gikas International
5515-1 No. 7th Street
Phoenix, AZ 85014
Ph. 602/265-2890
Fax 602/234-3955
Contact: Vicki Casulas
7-2-7-0

Innovative Query, Inc.
8687 E. Via De Ventura, #207
Scottsdale, AZ 85258
Ph. 602/483-7505
Fax 602/483-9388
Contact: Clare Stewart
48-24-24-24

O'Neil Associates, Inc.
412 East Southern Avenue
Tempe, AZ 85282
Ph. 602/967-4441
Fax 602/967-6122
Contact: Michael J. O'Neil
14-12-14-0

Quality Controlled Services (QCS)

6360-3 E. Thomas Road, Ste. 330
Scottsdale, AZ 85251
Ph. 800/647-4217 or 800/325-3338
Fax 602/941-0949
Contact: John McCullough
10-0-10-0
(See advertisement on p. 55)

Response Research
5220 W. Indian School Rd.
Phoenix, AZ 85031
Ph. (602) 277-2526
Fax (602) 247-4477
Contact: Shelley Muñoz
12-0-12-0

Time N Talent and Strictly Medical
Scottsdale Pl., 5725 Scottsdale Rd.
Scottsdale, AZ 85250
Ph. 602/423-0200
Fax 602/423-1548
Contact: Wendy Walker
8-0-8-0

Winona Market Research Bureau
8800 North 22nd Avenue
Phoenix, AZ 85021
Ph. 602/371-8800
Fax 602/943-3554
Contact: Robert Kerrey
150-150-150-150

TUCSON

FMR Ascts.
6095 E. Grant Road
Tucson, AZ 85712
Ph. 602/886-5548
Fax 602/886-0245
Contact: Jess DeVaney
55-0-55-0

Quality Controlled Services (QCS)

4500 N. Oracle, Box 360
Tucson, AZ 85705
Ph. 602/887-3502 or 800/325-3338
Fax 602/887-4480
Contact: Annette Idso
10-0-10-0
(See advertisement on p. 55)

VNU Operation Center
5055 E. Broadway, #A105
Tucson, AZ 85712
Ph. 800/395-0709
Contact: Dave Lustig
50-50-50-50

ARKANSAS**FORT SMITH**

Cunningham Field Service
Central Mall, Ste. 40 No.
Fort Smith, AR 72903
Ph. 501/484-5637
Fax 501/484-7379
Contact: Craig Cunningham
19-8-19-19

LITTLE ROCK

Miller Research Group, Inc.
10 Corporate Hill Dr., Ste 100
Little Rock, AR 72205
Ph. 501/221-3303
Fax 501/221-2554
Contact: David F. Miller
19-0-19-19

Sygnis
10825 Financial Pkwy., #401
Little Rock, AR 72211
Ph. 501/661-7000
Fax 501/661-7099
Contact: Mary Ford
50-0-50-31

CALIFORNIA**BAKERSFIELD**

Facts 'n Figures
1233 W. Ave. P, Ste. 701
Palmdale, CA 93551
Ph. 805/272-4888
Fax 805/272-5676
Contact: Tammy Tallant
12-6-1-0



PHONE POWER AND VALUE

QCS, the nation's largest supplier of telephone data collection, offers an array of resources to provide the marketing information you need — FAST! Combined with an experienced staff, competitive pricing, and neighborhood friendly service, you'll find QCS is an unbeatable value.

America's Data Collection Authority Offers:

- 800+ Interviewing Stations
- 500+ CATI Stations
- Advanced Data Processing
- In-house Sample
- Coding And Data Entry
- Remote Monitoring
- Project Management
- Competitive Pricing

*One call to our project management center
can make these resources an extension of your department.
To satisfy your marketing information needs call us at...*



Quality Controlled Services®
800-325-3338

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Marketing Works

425 18th Street
Bakersfield, CA 93301
Ph. 805/326-1012
Fax 805/326-0903
Contact: Dee Simpson
13-0-2-0

FRESNO**AIS Market Research**

2070 No. Winery
Fresno, CA 93703
Ph. 209/252-2727
Fax 209/252-8343
Contact: Kimberly Rudolf
20-20-20-0

Bartels Research

145 Shaw Avenue
Clovis, CA 93612
Ph. 209/298-7557
Contact: Janis Takata
50-0-50-12

LOS ANGELES**Area Phone Bank**

3607 W. Magnolia, Ste. N
Burbank, CA 91505
Ph. 818/848-8282
Fax 818/846-9912
Contact: Ed Goldbaum
20-0-20-0

Ask Southern California

1224 E. Katella Ave., Suite 100
Orange, CA 92667
Ph. 714/744-2744
Fax 714/744-2933
Contact: Judith Kerstner
27-0-27-0

Assistance In Marketing

Huntington Center Mall
7777 Edinger Ave., #201
Huntington Beach, CA 92647
Ph. 714/891-2440
Fax 714/898-1126
Contact: David Weinberg
20-20-20-20

Barna Research Group

647 W. Broadway
Glendale, CA 91204
Ph. 818/9241-9300
Fax 818/246-7684
30-30-30-0

California Survey Research

5400 Van Nuys Blvd., Suite 307
Van Nuys, CA 91401
Ph. 818/986-9444
Fax 818/986-1353
Contact: Ken Gross
21-12-21-21

Consumer Pulse of Los Angeles

Galleria at South Bay #269
1815 Hawthorne Blvd.
Redondo Beach, CA 90278-3440
Ph. 310/371-5578 or 800/336-0159
Fax 310/542-2669
Contact: Angie Abell
20-12-20-0

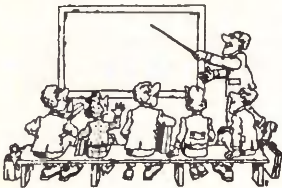
Creative Data, Inc.

7136 Haskell Ave., Suite 101
Van Nuys, CA 91406-4198
Ph. 818/988-5411
Fax 818/988-4057
Contact: Jennifer Von Schneidau
22-0-10-0

Davis Market Research Services

23801 Calabasas Road, Ste. 1036
Calabasas, CA 91302
Ph. 818/591-2408
Fax 818/591-2488
Contact: Carol Davis
70-52-70-70

22 Years Of Experience At Your Disposal !!



Focus Groups

- 16' x 20' GROUP ROOM
- 16' X 12' VIEWING ROOM
- 10' X 4' ONE WAY MIRROR
- IN-HOUSE RECRUITING
- SILENT AIR CONDITIONING
- 17 IN-HOUSE WATS LINES
- EXECUTIVE LEVEL INTERVIEWERS
- AVAILABLE FROM 7am TO 9pm PACIFIC TIME
- SILENT MONITORING SYSTEM

Phone Bank



Need a National field director to totally supervise any project anywhere in the US or Canada? Call Ted at ...

TED HEIMAN & ASSOCIATES

CALIFORNIA QUALITATIVE CENTER
20350 Ventura Boulevard Suite 140
Woodland Hills, CA. 91364

1-800-283-2133

FAX 818-887-2750

Field Dynamics Marketing Research

17547 Ventura Blvd., Suite 308
Encino, CA 91316
Ph. 818/783-2502
Fax 818/905-3216
Contact: Nancy Levine
12-0-10-0
(See advertisement on p. 57)

Facts 'n Figures

14550 Chase St., Ste. 78B
Panorama City, CA 91402
Ph. 818/891-6779
Fax 818/891-6119
Contact: Dee Escoc
8-4-1-0

Gikas International

2146 E. Lincoln Ave.
E. Anaheim, CA 92806
Ph. 714/778-2910
Fax 714/778-4937
Contact: Nancy Fidel
10-5-10-10

Ted Heiman & Ascts.

20350 Ventua Blvd., Ste. 140
Woodland hills, CA 91364
Ph. 800/283-2133
Fax 818/887-2750
Contact: Ted Heiman
19-10-19-19
(See advertisement on p. 56)

I/H/R Research Group

6 Hutton Centre Dr., Ste. 1240
Santa Ana, CA 92707
Ph. 714/241-7920
Fax 714/241-7933
Contact: Lynn Stalone
75-50-75-75
(See advertisement on p. 69)

Interviewing Service of America

16005 Sherman Way, #209
Van Nuys, CA 91406-4024
Ph. 818/989-1044
Fax 818/782-1309
Contact: Michael Halberstam
130-130-130-130
(See advertisement on p. 12)

MSI International

12604 Hidden Creek Way
Cerritos, CA 90701
Ph. 310/802-8273
Fax 310/802-8273
Contact: Richard Hurlburt
50-35-50-50

Nat'l. Marketing Research of Cal.

347 South Ogden Drive
Los Angeles, CA 90036
Ph. 213/937-5110
Fax 213/933-0724
Contact: Carole Lazurus
15-0-15-0

PKM Marketing Research

1240 West La Habra Blvd., #A
La Habra, CA 90601
Ph. 310/694-5634
Fax 310/697-8964
Contact: Patricia Koerner
35-0-35-0

Plog Research

18631 Sherman Way
Reseda, CA 91335
Ph. 818/345-7363
Fax 818/345-9265
Contact: Shelly Sasson
16-0-10-0

Quality Controlled Services (QCS)

17100 Pioneer Blvd., Ste. 400
Artesia, CA 90701
Ph. 310/402-6640 or 800/325-3338
Fax 310/924-8487
Contact: Mel Gerber
50-50-50-50
(See advertisement on p. 55)

Quality Controlled Services (QCS)

3528 Torrance Blvd., Ste. M120
Torrance, CA 90503
Ph. 310/316-0626 or 800/325-3338
Fax 310/316-4815
Contact: Carol Balcom Amundson
8-0-0-0
(See advertisement on p. 55)

The Ouestion Shop, Inc.
2860 N. Santiago Blvd., #100
Orange, CA 92667
Ph. 714/974-8020
Fax 714/974-6968
Contact: Ryan Reasor
20-0-0-0

Los Angeles

**818-783-2502**

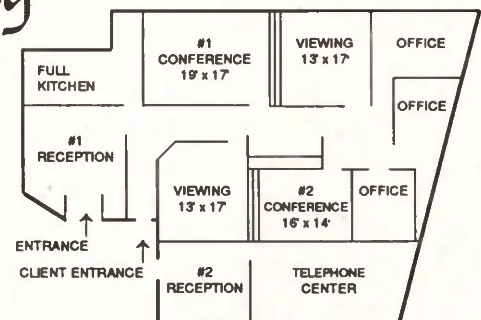
Nancy Levine
President

**17547 Ventura Boulevard, Suite 308
Encino, CA 91316**

FAX 818-905-3216

- recruiting
- location studies
- car clinics/ride & drive tests
- product clinics/tests/placements
- focus groups
- one-on-one interviews
- testimonial commercials
- taste tests
- music groups
- jury simulation
- telephone interviews
- executive/professional/medical
- mystery shopping
- Spanish and Asian languages
- nationwide capabilities

Focus Facility



CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Sievers Research Company, Inc.
1414 Fair Oaks, Ste. 9
So. Pasadena, CA 91030
Ph. 818/441-5900
Fax 818/441-3350
Contact: Candy Shirley
20-0-20-0

Southern California Interviewing Svce.
17200 Ventura Blvd.
Encino, CA 91316
Ph. 818/783-7700
Fax 818/783-8626
Contact: Ethel Brook
12-0-12-0

The Verity Group, Inc.
680 Langsdorf Dr., #102
Fullerton, CA 92631
Ph. 714/6809611
Fax 714/680-9676
Contact: Scott Kincer
30-30-30-0

C.A. Walker & Ascts., Inc.
11631 Victory Blvd., Ste. 207
N. Hollywood, CA 91606
Ph. 818/766-1246
Fax 818/766-3033
Contact: Sam Weinstein
70-50-70-70

Western International Research
8544 Sunset Blvd.
Los Angeles, CA 90069
Ph. 310/854-4869
Fax 310/652-4703
Contact: Joane Delisio
23-0-13-0

SACRAMENTO

Ask America Marketing Research
1932 Stockton Blvd.
Sacramento, CA 95816
Ph. 916/452-3300
Fax 916/452-3547
Contact: Michael Pettengill
37-0-16-0

J.D. Franz Research
1050 Fulton Ave., Ste. 230
Sacramento, CA 95825
Ph. 916/488-1550
Fax 916/481-4838
Contact: Jennifer Franz
25-0-25-0

Research Unlimited
1012 Second Street
Sacramento, CA 95814
Ph. 916/446-6064
Fax 916/448-2355
Contact: Magda Cooling
18-0-18-0

SAN DIEGO

Analysis Research Ltd.
4655 Ruffner Street, Ste. 180
San Diego, CA 92111
Ph. 619/268-4800
Fax 619/268-4892
Contact: Arline Lowenthal
11-2-6-0

CIC Research
1215 Cushman Avenue
San Diego, CA 92110-3904
Ph. 619/296-8844
Fax 619/297-8038
Contact: Joyce Revlett
82-8-82-82

Directions In Research, Inc.
5353 Mission Center Rd., Ste. 310
San Diego, CA 92108
Ph. 619/299-5883
Fax 619/299-5888
Contact: David Phife
51-25-51-30

Fogerty Research
4915 Mercury Street
San Diego, CA 92111
Ph. 619/268-8505
Fax 619/496-2015
Contact: Patty Fogerty
55-10-50-25

Market Development, Inc.

1643 Sixth Avenue
San Diego, CA 92101
Ph. 619/232-5628
Fax 619/232-0373
Contact: Roger Sennott
30-0-30-0
(See advertisement on p. 58)

San Diego Surveys, Inc.
4616 Mission Gorge Road
San Diego, CA 92120
Ph. 619/265-2361
Fax 619/582-1562
Contact: Jean Van Arsdale
24-0-24-0

Taylor Research
1545 Hotel Circle So., Ste. 350
San Diego, CA 92108
Ph. 619/299-6368
Fax 619/299-6370
Contact: Harriet Huntley
30-0-30-4

Westat, Inc.
3156 Vista Way, #300
Oceanside, CA 92054
Ph. 609/721-2800
75-75-75-75

SAN FRANCISCO

ADF Research
1456 Lincoln Avenue
San Rafael, CA 94901
Ph. 415/459-1115
Fax 415/457-2193
Contact: Art Faibisch
30-18-20-0

HISPANIC MARKET RESEARCH

MARKET DEVELOPMENT, INC. is a full-service HISPANIC MARKET RESEARCH firm, offering a complete range of custom qualitative and quantitative research services in the U.S. and Mexico, plus:

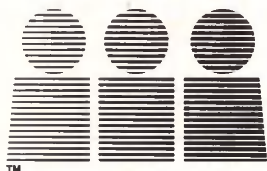
- HISPANIC COPY-TRAC, a standardized, quantitative copy-testing system for Spanish-language commercials;
- HISPANIC OMNIBUS, a national survey of the Hispanic market, conducted quarterly.

Field capabilities include:

- Bilingual Telephone Interviewing Facility with CATI;
- "Mall" Intercepts;
- Bilingual Focus Group Moderators.

Direct inquiries to: Roger Sennott

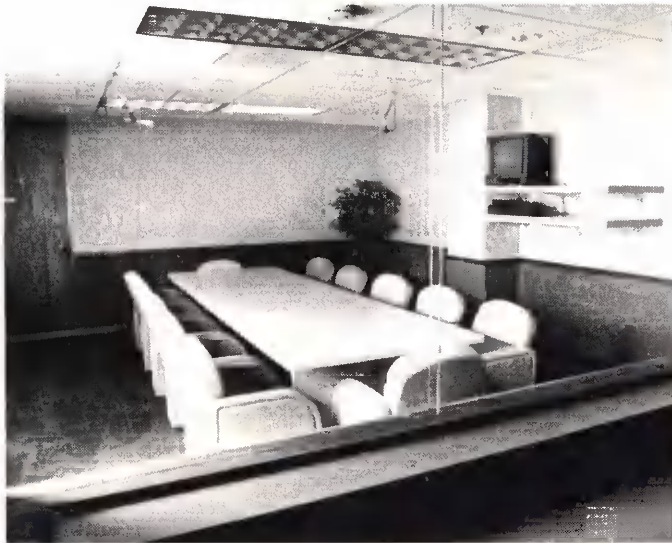
General Manager
MARKET DEVELOPMENT, INC.
1643 Sixth Avenue
San Diego, CA 92101
(619) 232-5628 / (619) 232-0373 - fax



Circle No. 903 on Reader Card

DENVER'S EXCEPTIONAL FOCUS GROUP AND CENTRAL LOCATION FACILITY

The Research Center is Denver's exceptional focus group and central location source featuring outstanding facilities and the highest quality recruiting and interviewing.



All recruiting for focus groups is conducted from The Research Center's **40-line telephone bank** (equipped with CRT and ACS Query interviewing software). The Research Center uses a duplicate number database system to help insure the highest quality recruiting.

The focus group suite is a tastefully decorated, contemporary and private facility located in an easy-to-find, high-profile building. The viewing room seats 17 comfortably. The conference room is 18' x 20' and features washable writing surface, oak rails and a bleached oak conference table. 1/2" video player and monitor are built-in and available at no additional charge.

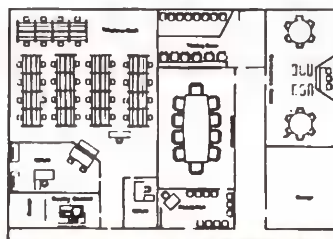
Annie Sampegna-Reid and Chris Balthaser manage The Research Center. They have over twenty years combined experience recruiting focus groups and central location tests in the Denver market. Their goal is to provide clients with the highest quality recruiting and the best facilities in Denver.



The central location facility is 24' x 24' and accommodates up to 50 participants.



The room is wired to provide audio and video feeds to the focus group viewing room. It features a raised platform and podium for the moderator and includes a built-in easel and wet bar.



The Research Center
550 South Wadsworth Suite 101
Denver, Colorado 80226
(303) 935-1750
FAX (303) 935-4390

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

ConStat

450 Sansome St., Ste. 1100
San Francisco, CA 94111
Ph. 415/274-6600
Fax 415/274-6610
Contact: Blaine Leroy
33-0-23-23

Consumer Research Associates

111 Pine Street, Ste. 1715
San Francisco, CA 94111
Ph. 415/392-6000
Fax 415/392-7141
Contact: Mike Mallonee
27-0-0-0

Corey, Canapary & Galanis

447 Sutter Street
San Francisco, CA 94108
Ph. 415/397-1200
Fax 415/433-3809
Contact: Elizabeth Canapary
25-0-6-0

Evans Research Associates
120 Howard Street, Ste. 660
San Francisco, CA 94105
Ph. 415/777-9888
Fax 415/777-9281
Contact: Sara Bailis
24-17-24-24

Field Management Associates

400 El Cerrito Plaza
El Cerrito, CA 94530
Ph. 510/527-8030
Contact: Hal Berke
20-0-20-0

Field Research Corporation

234 Front Street
San Francisco, CA 94111
Ph. 415/392-5763
Fax 415/434-2541
Contact: Jean Grunwald
45-45-45-45

Fleischman Field Research

220 Bush Street, Ste. 1300
San Francisco, CA 94104
Ph. 415/398-4140
Fax 415/989-4506
Contact: Andy Fleischman
45-0-45-45
(See advertisement on p. 60)

Freeman, Sullivan & Co.
131 Stuart Street, Ste. 500
San Francisco, CA 94105
Ph. 415/777-0707
Fax 415/777-2420
Contact: Patrice Souders
28-28-28-0

MR&A Field & Tab

1650 S. Amphlett Blvd., #202
San Mateo, CA 94102
Ph. 415/358-1480
Fax 415/574-8055
Contact: Sarah Fraser
25-15-25-25

Nichols Research, Inc.

333 W. El Camino Real, Ste. 180
Sunnyvale, CA 94087
Ph. 408/773-8200
30-10-30-0

Nichols Research, Inc.

1155 Newpark Mall
Newark, CA 94560
Ph. 408/773-8200
10-0-10-0

Nichols Research, Inc.

1820 Galindo St., Ste. 3
Concord, CA 94520
Ph. 408/773-8200
15-0-15-0

Parallax Marketing Research

535 Pacific Ave., 2nd Flr.
San Francisco, CA 94133
Ph. 415/956-6988
Fax 415/956-6536
Contact: Brad Woolsey
20-20-20-0

The Research Spectrum

182-2nd Street, 4th Floor
San Francisco, CA 94105
Ph. 415/543-3777 or 800/876-3770
Fax 415/543-3553
Contact: Rick Synder
30-30-30-30

Tragon Corporation

365 Convention Way
Redwood City, CA 94131
Ph. 415/365-1833
Fax 415/365-3737
Contact: Brian McDermott
12-0-12-0
(See advertisement on p. 41)

Margaret Yarbrough & Ascts.

934 Shore Point Ct., Ste. 100
Alameda, CA 94501
Ph. 510/521-6900
Fax 510/521-2130
Contact: Margaret Yarbrough/Diane Kientz
20-0-20-20

Foreign Language Data Collection/Recruiting

Consumer? Business?

Our interviewers are native speakers;

Our quality is second to none.

Call for a bid and/or references.

You'll be impressed.

Translation and Data Processing
also available.



Se Habla Español
我們講廣東話
我們說國語

พวกเราสามารถพูดภาษาไทยได้
Chúng tôi nói tiếng Việt
우리는 한국말을 합니다.
私達は日本語を話します

Nagsasalita kami ng Tagalog

Fleischman Field Research

220 Bush Street, Suite 1300
San Francisco, CA 94104
Phone: (415) 398-4140
Fax: (415) 989-4506



1655 North Main Street
Suite 320
Walnut Creek, CA 94596
Fax: (415) 989-4506

SAN JOSE

Phase III Market Research
1150 No. 1st Street, Ste. 211
San Jose, CA 95112
Ph. 408/947-8661
Fax 408/293-9909
Contact: Nancy Pitta
15-0-15-0

San Jose Focus
3032 Bunker Hill Ln., #105
San Jose, CA 95054
Ph. 408/988-4800
Fax 408/988-4866
Contact: Heidi Flores
50-0-50-0

COLORADO

COLORADO SPRINGS

Consumer Pulse of Colorado Springs
750 Citadel Drive East
Citadel Mall #1084
Colorado Springs, CO 80909-5341
Ph. 719/480-0128 or 800/336-0159
Fax 719/596-6935
Contact: Dunlap Scott/Mike Hrin
8-4-8-0

DENVER

Colorado Market Research
Ruth Nelson Research Svcs.
2149 S. Grape St.
Denver, CO 80222
Ph. 303/758-6424
Fax 303/756-6467
Contact: Cristy Reid
70-0-70-8

Consumer Pulse of Denver
Thornton Town Ctr., #105
10001 Grant Street
Thornton, CO 80229
Ph. 303/280-9747
Fax 303/280-9744
Contact: Dunlap Scott
10-8-10-10

Information Research Inc.
10650 E. Bethany Dr.
Denver, CO 80014
Ph. 303/751-0190
Fax 303/751-8075
Contact: Norm Petit
15-0-15-0

Phone Survey Inc.
1401 Saulsbury St., Ste. 100
Lakewood, CO 80215
Ph. 303/234-9930
Fax 303/234-9935
Contact: Cathy Wahl
15-0-15-0

The Research Center

550 S. Wadsworth Blvd., Ste. 101
Denver, CO 80226
Ph. 303/935-1750
Fax 303/935-4390
Contact: Annie Reid
30-10-30-30
(See advertisement on p. 59)

Talmey Research Inc.
100 Arapahoe, #4
Boulder, CO 80302
Ph. 303/443-5300
Contact: Paul Talmey
48-48-48-48

CONNECTICUT

HARTFORD

Beta One
270 Farmington Ave., Ste. 126
Farmington, CT 06032
Ph. 203/677-7711 or 800/447-2382
Fax 203/677-4967
Contact: John Bourget
25-0-13-13

NORWALK

J. B. Martin Research Svcs., Inc.
4695 Main Street
Bridgeport, CT 06606
Ph. 203/371-4158
Fax 203/371-5001
Contact: Nancy Salk
7-0-0-0

Response America
Two Enterprise Dr., Ste. 306
Shelton, CT 06484
Ph. 203/925-0200
Fax 203/925-0195
Contact: Steve Smith
18-0-18-0

STAMFORD

Coast To Coast Telephone Center
1351 Washington Blvd.
Stamford, CT 06902
Ph. 203/325-2335 or 800/288-6299
Fax 203/964-8269
Contact: Ellen Guion
30-30-30-30

Consumer Dialogue Center
25 Third Street
Stamford, CT 06905
Ph. 203/359-1678
Fax 203/327-9061
Contact: Susan Baines
35-0-35-35

DISTRICT OF COLUMBIA

Consumer Pulse of Washington
8310C Old Courthouse Road
Vienna, VA 22182-3809
Ph. 703/442-0960 or 800/336-0159
Fax 703/442-0967
Contact: Tricia Barnes
22-10-22-0

Decision Data Collection (Decision DC)
1489 Chain Bridge Rd., #100
McLean, VA 22102
Ph. 703/556-7748
Fax 703/356-1680
Contact: Gary Brown
16-0-16-0

Gikas International
11611 Old Georgetown Road
Rockville, MD 20852
Ph. 301/468-2380
Fax 301/770-0171
Contact: Larry Moyer
30-18-30-0

Peter D. Hart Research Ascts., Inc.
1724 Connecticut Ave. N.W.
Washington, DC 20009
Ph. 202/234-5570
Fax 202/232-8134
Contact: Linda Rosenberg
84-0-84-0

HTI Custom Rsch./Div. of NPD Grp.
6525 Belcrest Rd., #50
Hyattsville, MD 20782
Ph. 301/779-7950
Fax 301/779-4210
Contact: Leslie Ferons
45-45-45-45

KCA Research/Div. of David C. Cox & Ascts.
5501 Cherokee Ave., #111
Alexandria, VA 22312
Ph. 703/642-5220
Fax 703/256-1061
Contact: Arnie Greenland
20-20-20-0

Metro Research Services, Inc.
9990 Lee Hwy., #110
Fairfax, VA 22030
Ph. 703/385-1108
Fax 703/385-8620
Contact: Nancy Jacobs
16-0-16-0

National Research, Inc.
5335 Wisconsin Ave., #710
Washington, DC 20015
Ph. 202/686-9350
Fax 202/686-7163
Contact: Rebecca L. Craig
50-0-41-41

National Telecommunications Services, Inc.
236 Massachusetts Ave. NE, #610
Washington, DC 20002
Ph. 202/675-4500
Fax 202/546-0984
Contact: Ginger King
25-0-20-20

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

OMR (Olchak Market Research)
7255-A Hanover Pkwy.
Greenbelt, MD 20770
Ph. 301/441-4660
Fax 301/474-4307
Contact: Jill L. Siegel
18-0-12-12

Quality Controlled Services (QCS)

6691-B Springfield Mall
Springfield, VA 22150
Ph. 703/971-6717 or 800/325-3338
Fax 703/922-5946
Contact: Cynthia Dunn
7-5-0-0
(See advertisement on p. 55)

Shugoll Research
7475 Wisconsin Ave., Ste. 200
Bethesda, MD 20814
Ph. 301/656-0310
Fax 301/657-9051
Contact: Rick Seale
15-0-15-4

Westat, Inc.
1650 Research Blvd.
Rockville, MD 20850
Ph. 301/251-1500
Contact: Pat Skinner
75-75-75-75

Get more
information
from
advertisers

Use the
reader
response
card

Westat, Inc.
5303K Spectrum Dr.
Frederick, MD 21701
Ph. 301/662-0027
60-60-60-60

Woelfel Research, Inc.
2222 Gallows Road, #200
Vienna, VA 22182
Ph. 703/560-8400
Fax 703/560-0365
Contact: Jeff Adler
49-17-49-49

FLORIDA**FORT LAUDERDALE**

Mar's Surveys
1700 University Drive, #205
Coral Springs, FL 33071
Ph. 305/755-2805
Fax 305/755-3061
Contact: Eric Lipson
10-10-0-0

Mar's Surveys
4300 University Drive, #205
Fort Lauderdale, FL 33351
Ph. 305/755-2805
Fax 305/755-3061
Contact: Eric Lipson
20-10-20-20

VNU Operations Center
12350 NW 39th Street
Coral Springs, FL 33065
Ph. 800/395-0709
Fax 305/344-7687
Contact: David Lustig
40-40-40-40

JACKSONVILLE

A T & T American Transtech
8000 Baymeadows Way
Jacksonville, FL 32216
Ph. 904/636-1203
Fax 904/636-2369
Contact: Leslie Pecci
1636-1636-1636-1636

Irwin Research Services, Inc.
900 University Blvd. N., #606
Jacksonville, FL 32211
Ph. 904/744-7000
Fax 904/744-2090
Contact: Clarice Irwin
70-70-70-70
(See advertisement on p. 63)

Ulrich Research Services, Inc.
173 Kingsley Ave.
Orange Park, FL 32065
Ph. 904/264-3282
Fax 904/264-5582
Contact: Nancy Ulrich
24-0-24-0

MIAMI

BSR Field Services
2121 Ponce de Leon Blvd.
Coral Gables, FL 33134
Ph. 800/282-2771
Fax 305/448-6825
Contact: Darlene Carver
30-10-30-0

Findings International Corp.
9100 Coral Way, Ste. 6
Miami, FL 33165
Ph. 305/225-6517
Fax 305/225-6522
Contact: Orlando Esquivel
20-0-2-0

Jean M. Light Interviewing Svcs., Inc.
8415 Coral Way, #201
Miami, FL 33155
Ph. 305/264-5780
Fax 305/264-6419
Contact: Jean M. Light
20-0-20-20

National Opinion Research Services
760 NW 107th Ave., #115
Miami, FL 33172
Ph. 800/940-9410
Fax 305/553-8586
Contact: Daniel Clapp
38-25-38-38

National Surveys, Inc.
8925 SW 148th St., #214
Miami, FL 33176
Ph. 305/252-2526
Fax 305/252-0321
Contact: Ethel Owrey
25-0-25-25

Profile Marketing Research, Inc.
4020 So. 57th Avenue, #101
Lake Worth, FL 33463
Ph. 407/965-8300
Fax 407/965-6925
Contact: Judy A. Hoffman
20-0-20-20

Rife Market Research
1111 ParkCentre Blvd., #111
Miami, FL 33169
Ph. 305/620-4244
Fax 305/621-3533
Contact: Sandy Palmer
35-4-35-0

Weitzman & Philip, Inc.
850 Ives Dairy Rd.
Miami, FL 33179
Ph. 305/653-6323
Fax 305/653-4016
Contact: Joan Starr
21-0-21-21

ORLANDO

Central Florida Market Research, Inc.
1065 Maitland Ctr. Commons, #204
Maitland, FL 32751
Ph. 407/660-1808
Fax 407/660-9674
Contact: Vicky Stevens
12-8-12-0

Hancock Information Group
2180 West S.R. 434, #3170
Longwood, FL 32779
Ph. 407/682-1556
Fax 407/682-0025
Contact: Rhonda Hughes
30-30-30-0

Barbara Nolan Research
United States Research Co.
445 Osceola Street
Altamonte Springs, FL 32701
Ph. 407/830-4542
Contact: John Preston
30-0-30-30

PENSACOLA

Sand Dollar Research, Inc.
5100 No. 9th Ave., #M-1209
Pensacola, FL 32504
Ph. 904/478-9274
Fax 904/476-4450
Contact: Charles Graham
10-10-10-10

SARASOTA

VNU Operations Center
1751 Mound St., #205
Sarasota, FL 34236
Ph. 800/395-0709
Contact: David Lustig
60-60-60-60

TALLAHASSEE

MGT of America, Inc.
2425 Torreya Drive
Tallahassee, FL 32303
Ph. 904/386-3191
Fax 904/385-4501
Contact: Ray Thompson
20-0-20-0

TAMPA

Davis & Davis Research, Inc.
8001 Dale Mabry Hwy., #401B
Tampa, FL 33614
Ph. 813/873-1908
Fax 813/935-5473
Contact: Irene Davis
10-0-10-6

Field & Focus
4020 South 57th Ave., Ste. 103
Lake Worth, FL 33463
Ph. 407/965-4720
Fax 407/965-6925
Contact: Lois Stermer
35-30-30-30

Herron Associates, Inc.
600 North Westshore Blvd., #702
Tampa, FL 33609
Ph. 813/282-0866
Fax 813/282-3553
Contact: Elaine Herron-Cravens
24-4-24-0

Schwartz Field Svce., Inc.
8902 No. Dale Mabry
Tampa, FL 33614
Ph. 813/933-8060
Fax 813/935-3496
Contact: Bonita Schwartz
9-0-9-0

Suburban Associates
Tampa Conference Center
4350 W. Cypress, #535
Tampa, FL 33607
Ph. 813/874-3423
Fax 813/875-6789
Contact: Elaine Cravens
24-8-24-0

Total Research Corporation
5130 Eisenhower Blvd., Ste. 210
Tampa, FL 33634
Ph. 813/887-5544
Fax 813/882-0293
Contact: Cindy Williams
80-50-80-80

GEORGIA

ATLANTA

Atlanta Marketing Research Ctr.
3355 Lenox Rd. NE, Ste. 660
Atlanta, GA 30326
Ph. 404/239-0001
Fax 404/237-1235
Contact: Julie Swanson
20-0-20-20

Booth Research Services, Inc.
1120 Hope Rd., Ste. 200
Atlanta, GA 30350
Ph. 404/992-2200
Fax 404/642-4535
Contact: Dottie Nix
60-60-60-60

Compass Marketing Research
3294 Medlock Bridge Rd., Ste.100
Norcross, GA 30092
Ph. 404/448-0754
Fax 404/416-7586
Contact: Joe Ferris/Anne Rast
80-80-80-10
(See advertisement on p. 64)

Elrick & Lavidge, Inc.
1990 Lakeside Pkwy., 3rd Flr.
Tucker, GA 30084
Ph. 404/938-3233
Fax 404/621-7666
Contact: Jeffrey Lorber
230-187-187-187

Discover why our clients boast
that we really are . . .

THAT BIG?

They like our comprehensive
"70" line telephone survey
center . . . and that all research
data is verifiable, accurate,
reasonably priced, and that we
surely meet difficult deadlines.

Introducing:

DENISE HENRY, our new
Director of the "Art of Research
Services" with 8 years of
National experience in
Pittsburgh and Dallas, leads our
quality driven corp of
interviewers to bring you first
hand data to help strengthen
your decision making process.

Join the Next Generation '93 - '94

With advanced computer
techniques/interview training
and retraining, featuring Ci2
CATi services with on-site/off-
site monitoring capabilities.

Call Denise Henry for your next
project - 904-744-7000.

Irwin Research Services, Inc.

Jacksonville, Florida

CQDES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Jackson Associates, Inc.
1140 Hammond Dr., Bldg. H
Atlanta, GA 30328
Ph. 404/394-8700
Fax 404/394-8702
Contact: Margaret Hicks
40-20-40-40

Joyner Hutcheson Research, Inc.
1900 Century Place
Atlanta, GA 30345
Ph. 404/321-0953
Fax 404/634-8121
Contact: Wanda L. Hutcheson
20-0-20-0

MacConnell Research Services, Inc.
10 Perimeter Pk. Dr., #110
Atlanta, GA 30341
Ph. 404/451-6236
Fax 404/451-6184
Contact: Cubie House
14-0-2-0

Mid-America Research, Inc.
3393 Peachtree Road N.E.
Atlanta, GA 30326
Ph. 404/261-8011
Contact: Joan Ferdinands
10-10-10-0

Precision Field Services
3405 Piedmont Rd., #175
Atlanta, GA 30305
Ph. 404/266-8666
Fax 404/266-0208
Contact: Mykaela Brown
10-0-10-0

Quality Controlled Services (QCS)

2635 Century Pkwy., Ste. 100
Atlanta, GA 30345
Ph. 800/227-2974 or 800/325-3338
Fax 404/636-3276
Contact: Susan Lipsitz
14-0-14-0
(See advertisement on p. 55)

John Stolzberg Market Research
1800 Century Blvd., #1000
Atlanta, GA 30345
Ph. 404/329-0954
Fax 404/329-1596
Contact: John Stolzberg
17-0-17-0

Whaley Research, Inc.
5001 Riverside Ct.
Atlanta, GA 30073
Ph. 404/991-2588 or 800/283-4701
Fax 800/283-4733
Contact: Marilyn J. Whaley
50-50-50-50
(See advertisement on p. 2)

COMPASS MARKETING RESEARCH

Data Collection Specialists

Growing With Atlanta Since 1980

STATE-OF-THE-ART TELEPHONE FACILITY



Our expanded and enhanced CRT facility

- 80 CRT Stations
- Soundproof Partitions
- Fast Turnaround
- Local and WATS Dialing
- In-house GENESYS Sampling
- User-friendly Monitor System
- Off-Site Monitoring
- 1-800-CALLBACK Capabilities

PROFESSIONAL FOCUS GROUP FACILITIES

- Two Spacious Focus Group Rooms
- Each with Client Observation Room
- Comfortable Seating for Observers
- Connecting Client Lounge with Closed Circuit TV and Telephone
- In-house Audio-Visual Technician
- Remote Control Panning



One of our spacious focus group rooms

OTHER SERVICES

- Simulated Store Room
- Full Taste-Test Kitchen
- One-on-Ones
- Taste Tests
- Intercepts
- Mystery Shopper Studies
- Executive Interviewing
- Tabulation Services

COMPASS MARKETING RESEARCH

3294 Medlock Bridge Road Suite 100

Norcross, Georgia 30092

(Voice) 404-448-0754 (Fax) 404-416-7586

For Information Contact: Anne Rast Chris Ruff Joe Ferris

HAWAII

HONOLULU

Omnitrak Group, Inc.
220 So. King Street, #975
Honolulu, HI 96813
Ph. 808/537-3356
Fax 808/538-6227
Contact: Barbara Ankersmit
22-5-16-0

SMS Research
1042 Fort Street, #200
Honolulu, HI 96813
Ph. 808/537-3356
Fax 818/537-2686
Contact: James E. Dannemiller
24-0-12-0

Ward Research, Inc.
126 Queen Street, #307A
Honolulu, HI 96813
Ph. 808/522-5123
Fax 808/522-5127
Contact: Rebecca S. Ward
10-0-10-0

JUST HOW DO YOU MEASURE CUSTOMER SATISFACTION?

C/J Research, Inc. can help you determine exactly where you are and how best to get where you want to be in *delighting* your customers, clients or contributors.

C/J Research collects and interprets data by:

- WATS Telephone/CRT assisted (100+ stations)
- Focus groups (In house, with client viewing and A/V)
- Continuous tracking – to measure the impact of your efforts (and that of your competitors)
- Mall intercepts – nationwide
- Personal door-to-door interviewing
- Physician/Executive/Industrial interviews
- Exit interviews
- Central location pre-recruited interviews

Please write, phone, or fax for our capabilities brochure or for an appointment to discuss your requirements.



C/J RESEARCH, INC.

Headquarters Office
3150 Salt Creek Lane
Arlington Heights, IL 60005

Phone: 800/323-0266
or 708/253-1100
Fax: 708/253-1587

Circle No. 960 on Reader Card

©1992- C./J Research, Inc.

329

328

327

326

325

324

323

322

321

320

CQDES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

IDAHO**BOISE**

Clearwater Research, Inc.
1111 So. Orchard, #150
Boise, ID 83705
Ph. 208/343-9556
Fax 208/343-0648
Contact: Steve Swann
12-12-12-0

ILLINOIS**CHICAGO**

Adler Weiner Research Co.
6500 No. Lincoln Ave.
Lincolnwood, IL 60645
Ph. 708/675-5011
Fax 708/675-5698
Contact: Eileen Dorfman
25-0-10-0

Assistance In Marketing
1650 No. Arlington Heights Rd.
Arlington Heights, IL 60004
Ph. 708/392-5500
Fax 708/392-5841
Contact: Mark Divito
12-12-12-12

Irwin Broh & Associates, Inc.
1011 E. Touhy Avenue
Des Plaines, IL 80018
Ph. 708/297-7515
Fax 708/297-7847
Contact: David Waitz
20-5-20-20

Central Telephone Interviewing Sys. (CTIS)
6445 N. Western Avenue
Chicago, IL 60645
Ph. 312/274-3700
Fax 312/274-4021
Contact: Mark Pilarski
50-50-50-50

C/J Research, Inc.
3150 Salt Creek Lane
Arlington Heights, IL 60005-8760
Ph. 800/323-0266
Fax 708/253-1587
Contact: Sherrie Binke/Terri Cotter
100-80-100-0
(See advertisement on p. 65)

Communications Research, Inc.
233 E. Wacker Drive, Ste. 2105
Chicago, IL 60601
Ph. 312/938-0200
Fax 312/938-8711
Contact: Kathy Beimfohr
25-0-25-0

Communications Workshop, Inc.
168 No. Michigan Avenue
Chicago, IL 60601
Ph. 312/263-7551
Fax 312/332-6115
Contact: Paula King
30-0-30-30

Com-Sci Systems, Inc.
444 Frontage Road
Northfield, IL 60093
Ph. 708/446-0446
Fax 708/446-0504
Contact: Richard J. Schlesinger
35-12-35-0

Consumer & Professional Research, Inc.
3612 W. Lake Ave.
Wilmette, IL 60091
Ph. 708/256-7744
Fax 708/251-7662
Contact: Margie Morich
12-10-12-12

Conway/Milliken & Associates
875 No. Michigan
Chicago, IL 60611
Ph. 312/787-4060
Fax 312/787-4156
Contact: Rose Randle
36-36-36-36

Data Research, Inc.
1319 Butterfield Rd., #510
Downers Grove, IL 60515
Ph. 708/971-2880
Fax 708/971-2267
Contact: Ken Jennrich
50-20-50-20

Focuscope, Inc.
1100 W. Lake Street, Ste. 60
Oak Park, IL 60301
Ph. 708/386-5086
Fax 708/386-1207
Contact: Ann Rooney/Kevin Rooney
15-0-15-0

Heakin Research, Inc.
3615 Park Drive
Olympia, IL 60461
Ph. 708/503-0100
Fax 708/503-0101
39-24-34-34

Ingram Research, Inc.
OS 125 Church St.
Winfield, IL 60190
Ph. 708/462-0402
Fax 708/462-7153
Contact: Roland G. Ingram
25-0-20-20

Kapuler Survey Center
3436 N. Kennicott
Arlington Heights, IL 60035
Ph. 708/870-6700
Fax 708/392-2122
Contact: Rose Graziano
140-100-100-100

Market Facts, Inc.
National Telephone Center
1560 Sherman Ave., Ste. 210
Evanston, IL 60201
Ph. 708/864-5100
Fax 708/864-5100 ext. 107
Contact: Luann Lewis
68-68-68-68

Market Facts, Inc.
National Telephone Center
1010 Lake Street
Oak Park, IL 60301
Ph. 708/524-2001
Fax 708/524-2351
Contact: Kevin Coughlin
65-65-65-65

Market Facts, Inc.
National Telephone Center
4260 Westbrook Drive
Aurora, IL 60504
Ph. 708/851-6823
Fax 708/851-9213
Contact: Donna Banes
26-26-26-26

Mid-America Research, Inc.
999 No. Elmhurst Rd.
Mt. Prospect, IL 60056
Ph. 708/392-0800
Fax 708/870-6236
Contact: Nancy Lindholm
22-16-16-0

Millward Brown, Inc.
1245 E. Diehl Rd.
Naperville, IL 60653
Ph. 708/505-0066
Fax 708/505-0077
45-45-45-45

National Data Research, Inc.
770 Frontage Rd., #110
Northfield, IL 60093
Ph. 708/501-3200
Fax 708/501-2865
Contact: Val Maxwell
18-0-18-0

Precision Field Services
10600 W. Higgins Rd.
Rosemont, IL 60018
Ph. 708/390-8666
Contact: Scott Adleman
30-6-30-30

Quality Controlled Services (QCS)

Oak Brook East
2000 Spring Road, Ste. 100
Oak Brook, IL 60521
Ph. 800/322-2376 or 800/325-3338
Fax 708/990-8188
Contact: Andrea Wilk
10-10-10-0
(See advertisement on p. 55)

Quality Controlled Services (QCS)

400 N. Schmidt Road
 Bolingbrook, IL 60440
 Ph. 708/759-0700 or 800/325-3338
 Fax 708/759-9611
 Contact: Jean Grant
 48-48-48-48
 (See advertisement on p. 55)

Questions & Marketing Research Svcs.

19211 Henry Drive
 Mokena, IL 60448
 Ph. 708/479-2291
 Fax 708/479-4038
 Contact: Marge Weber
 20-0-20-0

The Research Group

8289 Golf Road
 Niles, IL 60714
 Ph. 708/966-8900
 Fax 708/966-8871
 Contact: Bill Smith
 25-0-25-25

Research House, Inc.

6901 No. Lincoln
 Lincolnwood, IL 60646
 Ph. 708/677-4747
 Fax 708/677-7990
 Contact: Darlene Piell
 24-0-24-0

Smith Medical Market Research, Inc.

1121-P Lake Cook Rd.
 Deerfield, IL 60015
 Ph. 708/948-0440
 Fax 708/948-8350
 Contact: Kevin Smith
 24-10-24-24

Survey Center, Inc.

455 E. Illinois Street
 Chicago, IL 60611
 Ph. 312/321-8100
 Fax 312/321-0607
 Contact: Pam Kaplan
 130-30-130-130

TeleAmerica

1822 Ridge Ave.
 Evanston, IL 60201
 Ph. 708/869-9001
 Contact: Greg Jiede
 100-54-100-100

TeleBusiness USA

1945 Techny Rd., Ste. 3
 Northbrook, IL 60002
 Ph. 708/480-1560
 Fax 708/480-6055
 Contact: Larry Kaplan
 75-25-75-75

Time N Talent, Inc.

Meadowtown Mall, 1400 E. Golf Rd.
 Rolling Meadows, IL 60008
 Ph. 708/806-0006
 Fax 708/806-0782
 Contact: Myra Balaban
 6-2-6-0

United States Testing Co.

300 Marquardt Drive
 Wheeling, IL 60090
 Ph. 708/520-3600
 Fax 708/520-3621
 Contact: Margaret Krieg
 125-0-125-125

PEORIA**Scotti Marketing Research, Inc.**

1118 No. Sheridan Road
 Peoria, IL 61606
 Ph. 309/673-6194
 Contact: Nancy Matheis
 16-0-16-0

ROCKFORD

Millward Brown, Inc.
 7115 Windsor Lake Pkwy.
 Loves Park, IL 61111
 Ph. 815/654-6300
 Fax 815/654-6317
 105-75-105-105

Millward Brown, Inc.

5301 E. State St., #312
 Rockford, IL 61108
 Ph. 815/226-5678
 Fax 815/226-2253
 60-60-60-60



**In 1939 we began
 looking for answers.**



We've never stopped.

Anticipating what's ahead. That's been the attitude that has kept us in a leadership position in the research services industry for decades. We've built a reputation by building on existing ideas and introducing new ones that have helped shape an industry and create a new level of customer confidence.

We've never been comfortable applying yesterday's solutions to today's problems when there's a better way.

If you're looking for answers to your data collection, data processing and field management needs, look to DataSource.



DataSource

800/800-8370

3939 Priority Way S. Drive • P.O. Box 80432 • Indianapolis, IN 46280-0432

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

INDIANA

EVANSVILLE

Product Acceptance & Research
1510 W. Franklin
Evansville, IN 47710
Ph. 812/425-3533
Fax 812/425-6806
Contact: Woody Youngs
60-40-60-60

FORT WAYNE

DataSource
3400 Coliseum Blvd E., #300
Fort Wayne, IN 46805
Ph. 219/484-9025
Fax 219/482-1875
Contact: Cathy Huff
50-50-50-50
(See advertisement on p. 67)

Dennis Research Services, Inc.
3502 Stellhorn Rd.
Fort Wayne, IN 46815
Ph. 219/485-2442
Fax 219/485-1476
Contact: Pat Slater
25-0-25-25

INDIANAPOLIS

Communications Center, Inc. (CCI)
3828 S. Madison
Indianapolis, IN 46227
Ph. 317/781-9009
Fax 317/781-1812
Contact: Sandra Patton
100-0-100-100
(See advertisement on pp. 41,43,45)

DataSource

3939 Priority Way S. Drive
Indianapolis, IN 46280-0432
Ph. 800/800-8370
Fax 317/843-8638
Contact: Lynn Yaney
80-80-80-80
(See advertisement on p. 67)

Herron Associates, Inc.
710 Executive Park Dr.
Greenwood, IN 46143
Ph. 317/882-3800
Fax 317/882-4716
Contact: Sue Nielsen
24-12-24-0

Strategic Marketing & Research, Inc.
9200 Keystone Crossing, #400
Indianapolis, IN 46240
Ph. 317/574-7700 or 800/424-6270
Fax 317/574-7777
Contact: Lynell Newell
33-33-33-33

IOWA

CEDAR RAPIDS

Epley Marketing Services, Inc.
One Quail Creek Circle
North Liberty, IA 52317
Ph. 319/626-2567
Contact: Sarah Campbell
25-25-25-0

Frank N. Magid Associates
One Research Center
Marion, IA 52302
Ph. 319/377-7345
Fax 319/377-5861
Contact: Jane Cook
115-50-95-95
(See advertisement on p. 68)

DAVENPORT

Per Mar Research
322 Brady Street
Davenport, IA 52801
Ph. 319/322-1960
Fax 319/322-1370
Contact: Martha Renk
15-0-15-0

Millward Brown, Inc.
100 E. Kimberly Rd., #605
Davenport, IA 52806
Ph. 319/388-2920
Fax 319/388-2922
85-85-85-85

DES MOINES

Iowa Field Research
2302 SW 3rd Street
Ankeny, IA 50021
Ph. 515/964-1379
Fax 515/964-7246
Contact: Anthony Soares/Jerry Hausman
30-0-30-30

Per Mar Research
2901 Douglas, Ste. 1A
Des Moines, IA 50310
Ph. 515/255-2218
Fax 515/255-3664
Contact: Mary Vortherms
10-6-10-0

MASON CITY

Directions In Research
Box 1731
Mason City, IA 50401
Ph. 515/423-0275
Fax 515/423-8494
Contact: Tom Thul
25-0-25-0

Call today,

Our services are designed to meet the biggest standards of data collection.

- 115 WATS lines
- 64 CATI stations, trained interviewers
- Focus group recruiting and facilities
- Remote monitoring
- 35 years of quality, professional service

get a bid tomorrow

To receive a detailed field and tab bid within 24 hours, call Jane Cook at (319) 377-7345, or FAX (319) 377-5861.

Frank N. Magid Associates, Inc.

• ONE RESEARCH CENTER MARION, IOWA 52302

KANSAS

GREAT BEND

ASI Market Research
210 So. McKinley
Great Bend, KS 67530
Ph. 316/792-1785
Fax 316/792-8255
Contact: Steve Hulbert
125-100-125-125

KANSAS CITY

(See Kansas City, MO)

WICHITA

Data Net-Wichita
7700 E. Kellogg, #231
Wichita, KS 67207
Ph. 316/682-6655
Fax 316/682-6644
Contact: Clyde Nitta
7-0-7-0

The Marketing Research Partnership, Inc.
224 N. Ohio
Wichita, KS 67214
Ph. 316/263-6433
Fax 316/263-0885
Contact: Esther Headley
8-0-0-0

KENTUCKY

LOUISVILLE

Communications Center, Inc. (CCI)
1930 Bishop Lane, Ste. 800
Louisville, KY 40218
Ph. 502/452-1095
Fax 502/452-1481
Contact: Henry Allen
100-0-100-100
(See advertisement on pp. 41,43,45)

Davis Research Services, Inc.
4229 Bardstown Rd.
Louisville, KY 40218
Ph. 502/499-0607
Fax 502/459-0122
Contact: Leslie Poore
16-10-16-16

Fangman Stevens Research Svcs., Inc.
1941 Bishop Lane, Ste. 806
Louisville, KY 40218
Ph. 502/456-5300
Fax 502/456-2404
Contact: Allen B. Fangman
11-0-0-0

Personal Opinion, Inc.
3415 Bardstown Road, Ste. 206A
Louisville, KY 40218
Ph. 502/451-1971
Fax 502/451-3940
Contact: Rebecca Davis
25-6-3-0

Southern Research Services, Inc.
1930 Bishop Lane, #918
Louisville, KY 40218
Ph. 502/454-0771
Fax 502/458-5773
Contact: Sharron Hermanson
30-0-30-30

Wilkerson and Associates
3339 Taylorsville Road
Louisville, KY 40205
Ph. 502/459-3133
Fax 502/459-8392
Contact: Suzanne Elder
30-15-30-30

LOUISIANA

BATON ROUGE

Gulf States Research Center
Bon Marche Mall
7261 Florida Blvd.
Baton Rouge, LA 70806
Ph. 800/848-2555
Fax 504/925-9990
Contact: Robert H. Landsberger
30-30-30-0

How To Find The Best Deal On WATS Interviewing.

The high costs of telephone interviewing getting you down? I/H/R Research Group can help — with the highest quality, lowest prices, and best service available anywhere.

- 75 line national coverage
- MRA certified interviewers
- Project bids in one hour
- 50 Ci2/CATI stations
- Highest quality
- On/off premise monitoring
- On time results
- Low prices
- State-of-the-art technology

What makes I/H/R the best? Some say it's our on-going training program or our great supervisors... But, what seems to make our clients even happier are the really competitive prices. We're growing, so we can afford to bid very aggressively.

If you're tired of the same old song and dance, give I/H/R Research Group a call. We'll make sure your job's done right and at a cost you can live with.

I/H/R Research Group

Quality Marketing Research That Works.

4440 S. Maryland Pkwy. - Suite 203 - Las Vegas, NV 89119 - (702) 734-0757

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

JKB & Associates
2223 Quail Run Dr., #C-2
Baton Rouge, LA 70808
Ph. 504/766-4065
Fax 504/766-9597
Contact: Joan Berg/Maggie Happe
12-0-12-0

Market Research & Issues Mgmt.
1055 Laurel
Baton Rouge, LA 70802
Ph. 504/387-6766
Fax 504/387-6769
Contact: Robert Miller
40-0-40-0

NEW ORLEANS

Analytical Studies, Inc.
708 Rosa
Metairie, LA 70005
Ph. 504/835-3508
Contact: Myrtle Grosskopf
18-7-18-18

Gulf States Research Center
516 N. Starrette Rd.
Metairie, LA 70003
Ph. 800/848-2555
Fax 504/925-9990
Contact: Robert H. Landsberger
12-10-12-0

Linden Research Services
197-36 Westbank Exp.
Gretna, LA 70053
Ph. 504/368-9825
Fax 504/368-9866
Contact: Marty Olson
13-0-13-0

NGL Research Services, Inc.
4300 So. I-10 Svce. Rd., #115
Metairie, LA 70001
Ph. 504/456-9025
Fax 504/456-9072
Contact: Lena Webre
12-0-12-0

MAINE

BANGOR

Northeast Research
69 Main Street
Orono, ME 04473-0009
Ph. 207/866-5593
Fax 207/866-0009
Contact: David Kovenock
9-7-8-7

MARYLAND

ANNAPOLIS

Widener-Burrows & Associates
130 Holiday Ct., Ste. 108
Annapolis, MD 21401
Ph. 410/266-5343
Fax 410/841-6380
Contact: Diane Widener
30-0-30-0

BALTIMORE

Assistance In Marketing-Baltimore
1410 N. Crain Hwy.
Glen Burnie, MD 21061
Ph. 410/760-0052
Fax 410/760-6744
Contact: Becky Valenta
32-10-10-0

Assistance In Marketing-Baltimore
101 E. Chesapeake Ave.
Towson, MD 21286
Ph. 410/337-5000
Fax 410/337-5089
Contact: Sylvia Yeager
10-10-10-0

BALTIMORE. A FRESH MARKET FOR YOUR NEXT FOCUS GROUP.

People come to Baltimore to sample the city's world-famous seafood.

But you can sample more than seafood in Baltimore. You can tap into the city's fresh and rich demographic diversity in your next focus group. Chesapeake Surveys can help. Here's some of what we have to offer:

- Centralized location - Baltimore is close to Washington D.C., New Jersey, Philadelphia and New York.
- Executive, Medical & Consumer recruiting which also includes the 2% incidence projects.
- Accurate and proper recruiting done in-house. Computerized database of more than 4,000 households and growing all the time.
- All specs are met to your qualifications and re-screened prior to the group.

- Telephone interviewing is completely supervised at all times.
- 25 line phone center complete with on & off premise telephone monitoring capabilities.
- 45 full & part time trained interviewers using the MRA Video taped training program.
- Executive & extensive medical in-depth interviewing with 30,000 doctors & complete hospital database on computer.
- Convention interviewing, in-store interviewing, store audits and mystery shopping.

For more information on your next focus group or telephone survey, call Carolyn Hilton at (410) 356-3566.



Chesapeake Surveys • 4 Park Center Court • Suite 100 • Owings Mills, MD 21117 • (410) 356-3566

Chesapeake Surveys
4 Park Center Dr., Ste. 100
Owings Mills, MD 21117
Ph. 410/356-3566
Fax 410/581-6700
Contact: Carolyn Hilton
25-0-25-25
(See advertisement on p. 70)

Consumer Pulse of Baltimore
Hunt Valley Mall, #101
118 Shawan Road
Cockeysville, MD 21030
Ph. 410/527-9460 or 800/336-0159
Fax 410/527-9465
Contact: Linda Crowder
22-12-22-0

Maryland Marketing Source
817 Maiden Choice Lane, Ste. 150
Baltimore, MD 21228-3680
Ph. 301/247-3276
Fax 301/536-1858
15-16-16-0

MASSACHUSETTS

BOSTON

Atlantic Marketing Research Co., Inc.
109 State Street
Boston, MA 02109
Ph. 617/720-0174
Fax 617/589-3731
Contact: Peter F. Hooper
26-10-26-26

Bernett Research
230 Western Avenue, Ste. 201
Boston, MA 02134
Ph. 617/254-1314
Fax 617/254-1857
Contact: Bernyce Hayes
10-4-10-4

Dorr & Sheff, Inc.
190 No. Main Street
Natick, MA 01760
Ph. 508/650-1292
Fax 508/650-4722
Contact: Gary Sheff
24-0-20-20

First Market Research Corp.
121 Beach Street
Boston, MA 02111
Ph. 617/482-9080
Fax 617/482-4017
Contact: Jack Reynolds
10-0-0-0
(See advertisement on p. 71)

Focus Data, Inc.
4 California Ave.
Framingham, MA 01701
Ph. 508/626-2556
Fax 508/626-2558
Contact: Mona Dabbon
10-8-10-0

Performance Plus, Inc.
111 Speen Street, Ste. 105
Framingham, MA 01701
Ph. 508/872-1287
Fax 508/879-7108
Contact: Shirley Shames
32-4-32-0

Research Data, Inc.
624 Worcester Road
Framingham, MA 01701
Ph. 508/875-1300
Fax 508/872-2001
Contact: Joyce Meenes
55-24-55-55

MICHIGAN

DETROIT

Amrigon
2750 S. Woodward
Bloomfield Hills, MI 48013
Ph. 313/332-2300
Fax 313/333-9710
Contact: Richard Smith
192-192-192-192

Consumer Pulse of Detroit
725 South Adams Rd.
Birmingham, MI 48009
Ph. 313/540-5330 or 800/336-0159
Fax 313/645-5685
Contact: Mary Taras
60-30-60-60

Crimmins & Forman Market Research, Inc.
26237 Southfield Road
Southfield, MI 48076
Ph. 313/569-7095
Fax 313/569-8927
Contact: Paula Crimmins/Lois Forman
12-5-10-10

DataStat, Inc.
3975 Research Park Drive
Ann Arbor, MI 48108
Ph. 313/994-0540
Fax 313/663-9084
Contact: Sherry Marcy
100-100-100-0

Demand Research, Inc.
450 So. Wagner Rd.
Ann Arbor, MI 48103
Ph. 313/747-9911
Fax 313/747-8755
Contact: MariAnn M. Apley
10-10-10-10

Electronic Survey Professionals, Inc.
33411 Schoolcraft
Livonia, MI 48150
Ph. 313/425-5551
Fax 313/261-6371
Contact: Gary Wolak
20-20-20-20

FIRST, MARKET RESEARCH.

First Market Research helps its clients "get the facts" with:

- Focus-group rooms in downtown Boston and downtown Austin
- National telephone interviewing with remote monitoring
- Special expertise in:
business-to-business
high technology
consumer research
health care

The common-sense comma.
It turns our name into an agenda.

1-800-FIRST-1-1
1-800-FIRST-TX



First
Market
Research

121 Beach Street, Boston, MA 02111
(617) 482-9080
2301 Hancack Drive, Austin, TX 75756
(512) 451-4000

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Friedman Marketing
25130 Southfield Rd.
Southfield, MI 48075
Ph. 313/569-0444
Fax 313/569-2813
Contact: Deanna Quarters
30-0-30-30

General Interviewing Surveys
17117 W. Nine Mile Rd., #1020
Southfield, MI 48075
Ph. 313/559-7860
Fax 313/559-2421
Contact: Sheila Smith
20-5-20-12

Information Transfer Systems, Inc.
209 E. Washington St., #200
Ann Arbor, MI 48104
Ph. 313/994-0003
Fax 313/994-1228
Contact: Bruce M. Brock
25-25-25-25

M.O.R.-PACE, Inc.
38800 Ryan Rd., #105
Sterling Heights, MI 48310
Ph. 313/268-6090
Fax 313/268-0040
Contact: Sue Prieur
78-78-78-78

M.O.R.-PACE, Inc.
33127 Schoolcraft
Livonia, MI 48150
Ph. 313/421-6320
Fax 313/421-8249
Contact: Sue Prieur
40-40-40-40

Nordhaus Research, Inc.
20300 West Twelve Mile Rd.
Southfield, MI 48076
Ph. 313/827-2400
Fax 313/827-1380
Contact: John King
60-50-60-60
(See advertisement on p. 72)

Opinion Search
21800 Melrose, Ste. 4
Southfield, MI 48075
Ph. 313/358-9922
Fax 313/358-9914
Contact: Joanne Levin
15-0-10-10

Research Data Analysis
450 Enterprise Ct.
Bloomfield Hills, MI 48013
Ph. 313/332-5000
Fax 313/332-4168
Contact: Linda Gibbons
70-70-70-70

Yee/Minard & Associates, Inc.
27300 W. Eleven Mile Rd., Ste. 500
Southfield, MI 48034
Ph. 313/352-3300
Fax 313/352-3787
Contact: Lynne Goodman
70-30-70-70

GRAND RAPIDS

Barnes Research, Inc.
4260 Plainfield N.E.
Grand Rapids, MI 49505
Ph. 616/363-7643
Fax 616/363-8227
Contact: Sona Barnes
35-35-25-25

Breakthru Surveys, Inc.
535 Greenwood S.E.
Grand Rapids, MI 49506
Ph. 616/451-9219
Fax 616/451-8812
Contact: Fred Howell
38-15-38-38

Datatrack, Inc.
2401 Camelot Ct. S.E.
Grand Rapids, MI 49546
Ph. 616/954-6303
Fax 616/954-0001
Contact: Mike Tourangeau
45-45-35-35

**What
the
World
is
Thinking**

You need it now. But you must be careful of costs. It must be clear. And above all, it must be accurate. For it's the force that drives your business. Market Research. It's not something you can trust to just anyone.

Nordhaus Research Inc.*Southfield Office*

20300 W. Twelve Mile Rd. • Suite 102
Southfield, MI 48076
Tel: 313 • 827 • 2400 / Fax: 313 • 827 • 1380

Chicago Office

2300 N. Barrington Road • Suite 400
Hoffman Estates, IL 60195
Tel: 708 • 490 • 5363 / Fax: 708 • 884 • 2878

Grand Rapids Office

2449 Camelot Court
Grand Rapids, MI 49546
Tel: 616 • 942 • 9700 / Fax: 616 • 942 • 1325

Baltimore Office

504 South Hanover
Baltimore, MD 21201
Tel: 410 • 685 • 4070 / Fax: 410 • 685 • 4166

Nordhaus Research, Inc.
2449 Camelot Court
Grand Rapids, MI 49506
Ph. 616/942-9700
Fax 313/942-1325
Contact: John King
60-20-60-60
(See advertisement on p. 72)

Western Michigan Research, Inc.
6143 1/2-28th Street S.E.
Grand Rapids, MI 49546
Ph. 616/949-8724
Fax 616/949-8511
Contact: Nancy Vanderveer
14-0-14-14

KALAMAZOO

Harrington Market Research
100 E. Michigan Ave., #300
Kalamazoo, MI 49007
Ph. 616/349-4774
Fax 616/349-3051
Contact: Linda Stump
20-0-10-0

MINNESOTA

MINNEAPOLIS/ST. PAUL

Cook Research & Consulting, Inc.
6600 France Ave. So., #214
Minneapolis, MN 55435
Ph. 612/920-6251
Fax 612/920-1230
Contact: Joan Moeller
10-0-10-0

Custom Research Inc.
10301 Wayzata Blvd.
Minneapolis, MN 55426-0695
Ph. 612/542-0800
Fax 612/542-0864
Contact: Beth Rounds
105-105-105-105

Bette Dickinson Research, Inc.
3900 36th Avenue No.
Minneapolis, MN 55422
Ph. 612/521-7635
Fax 612/521-4385
Contact: Bette Dickinson
15-0-15-0

Jeanne Drew Surveys, Inc.
5005 1/2 34th Avenue So.
Minneapolis, MN 55417
Ph. 612/729-2306
Fax 612/729-7645
Contact: Jeanne Drew/Ray Drew
17-0-17-0

Focus Market Research, Inc.
801 West 106th Street
Bloomington, MN 55420
Ph. 612/881-3635
Fax 612/881-1880
Contact: Judy Opstad
20-0-20-0

N.K. Friedrichs & Associates, Inc.
431 So. 7th Street, Ste. 2500
Minneapolis, MN 55415
Ph. 612/333-5400
Fax 612/344-1408
Contact: Michael Rossow
28-28-28-28

Minnesota Opinion Research, Inc.
7831 Glenroy Rd., #100
Minneapolis, MN 55439
Ph. 612/835-3050
Fax 612/835-3385
Contact: Kristin McGrath
35-35-35-0

Northstar Interviewing Svce., Inc.
4660 W. 77th Street, Ste. 140
Edina, MN 55435
Ph. 612/897-3700
Contact: LaRae Agar
19-16-19-19

C.J. Olson Market Research, Inc.
708 So. 3rd Street, #105E
Minneapolis, MN 55415
Ph. 612/339-0085
Fax 612/339-1788
Contact: Carolyn J. Olson
14-0-14-0

THE ROCKWOOD DIFFERENCE

Rockwood sharpens the focus of your group interviews

Are your focus group situations out of focus? At Rockwood Research we offer a clear, sharp difference:

- An experienced, professional staff of recruiters and moderators.
- Thousands of fresh respondents within a few miles of our offices.
- An ideal Twin Cities location.
- Modern, state-of-the-art facilities, including a large focus group room, private client offices and high-quality recording equipment.

Where you conduct your focus group interviews does make a difference. Call us today to discover the Rockwood difference.



Rockwood Research

1751 West County Road B • St. Paul, MN 55113 • 612-631-1977

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Orman Guidance Research, Inc.
715 Southgate Office Plaza
Minneapolis, MN 55437
Ph. 612/831-4911
Fax 612/831-4913
Contact: Allan D. Orman/Rosemary Sundin
13-0-13-0

Plasman/Compass, Inc.
1301 Corporate Ctr. Dr.
St. Paul, MN 55121
Ph. 612/454-0144
Contact: George Zirnheld
14-14-14-0

Project Research, Inc.
10000 State Hwy. 55
Plymouth, MN 55441
Ph. 612/542-9442
Fax 612/542-9240
Contact: Nancy Robinson Bostrom
35-35-35-35

Quality Controlled Services (QCS)
2622 W. Lake Street
Minneapolis, MN 55416
Ph. 800/526-5718 or 800/325-3338
Fax 612/926-6281
Contact: Kathy Riemer
32-32-32-32
(See advertisement on p. 55)

Research Systems, Inc.
1809 So. Plymouth Road, Ste. 325
Minnetonka, MN 55305
Ph. 612/544-6334
Fax 612/544-6764
Contact: Bill Whitney
17-0-17-0

Rockwood Research Corp.
1751 West County Road B.
St. Paul, MN 55113
Ph. 612/631-1977
Fax 612/631-8198
Contact: Lisa Schwartz Morse
60-45-60-60
(See advertisement on p. 73)

Twin City Interviewing Service
3225 Hennepin Avenue So.
Minneapolis, MN 55408
Ph. 612/823-6214
Fax 612/823-6215
Contact: Beth Fischer
10-0-10-0

MISSOURI**KANSAS CITY**

The Field House
7220 West 98th Terrace
Overland Park, KS 66212
Ph. 913/341-4245
Fax 913/341-1462
Contact: Ellen Dimbert
30-16-30-0

The Lysis Group
7015 College Blvd., Ste. 250
Overland Park, KS 66211
Ph. 913/491-7245
Fax 913/491-7297
Contact: Gary Chronister
80-80-80-30

Market Directions
911 Main Street, #300
Kansas City, MO 64105
Ph. 816/842-0020
Fax 816/472-5177
Contact: Annie Heck
58-58-58-13

Market Research Institute
7315 Frontage Rd., Ste. 200
Merriam, KS 66204
Ph. 913/236-6060
Fax 913/236-6094
Contact: Don Weston
32-24-32-24

Opinion Data Center
8301 State Line Rd., Ste. A
Kansas City, MO 64114
Ph. 816/333-1515
Fax 816/333-7117
Contact: John Claman
30-30-30-30

Quality Controlled Services (QCS)
10875 Grandview Street, Ste. 2230
Corporate Woods Office Park
Overland Park, KS 66210
Ph. 800/525-1952 or 800/325-3338
Fax 913/345-2070 or 913/345-8050
Contact: Shirley Musgrave
52-52-52-52
(See advertisement on p. 55)

Quality Controlled Services (QCS)
8600 Ward Parkway
Kansas City, MO 64114
Ph. 800/628-3428 or 800/325-3338
Fax 816/361-3580
Contact: Iva Schlatter
20-0-20-20
(See advertisement on p. 55)

Quality On Time Interviewing
8889 Bourgade Ave.
Lenexa, KS 66219
Ph. 913/894-9012
Fax 913/894-5240
Contact: Cathy Von Fange
16-13-12-12

ST. LOUIS

ACG Research Solutions
120 South Central Ave., Ste. 1750
St. Louis, MO 63105
Ph. 314/726-3403
Fax 314/726-2503
Contact: Vicki Savala
20-20-20-20
(See advertisement on p. 75)

Alpha Information Center
14323 South Outer Rd., Ste. N600
Chesterfield, MO 63017
Ph. 314/391-3383
Fax 314/576-5471
Contact: Roger Jay Bigler
30-0-30-30

Business Response, Inc.
1974 Innerbelt Business Ctr. Dr.
St. Louis, MO 63114
Ph. 314/426-6500
Fax 314/426-6935
Contact: Donald Kornblet
45-45-45-45

Consumer Opinion
10795 Watson Road
St. Louis, MO 63127
Ph. 314/965-0053
Fax 314/965-8042
Contact: Carol McGill
12-4-12-0

Consumer Opinion Council
222 So. Meramec Ave., Ste. 301-02
St. Louis, MO 63105
Ph. 314/863-3780
Fax 314/863-2880
Contact: Shelle Hassenforder
13-0-10-10

Conway/Milliken & Ascts.
1655 Des Peres Road
St. Louis, MO 63131
Ph. 314/821-5600
Fax 314/821-8923
Contact: Stephanie Paule
48-42-48-48

Fact Finders, Inc.
11960 Westline Industrial Dr., Ste. 105
St. Louis, MO 63146
Ph. 314/469-7373
Fax 314/469-0758
Contact: Sandra J. Christie
30-15-30-30

Marketeam Associates
1807 Park 270 Dr., Ste. 300
St. Louis, MO 63146
Ph. 314/878-7667
Fax 314/878-7616
Contact: Denise Titus
30-15-30-30

Marketeam Associates
348 Brookes Drive
Hazelwood, MO 63042
Ph. 314/731-2005
Fax 314/731-1105
Contact: Kathy Sammons
24-20-24-24

Marketing Horizons, Inc.
1001 Craig Road
St. Louis, MO 63146
Ph. 314/432-1957
Fax 314/432-7014
Contact: Robert Jasper
30-0-30-30

Peters Marketing Research, Inc.
12655 Olive Blvd., #250
St. Louis, MO 63141
Ph. 314/542-0011
Contact: Anne Fleming
25-0-25-25

Quality Controlled Services (QCS)

1655 Des Peres Road, Ste. 110
Des Peres, MO 63131
Ph. 800/992-2139 or 800/325-3338
Fax 314/822-4294
Contact: Yvonne Filla
20-0-20-20
(See advertisement on p. 55)

Quality Controlled Services (QCS)

St. Louis Survey Center
3630 S. Geyer Road, Ste. 112
Sunset Hills, MO 63127
Ph. 314/822-4145 or 800/325-3338
Fax 314/822-9145
Contact: Shirley Plevyak
42-38-42-42
(See advertisement on p. 55)

Superior Surveys of St. Louis
10795 Watson Road
St. Louis, MO 63127
Ph. 314/325-4982
Fax 314/965-8042
Contact: Trish Dunn
12-4-12-0

Westgate Research, Inc.
650 Office Parkway
Creve Coeur, MO 63141
Ph. 314/567-3333
Fax 314/567-7131
Contact: Germaine Eley
36-36-36-0

NEBRASKA

LINCOLN

The Gallup Organization-HQ for Processing
300 South 68th Street
Lincoln, NE 68510
Ph. 402/489-8700
Fax 402/486-6248
Contact: Ellen Hoepfner
184-184-184-184

The Gallup Organization-Lincoln Downtown
200 North 11th
Lincoln, NE 68505
Ph. 402/486-6598
Fax 402/477-3983
Contact: Charlie Colon
150-150-150-150

WRA, Inc.
1630 So. 70th Street, #100
Lincoln, NE 68506
Ph. 402/463-5054
Fax 402/483-5259
Contact: Gary L. Lorenzen
60-0-60-60

OMAHA

The Gallup Organization-Omaha
10909 Mill Valley Rd., #210
Omaha, NE 68154
Ph. 402/496-1240
Fax 402/496-1062
Contact: Dave Hoepfner
111-108-111-111

Gilmore Research Group
1620 Harney Street
Omaha, NE 68102
Ph. 402/346-6767
Fax 402/346-6561
Contact: Robin Tilton
24-24-24-24

Midwest Survey, Inc.
8922 Cumming Street
Omaha, NE 68114
Ph. 402/392-0755
Fax 402/392-1068
Contact: Jim Krieger
12-0-12-0

WRA, Inc.
10707 Pacific St., Ste. 202
Omaha, NE 68114
Ph. 402/391-7734
Fax 402/391-0331
Contact: Tom Wiese
30-0-30-30

NEVADA

LAS VEGAS

I/H/R Research Group-Las Vegas
4440 S. Maryland Pkwy., #203
Las Vegas, NV 89119
Ph. 702/734-0757
Fax 702/734-6319
Contact: Lynn Stalone
75-50-75-75
(See advertisement on p. 68)

Las Vegas Surveys, Inc.
1516 S. Eastern Ave.
Las Vegas, NV 89104
Ph. 702/598-0400
Fax 702/598-0883
Contact: Carlos Kelly
20-0-20-0

RENO

C/J Research, Inc.
Executive Plaza
1005 Terminal Way, Ste. 202
Reno, NV 89502
Ph. 800/323-0266
Fax 702/688-3788
Contact: Sherrei Binke/Terri Cotter
35-0-35-0
(See advertisement on p. 65)

MarkeTec, Inc.
20 Mary Street
Reno, NV 89502
Ph. 702/333-1221
Fax 702/333-1224
Contact: Katherine Cole
7-0-1-0

ACG RESEARCH SOLUTIONS

Chromalloy Plaza
Suite 1750
120 South Central
St. Louis, Missouri
63105

PHONE: 314-726-3403

FAX: 314-726-2503

Contact Vicki Savala

**We Offer Both
Qualitative &
Quantitative
Services:**

FREE Videotaping
Experienced Moderators

Centrally Located
Focus Group Facility for
Business & Consumers

Segmentation Studies
Attitude/Image Studies
Tracking Studies

Executive Interviews
Mystery Shopping
Litigation Research

Our most sophisticated data collection device.



When it comes to market research data collection, we believe that listening is just as important as talking.

We offer full-service market research telephone data collection by a trained staff. We have 80 WATS lines that you can monitor and the security of a software system that eliminates interviewer error.

So talk to us today. You know we'll listen.



ON-LINE COMMUNICATIONS

291 Wall Street, Kingston, NY 12401,
914/331-0061, Fax 914/331-7016

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRTS - No. of stations using CRTS for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

NEW HAMPSHIRE

NASHUA

New England Interviewing, Inc.
5 Coliseum Avenue
Nashua, NH 03063
Ph. 603/889-8222
Fax 603/883-1119
Contact: Joan Greene
14-0-14-0

NEW JERSEY

(See also New York City and Philadelphia)

ASBURY PARK

Centrac, Inc.
317 Brick Blvd.
Brick Town, NJ 08723
Ph. 201/920-0500
Fax 201/920-3896
Contact: Lisa Rust
80-50-80-80

NEW BRUNSWICK

Bruskin/Goldring
100 Metroplex Drive
Old Bridge, NJ 08857
Ph. 908/572-7300
Fax 908/572-7980
Contact: Richard Hare
140-140-140-140

Capricorn TelePlus
322-D Englishtown Rd.
Old Bridge, NJ 08857
Ph. 201/251-9000
Fax 201/251-9008
Contact: Patti Nelson
30-0-30-0

NORTHERN NEW JERSEY

Opinion Research Corporation
100 Corporate Court
So. Plainfield, NJ 07080
Ph. 908/769-8200
Fax 908/769-4842
Contact: Rob Karcezewski
85-60-85-85

Roth-Harris Communications
822 Broadway
Bayonne, NJ 07002
Ph. 201/585-1400
Fax 201/585-1524
Contact: Lou Roth
100-60-100-100

The WATS Room

120 Van Nostrand Avenue
Englewood Cliffs, NJ 07632
Ph. 201/585-1400
Fax 201/585-1524
Contact: Lou Roth
100-60-100-100
(See advertisement on p. 81)

PARSIPPANY

TMR, Inc.

Two Sylvan Way
Parsippany, NJ 07054
Ph. 201/829-1030
Fax 201/829-1031
Contact: Joe Calvanelli
20-20-20-20
(See advertisement on p. 81)

TRENTON

Response Analysis Corp.
3635 Quaker Bridge Rd.
Trenton, NJ 08619
Ph. 609/587-1022
Fax 609/586-0149
Contact: Miriam Lowe
50-50-50-50

NEW MEXICO

ALBUQUERQUE

Gilmore Research Group
2400 Louisiana Ave. N.E.
AFC Bldg. #4, Ste. 110
Albuquerque, NM 87110
Ph. 505/888-3536
Fax 505/881-0227
Contact: Frank Luna
20-20-20-20

Sandia Marketing Services
2201 San Pedro NE Bldg. 1, #230
Albuquerque, NM 87110
Ph. 800/950-4148
Fax 505/883-4776
Contact: Lana Scutt
14-14-14-0

NEW YORK

ALBANY

Fact Finders, Inc.
262 Delaware Ave.
Albany, NY 12054
Ph. 518/439-7400
Fax 518/439-7609
Contact: Stephen Ribner
30-0-0-0

On-Line Communications, Inc.
1724 Fifth Avenue
Troy, NY 12180
Ph. 518/272-1184
Fax 518/272-0018
Contact: Mary Bucca
40-40-40-40
(See advertisement on p. 76)

SUBSCRIBE!

To Quirk's Marketing Research Review

Get current information on the marketing research industry, technique discussion and the most complete directories of research suppliers available for only \$40 for one year (10 issues).

Payment of \$40 enclosed Charge Credit Card

MasterCard Visa



_____ CHARGE ACCOUNT NUMBER

_____ EXPIRATION

_____ SIGNATURE

(REQUIRED FOR ALL CREDIT CARD ORDERS)

Name _____ Title _____

Company Name _____

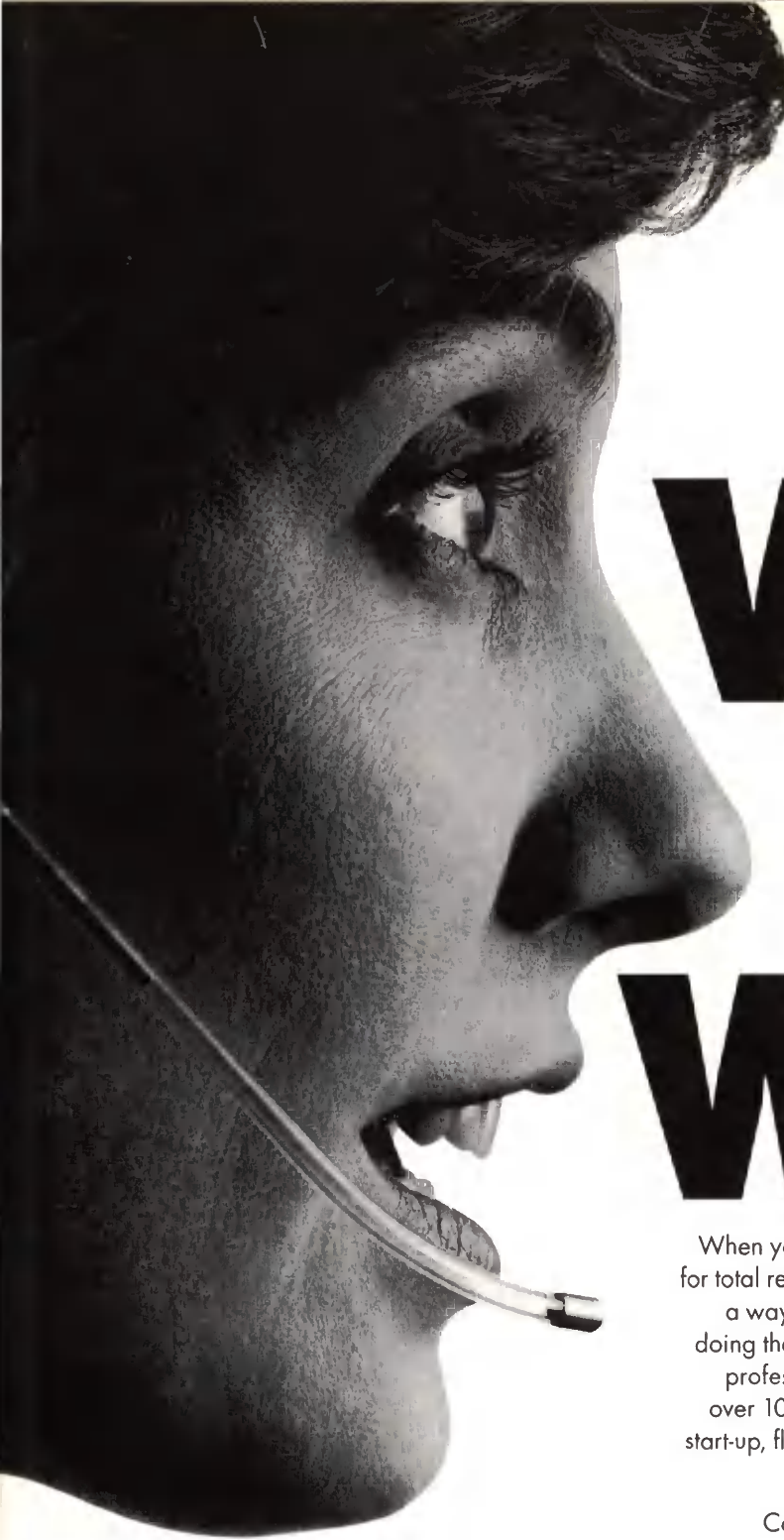
Address _____

City _____ State _____ Zipcode _____

Place
Postage
Here

Quirk's
MARKETING RESEARCH
Review

P.O. Box 23536
Minneapolis, MN 55423



THE WATS YOU WANT

When you place a WATS study at AHF, you get just what you need for total reliability and worry-free results. That's because we've found a way to avoid errors that cost you time and money. We do it by doing the work at our own in-house CATI WATS facility where AHF professionals exercise the tightest possible quality controls. With over 100 CRT's in operation 7 days a week, you can count on fast start-up, flexible scheduling, and competitive pricing for every study.

Want to know more about our WATS?
Contact AHF President Scotty Levitt for complete information.

AHF

THE IN-HOUSE RESEARCH HOUSE THAT DOES IT ALL

AHF Marketing Research, Inc. • 100 Avenue of the Americas, New York, NY 10013 • 212-941-5555 • 1-800-TAKE AHF

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRTS - No. of stations using CRTS for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

BUFFALO

Buffalo Survey & Research, Inc.
1249 Eggert Road
Buffalo, NY 14226
Ph. 716/833-6639
Fax 716/834-0372
Contact: Jeanette Levin
8-0-8-0

Marketing Decisions Group, Inc.
9141 Main Street
Buffalo, NY 14031
Ph. 716/634-2045
Fax 716/634-9560
Contact: Arup K. Sen
15-7-15-0

Smartline Systems, Inc.
Empire Tower, Ste. 510
Buffalo, NY 14202
Ph. 800/232-4484
Fax 716/842-2020
Contact: Lynn O'Connor
60-60-60-60

Survey Service of Western New York
1911 Sheridan Drive
Buffalo, NY 14223
Ph. 716/876-6450
Fax 716/876-0430
Contact: Susan Adelman
30-30-30-0

NEW YORK CITY

AHF/WATS Telephone Center
(Div. of AHF Marketing Research, Inc.)
100 Avenue of the Americas
New York, NY 10013
Ph. 212/941-5555 or 800/TAKE AHF
Fax 212/941-7031
Contact: Bill Monsky or Tibor Weiss
102-102-102-102
(See advertisement on p. 79)

A thru Z Marketing Research
34 Cliff Street
New York, NY 10038
Ph. 212/608-4877
Fax 212/608-4966
Contact: Steve Margolin
20-0-20-20

Beta Research Corporation
6400 Jericho Turnpike
Syosset, NY 11791
Ph. 516/935-3800
Fax 516/935-4092
Contact: Richard Welch
40-20-40-0

Edward Blank Ascts.
71 West 23rd Street
New York, NY 10010
Ph. 212/741-8133
Contact: Ed Blank
200-200-200-200

Brehl Ascts. Marketing Research
11 Grace Avenue
Great Neck, NY 11021
Ph. 516/466-6882
Fax 516/773-0923
Contact: Mona Nicot
18-0-18-0

Brown Koff & Fried Interviewing Network
100 Fire Island Avenue
Babylon, NY 11702
Ph. 212/206-0700
Fax 212/675-4795
Contact: Ronnee Fried
35-16-35-35

Centrac, Inc.
48 Industrial West
Clifton, NJ 07012-1712
Ph. 201/777-6000
Fax 201/777-7134
Contact: Ron Leeds
12-12-12-12

Central Marketing, Inc.
30 Irving Place, 7th Flr.
New York, NY 10003
Ph. 212/260-0070
Contact: Carol McMahon
150-150-150-150

CMR Market Research Inc.
518 Fifth Ave.
New York, NY 10036
Ph. 212/944-4545
Fax 212/944-1969
Contact: Gary Solshatz
22-0-22-0

Diversified Research, Inc.
16 No. Astor Street
Irvington, NY 10533
Ph. 914/591-5440
Fax 914/591-4013
Contact: Michael LaVelle
50-25-50-0

Ebony Marketing Research, Inc.
162-10 Jamaica Avenue
New York, NY 11434
Ph. 718/526-3204
Fax 718/526-3312
Contact: Christy Campos
6-0-6-0

Ebony Marketing Research, Inc.
2100 Bartow Ave.
Bronx, NY 10475
Ph. 212/320-3220
Fax 212/320-3996
Contact: Bruce Garfield
15-0-15-15

Facts Center
205 Lexington Avenue
New York, NY 10016
Ph. 212/679-2500
Fax 212/679-0616
Contact: Peter Kochenehal
94-54-94-94

Focus World, Inc.
146 Highway 34, Ste. 100
Holmdel, NJ 07733
Ph. 908/946-0100
Fax 908/946-0107
Contact: Paulette Eichenholtz
50-0-50-50

Glickman Research Associates, Inc.
160 Paris Avenue
Northvale, NJ 07647
Ph. 201/767-8888
Fax 201/767-6933
Contact: Jim Glickman
8-0-8-0

Louis Harris & Associates
630 5th Avenue
New York, NY 10111
Ph. 212/698-9600
40-40-40-40

Harte-Hanks Mktg. Svcs.
National WATS Division
65 Route 4 East
River Edge, NJ 07661
Ph. 201/342-6700
Fax 201/342-1709
Contact: Dan Martin
45-15-45-45

KRC Research
145 Avenue of the Americas, 7th Flr.
New York, NY 10013
Ph. 212/989-6060
Contact: Bob Romano
100-0-100-100

Manhattan Phone Center
19 West 21st Street
New York, NY 10010
Ph. 212/633-0490
Fax 212/366-5321
Contact: Ralph Borelli
50-50-50-50

Michaels Marketing Ascts.
704 Executive Blvd.
Valley Cottage, NY 10989
Ph. 914/268-8900
Fax 914/268-8973
Contact: Virginia Michaels
50-0-50-50

Mktg., Inc.
200 Carleton Avenue
East Islip, NY 11730
Ph. 516/277-7000
Fax 516/277-7601
Contact: Howard Gershowitz
200-118-200-200

Mktg., Inc.
100 Fire Island Ave.
Babylon, NY 11702
Ph. 516/277-7000
Fax 516/277-7601
Contact: Howard Gershowitz
40-16-40-40

Quality Controlled Services (QCS)
142 Central Avenue
Clark, NJ 07066
Ph. 908/815-1100 or 800/325-3338
Fax 908/499-7027
Contact: Yetta Draper
30-30-30-30
(See advertisement on p. 55)

Roth-Harris Communications
822 Broadway
Bayonne, NJ 07002
Ph. 201/585-1400
Fax 201/585-1524
Contact: Lou Roth
100-60-100-100

Schlesinger Associates, Inc.

Levinson Plaza, Ste. 302
 2 Lincoln Highway
 Edison, NJ 08820
 Ph. 908/906-1122
 Fax 908/906-8792
 Contact: Steven A. Schlesinger
 20-0-20-20
(See advertisement on p. 37)

Schulman, Ronca & Bucuvalas, Inc.

444 Park Avenue So.
 New York, NY 10016
 Ph. 212/481-6200
 Fax 212/481-6219
 Contact: Albert A. Ronca
 65-60-65-65

Seaport Surveys

34 Cliff Street
 New York, NY 10034
 Ph. 212/608-3100
 Fax 212/608-4966
 Contact: John Kummick
 20-0-20-0

Statistical Research, Inc.

111 Prospect Street
 Westfield, NJ 07090
 Ph. 201/654-4000
 Fax 201/654-6498
 Contact: Gale Metzger
 45-45-45-45

Suburban Associates

579 Franklin Turnpike
 Ridgewood, NJ 07450
 Ph. 201/447-5100
 Fax 201/447-9536
 Contact: Andy Edwards
 35-15-35-35

The Telephone Centre, Inc.

3 Cottage Place
 New Rochelle, NY 10801
 Ph. 914/576-1100
 Fax 914/576-0469
 Contact: Andy Fleischer
 135-135-135-135

TeleQuest Nationwide Telephone Interviews

211 W. Chester Street
 Long Beach, NY 11561
 Ph. 516/432-7733
 Fax 516/432-1368
 Contact: Barbara Ruderman
 20-0-20-20

U.S. WATS

404 Park Avenue So.
 New York, NY 10016
 Ph. 212/889-0043
 Fax 212/889-5624
 40-25-40-0

The WATS Room, Inc.

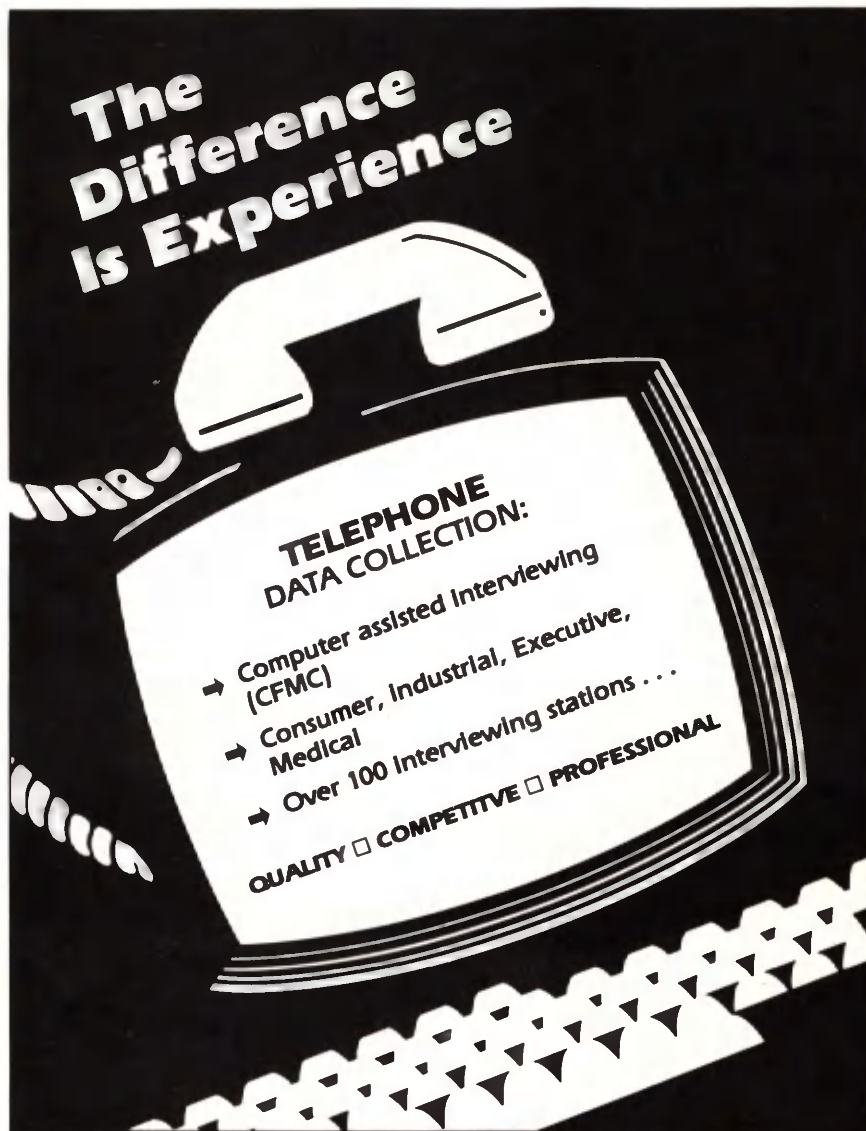
120 Van Nostrand Avenue
 Englewood Cliffs, NJ 07632
 Ph. 201/585-1400
 Fax 201/585-1524
 Contact: Lou Roth
 100-60-100-100
(See advertisement on p. 81)

POUGHKEEPSIE**On-Line Communications, Inc.**

291 Wall Street
 Kingston, NY 12401
 Ph. 914/331-0061
 Fax 914/331-7016
 Contact: Peggy O'Connor
 40-40-40-40
(See advertisement on p. 76)

ROCHESTER**Gordon S. Black Corporation**

135 Corporate Woods
 Rochester, NY 14623-1457
 Ph. 716/272-8400
 Fax 716/272-8680
 Contact: Angel Broadnax
 78-78-78-78



The WATS Room, Inc.
 120 Van Nostrand Avenue, Englewood Cliffs, NJ 07632
 (201) 585-1400
 FAX: (201) 585-1524

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

SYRACUSE

KS&R Consumer Testing Center
 Shoppingtown Mall
 3649 Erie Blvd. E.
 Syracuse, NY 13214
 Ph. 800/645-5469
 Fax 315/446-6719
 Contact: Lynette S. Van Dyke
 40-26-40-0

McCarthy Associates, Inc.
 Penn Can Mall/5775 S. Bay Rd.
 Cicero, NY 13039
 Ph. 315/458-9320
 Contact: John McCarthy
 10-10-10-0

NORTH CAROLINA**CHAPEL HILL**

FGI
 700 Eastowne Drive
 Chapel Hill, NC 27514
 Ph. 919/493-8829
 Fax 919/490-8829
 Contact: Lenny Lind
 90-90-90-90

CHARLOTTE

Consumer Pulse of Charlotte
 5625 Central Ave./Eastland Mall
 Charlotte, NC 28212
 Ph. 704/536-6067 or 800/336-0159
 Fax 704/536-2238
 Contact: Jeff Davis
 12-6-12-0

Leibowitz Market Research Ascts.
 One Parkway Plaza, Ste. 110
 4824 Parkway Plz. Blvd.
 Charlotte, NC 28217-1968
 Ph. 704/357-1961
 Fax 704/357-1965
 Contact: Teri Leibowitz
 15-10-0-0

MarketWise, Inc.
 1332 E. Morehead St.
 Charlotte, NC 28204
 Ph. 704/332-8433
 Fax 704/332-0499
 Contact: Beverly Kothe
 15-0-15-15

GREENSBORO

Bellomy Research, Inc.
 108 Cambridge Plaza Dr.
 Winston-Salem, NC 27104
 Ph. 919/765-7676
 Fax 919/765-8084
 Contact: Lacy Bellomy
 60-60-60-60

Corporate Research
 226 Highway 68 South
 Greensboro, NC 27409
 Ph. 919/812-3500
 Fax 919/812-8888
 Contact: John Deuteran
 40-0-40-40

The Customer Center, Inc.
 Horace Kelly & Ascts.
 3528 Vest Mill Road
 Winston-Salem, NC 27103
 Ph. 919/768-7368
 Fax 919/768-7428
 Contact: Jane Emerson
 22-0-22-22

FGI
 700 Eastowne Drive
 Chapel Hill, NC 27514
 Ph. 919/493-1670
 Fax 919/490-8829
 Contact: Lenny Lind
 90-90-90-90

M/A/R/C
 Northline Ave., Ste. 661
 Greensboro, NC 27408
 Ph. 919/855-6700
 Fax 919/294-3253
 Contact: Grace Atkins
 74-74-74-74

The Telephone Centre, Inc.
 1605 Spring Garden St.
 Greensboro, NC 27403
 Ph. 919/574-3000
 Fax 919/574-3007
 Contact: Liz Winter
 65-65-65-65

RALEIGH

Johnston, Zabor & Associates, Inc.
 2222 Chapel Hill-Nelson Hwy.
 Research Triangle Park, NC 27709
 Ph. 919/544-5448
 Fax 919/544-0954
 Contact: Jeffery M. Johnston
 30-0-30-30

Wilkerson & Associates
 4208 Six Forks Rd., Bldg. 2, #333
 Raleigh, NC 27609
 Ph. 502/452-1575
 15-0-15-0

TARBORO

Statistical Analysis Center
 Clark Square Mall, Main Street
 Tarboro, NC 27886
 Ph. 919/823-0950
 Fax 919/823-4621
 Contact: Rawls Howard, Jr.
 29-9-20-20

OHIO**AKRON**

Opinion Centers American, Inc.
 2872 W. Market St., Ste. D
 Akron, OH 44143
 Ph. 216/867-0885
 Fax 216/867-5429
 Contact: Suzann Davis
 10-0-0-0

Research Interviewing Center
 1 Cascade Plaza, 21st Flr.
 Akron, OH 44308
 Ph. 216/762-2141
 Fax 216/762-3019
 Contact: Jane Sheppard
 42-36-36-36

CINCINNATI

Advanced Research In Marketing
 10133 Springfield Pike
 Cincinnati, OH 45215
 Ph. 513/772-2929
 Contact: Judy Christman
 22-0-22-0

Alliance Research, Inc.
 538 Centre View Blvd.
 Crestview Hills, KY 41017
 Ph. 606/344-0077
 Fax 606/344-0078
 Contact: Molly Moreland
 70-70-70-70

The Answer Group
 4665 Cornell Rd., #150
 Cincinnati, OH 45241
 Ph. 513/489-9000
 Fax 513/489-9130
 Contact: Mary Anne Habel
 20-0-20-20

Assistance In Marketing
 11890 Montgomery Road
 Cincinnati, OH 45249
 Ph. 513/683-6600
 Fax 513/683-9177
 Contact: Irwin Weinberg
 35-10-21-21

B & B Research Services, Inc.
 8005 Plainfield Road
 Cincinnati, OH 45236
 Ph. 513/793-4223
 Fax 513/793-9117
 Contact: Lynn Caudill
 20-15-15-0

Burke Marketing Research
 2621 Victory Parkway
 Cincinnati, OH 45206
 Ph. 513/852-3842
 Fax 513/559-7555
 Contact: Beth Teehan
 110-110-110-110

Calo Research Services
10250 Alliance Rd., Ste. 230
Cincinnati, OH 45242
Ph. 513/984-9708
Contact: Patricia Calo
14-0-14-0

Consumer Pulse of Cincinnati
Forest Fair Mall
514 Forest Fair Drive
Cincinnati, OH 45240
Ph. 513/671-1211 or 800/336-0159
Fax 513/346-4244
Contact: Susan Lake
12-6-12-0

DataSource
1717 Dixie Highway, Ste. 500
Ft. Wright, KY 41011
Ph. 606/331-3632
Fax 606/331-3661
Contact: Marc Drizin
40-30-40-40
(See advertisement on p. 67)

Fields Marketing Research, Inc.
7979 Reading Rd.
Cincinnati, OH 45237
Ph. 513/821-6266
Fax 513/679-5300
Contact: Ken A. Fields
28-28-28-0

Marketing Research Services, Inc.
15 East Eighth Street
Cincinnati, OH 45202
Ph. 513/579-1555
Fax 515/562-8819
Contact: Randall Thaman
125-125-125-125

MarketVision Research, Inc.
MarketVision Bldg.
4500 Cooper Rd.
Cincinnati, OH 45242
Ph. 513/791-3100
Fax 513/791-3103
Contact: Ellen Benner
50-40-50-50

Matrixx Marketing Research
4600 Montgomery Rd., Ste. 400
Cincinnati, OH 45212
Ph. 513/841-1199
Fax 513/841-9966
Contact: Brian D. Goret
65-65-65-65

QFact Marketing Research
9908 Carver Road
Cincinnati, OH 45242
Ph. 513/891-2271
Fax 513/791-7356
Contact: Mary Swart/Nan Moore
22-6-22-22

Quick Test
11 Triangle Park Dr.
Cincinnati, OH 45246
Ph. 513/772-0134
Fax 513/772-1125
Contact: Barbara Riggs
31-28-31-31

Research & Results, Inc.
4941 Paddock Rd.
Cincinnati, OH 45237
Ph. 513/242-6700
Fax 513/242-1337
Contact: Barbara Newman
18-0-18-0

Service Industry Research Sys.
2330 Victory Pkwy.
Cincinnati, OH 45206
Ph. 513/751-5556
Fax 513/751-1303
Contact: Mirjana Popovich
32-24-32-32

Spar/Burgoyne Info. Sys.
30 West Third Street
Cincinnati, OH 45202
Ph. 513/621-7000
Fax 513/621-9449
Contact: Ann Wilking
20-20-20-0

CLEVELAND

Business Research Services, Inc.
23825 Commerce Park
Cleveland, OH 44122
Ph. 216/831-5200
Fax 216/292-3048
Contact: Tony Ramacciatti
25-0-25-25

Cleveland Field Resources, Inc.
781 Beta Dr., #E
Mayfield Village, OH 44143
Ph. 216/473-9941
Fax 216/473-0428
Contact: Daniel McCafferty
15-12-15-15

Cleveland Survey Center
691 Richmond Road
Cleveland, OH 44143
Ph. 800/950-9010
Fax 216/461-9525
Contact: Betty Perry/Harriet Fadem
15-2-15-0
(See advertisement on p. 83)

Consumer Pulse of Cleveland
4301 Ridge Road
Cleveland, OH 44144
Ph. 216/351-4644 or 800/336-0159
Fax 216/351-7876
Contact: Veronica Hoffman McCready
28-16-28-0

Focus Groups of Cleveland Survey Center
2 Summit Park Dr., Ste. 225
Cleveland, OH 44131
Ph. 800/950-9010
Fax 216/642-8695
Contact: Harriet Fadem/Betty Perry
5-2-5-0

Pat Henry Market Research, Inc.
230 Huron Rd. N.W., Ste. 100.43
Cleveland, OH 44113
Ph. 216/621-3831
Fax 216/621-8455
Contact: Judith A. Hominy
12-5-12-0

The Maffert Research Group
25111 Country Club Blvd.
North Olmsted, OH 44070
Ph. 216/779-1303
Fax 216/779-2718
Contact: Cindy Kozik
20-10-10-0

Marketeam Associates
3645 Warrensville Ctr. Rd., #340
Shaker Heights, OH 44122
Ph. 216/491-9515
Fax 216/491-8552
Contact: Nikki Klonaris
14-0-14-14

Window On The World

Over 25 Years Of Consumer Data Collection Experience

Professional Consumer Research Services For
Planning Direction And Minimized Risk
In Business Decisions

Call 800-950-9010

CLEVELAND SURVEY CENTER

Richmond Mall • 691 Richmond Rd. • 2nd Floor • Cleveland, OH 44143

CQDES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRTS - No. of stations using CRTS for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Opinion Centers, America
22021 Brookpark Rd.
Cleveland, OH 44126
Ph. 216/867-6117
Fax 216/779-3040
Contact: Betty Schwarz
35-10-35-35

Rosen Research
25906 Emery Road
Cleveland, OH 44128
Ph. 216/464-5240
Fax 216/464-7864
Contact: Shirley Jacim
10-1-10-0

COLUMBUS

B & B Research Services, Inc.
1365 Grandview Avenue
Columbus, OH 43212
Ph. 614/486-6746
Fax 614/486-9958
Contact: Judy Frederick
10-6-6-0

Clark Jones Inc.
1029 Dublin Road
Columbus, OH 43215
Ph. 614/488-2466
Fax 614/488-2564
Contact: Hugh Clark
29-10 -29-0

Focus and Phones of Columbus
2655 Oakstone Drive
Columbus, OH 43231
Ph. 614/898-5800
Fax 614/895-5840
Contact: Sally Pilcher
25-8-25-0

Project Research, Inc.
2929 Kenny Road
Columbus, OH 43221
Ph. 614/538-2440
Fax 614/538-2444
Contact: Cindy Calvert
15-0-15-15

Quality Controlled Services (QCS)

7634 Crosswoods Drive
Columbus, OH 43235
Ph. 800/242-4118 or 800/325-3338
Fax 614/436-7040
Contact: Judy Golas
23-13-23-23
(See advertisement on p. 55)

Saperstein Associates, Inc.
4555 N. High Street
Columbus, OH 43214
Ph. 614/261-0065
Fax 614/261-0076
Contact: Martin Saperstein
36-21-36-36

Dwight Spencer & Associates, Inc.
1290 Grandview Avenue
Columbus, OH 43212
Ph. 614/488-3123
Fax 614/421-1154
Contact: Betty Spencer
28-16-28-28

DAYTON

Ruth Elliott Research Co., Inc.
3077 Kettering Blvd., Ste. 300
Dayton, OH 45439-1949
Ph. 513/294-5959
Fax 513/294-8518
Contact: Dianne Howell
10-0-10-10

Shiloh Research Ascts., Inc.
6927 No. Main Street
Dayton, OH 45415
Ph. 513/274-9325
Fax 513/274-9536
Contact: Alan Sibila
8-0-8-0

TOLEDO

Barbour Research, Inc.
5241 Southwyck Blvd., Ste. 201
Toledo, OH 43614
Ph. 419/866-3475
Fax 419/866-3478
Contact: Emily Barbour
40-20-40-40

Creative Marketing Enterprises
3609 W. Alexis Road
Toledo, OH 43623
Ph. 419/473-2020
Contact: Lynn Brown
50-50-50-50

Market Research of Toledo
3103 Executive Pkwy., #106
Toledo, OH 43606
Ph. 419/534-4705
Fax 419/531-8950
Contact: Sharon Schweickert
20-0-20-0

NFO Research, Inc.
P.O. Box 315
Toledo, OH 43697-0315
Ph. 419/666-8800
Fax 419/661-8595
Contact: Sara Van Dahm
200-200-200-200

Quality Controlled Services (QCS)

3035 Moffat Drive
Toledo, OH 43615
Ph. 419/841-8300 or 800/325-3338
Fax 419/841-8349
Contact: Jackie Martzke
40-35-40-40
(See advertisement on p. 55)

OKLAHOMA**OKLAHOMA CITY**

Johnson Marketing Research, Inc.
2915 N. Classen Blvd., #50
Oklahoma City, OK 73106
Ph. 405/528-2700
Contact: Patty Casteel
14-0-14-0

Oklahoma City Research
Ruth Nelson Research Svcs.
Quail Springs Mall
2501 West Memorial Drive
Oklahoma City, OK 73134
Ph. 405/752-4710
Fax 405/752-2344
10-10-10-10

Oklahoma Market Research
3909 Classen Blvd., Ste. 200
Oklahoma City, OK 73118
Ph. 405/525-3412
Fax 405/525-3419
Contact: Clyde Nitta
19-0-19-0

TULSA

Cunningham Marketing & Rsch. Fld. Svcs.
4107 So. Yale, #LA107
Tulsa, OK 74135
Ph. 918/664-7485
Fax 918/664-4122
Contact: Roberta Cunningham
10-4-10-0

Gayle's Force, Inc./Tulsa Surveys
4530 So. Sheridan, #101
Tulsa, OK 74135
Ph. 918/665-3311
Fax 918/665-3388
Contact: Tim Jarrett
30-1-30-0

OREGON**PORTLAND**

Gargan & Associates
2705 E. Burnside, Ste. 200
Portland, OR 97214
Ph. 503/234-7111
Fax 503/233-3865
Contact: Daniel Gargan
15-2-15-15

Gilmore Research Group
729 N.E. Oregon St., Ste. 150
Portland, OR 97232
Ph. 503/236-4551
Fax 503/731-5590
Contact: David Nelson
35-20-35-35

Griggs-Anderson Field Research
308 S.W. 1st Ave., 1st Flr.
Portland, OR 97204
Ph. 503/241-8700
Fax 503/241-8716
Contact: Mary Cogan
110-80-110-110

Market Decisions Corporation
8959 S.W. Barbur Blvd., #204
Portland, OR 97219
Ph. 503/245-4479
Fax 503/245-9677
Contact: Sue Ellen Christensen
48-20-20-20

Market Trends, Inc.
2130 S.W. Jefferson, Ste. 200
Portland, OR 97201
Ph. 503/224-4900
Fax 503/224-0633
Contact: Laura Demelo
22-22-22-22

Omni Research
7689 S.W. Capitol Hwy.
Portland, OR 97219
Ph. 503/245-4014
Fax 503/245-9065
Contact: Chris Robinson
10-0-10-10

PENNSYLVANIA

ALLENTOWN

Telephone Concepts, Unltd.
3724 Crescent Center W.
Whitehall, PA 18052
Ph. 215/437-4000
Fax 215/437-5212
Contact: Robert Williams
40-0-40-0

ERIE

Moore Research Services
2610 Ellsworth Ave.
Erie, PA 16508
Ph. 814/868-4678
Contact: Peggy Moore
10-5-10-0

INDIANA

Intersearch Corporation
Indiana, PA 15701
Ph. 215/657-1400
80-80-80-80

LANCASTER

Visions Marketing Services
451 East Ross St.
Lancaster, PA 17602
Ph. 717/295-8000
Fax 717/295-8020
Contact: Robert Howell
35-8-35-20

PHILADELPHIA

Central Telephone Interviewing Sys. (CTIS)
920 Towncenter Dr., Bldg. I-10
Langhorne, PA 19047
Ph. 215/752-7266
Fax 215/741-4893
Contact: Bob Ruppe
50-50-50-50

Chilton Research Services

One Chilton Way
Radnor, PA 19089
Ph. 215/964-4602
Fax 215/964-4682
Contact: Barbara Nuessle
300-300-300-300

(See advertisement on Back Cover)

JRP

Marketing Research

CAPABILITIES

FACILITIES

SOLIO EXPERIENCE

All the Ingredients to Get the Job Done Right!

• Solid Experience

JRP's management team has considerable marketing research experience at the supplier, advertiser and advertising agency levels, enabling us to understand the importance of designing studies that meet objectives and produce actionable data and presentations.

• Capabilities

We know how to talk to all types of business people and consumers, and we're adept at designing and implementing the whole gamut of research studies. We also can provide multi-variate data analyses as well as conventional. Whether the study requires nationwide or local interviewing, the emphasis is always on quality and cost efficiency.

• Facilities

We have exclusive access to three key Malls in the Philadelphia area and one in the Dallas area. These, plus the JRP WATS Line Telephone Center, are all staffed by JRP trained interviewers.

In addition, the new JRP Research Center houses two state-of-the-art focus group rooms, two viewing rooms, three one-on-one rooms and a fully equipped kitchen.

STRUGGLING WITH A COMPLEX MARKETING PROBLEM? LET JRP HELP YOU FIND THE SOLUTION. CALL (215) 565-8840.

JRP

MARKETING RESEARCH SERVICES, INC.
100 GRANITE DRIVE, TERRACE LEVEL, MEDIA, PA 19063

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Consumer/Industrial Research Svce.
600 No. Jackson Street
Media, PA 19063
Ph. 215/565-6222
Fax 215/565-1260
Contact: Gene Rullo
35-0-35-0

Consumer Pulse of Philadelphia
2203 Plymouth Meeting Mall
Plymouth Meeting, PA 19462
Ph. 215/825-6636 or 800/336-0159
Fax 215/825-6805
Contact: Elanor Yates
20-8-20-0

The Data Group, Inc.
2260 Butler Pike, Ste. 150
Plymouth Meeting, PA 19462
Ph. 215/834-2080
Fax 215/834-3035
Contact: Ted Reed
95-85-85-85

Delta Market Research, Inc.
333 N. York Road
Hatboro, PA 19040
Ph. 215/674-1180
Fax 215/674-1271
Contact: Linda Celec
23-20-23-23

Equipax/Quick Test Opinion Centers
2200 West Broad Street
Bethlehem, PA 18018
Ph. 215/861-8880 or 800/678-0100
Fax 215/861-8212
Contact: Rosemary Murtagh
66-42-66-66

I C R Survey Research Group

605 West State Street
Media, PA 19063
Ph. 215/565-9280
Fax 215/565-2369
Contact: Fred Soulas
100-100-100-100
(See advertisement on pp. 27,29,31)

Intersearch Corporation
132 Welsh Road
Horsham, PA 19044
Ph. 215/657-6400
Contact: Robert Cosgrove
50-50-50-50

Intersearch Corporation
Northeast Philadelphia, PA
Ph. 215/657-6400
50-50-50-50

Intersearch Corporation
Oxford Circle, PA 19363
Ph. 215/657-6400
90-55-90-90

Intersearch Corporation
Mayfair, PA
Ph. 215/657-6400
45-45-45-45

JRP Marketing Research Svcs.

100 Granite Dr., Terrace Level
Media, PA 19063
Ph. 215/565-8840
Fax 215/565-8870
Contact: Kathy McCarty
33-15-20-20
(See advertisement on p. 85)

Market Dimensions, Inc.
203 E. Baltimore Pike
Media, PA 19063
Ph. 215/565-9610
Fax 215/565-7293
25-0-25-25

MarketLab Research, Inc.
100 No. 17th Street
Philadelphia, PA 19103
Ph. 215/561-5500
Fax 215/561-6525
Contact: Tom Bershad
30-15-30-30

A Tradition of Quality, Service & Integrity

COMPLETE DATA COLLECTION SERVICES

- ✓ 25 WATS Lines
- ✓ 10 CRT Stations
- ✓ Medical, Business, Consumer
- ✓ Sample Generation
- ✓ Data Reduction
- ✓ Off-Site Monitoring

J RECKNER ASSOCIATES

587 Bethlehem Pike, Suite 800
Montgomeryville, PA 18936-9741
215/822-6220 ✓ FAX 822-2238



Mar's Surveys, Inc.
Rte. 130, Cinnaminson Mall
Cinnaminson, NJ 08077
Ph. 609/786-8514
Fax 609/786-0480
Contact: Marlene Teblum
14-0-14-5

MSI International East
408 E. 4th Street
Bridgeport, PA 19405
Ph. 215/270-0919
Fax 215/272-2712
Contact: Paul Strasser
35-20-35-35

Quality Controlled Services (QCS)

2577 Interplex Drive
KOR Center A, Ste. 101
Trevose, PA 19053
Ph. 800/752-2027 or 800/325-3338
Fax 215/639-8224
Contact: Mitzi Keller
14-0-14-0
(See advertisement on p. 55)

Quick Test
2200 W. Broad Street
Bethlehem, PA 18018
Ph. 215/861-8880
Fax 215/861-8212
Contact: Margaret Burd
66-48-66-66

J. Reckner Associates

587 Bethlehem Pike, #800
Montgomeryville, PA 18936
Ph. 215/822-6220
Fax 215/822-2238
Contact: Nancy Kolkebeck
20-10-20-20
(See advertisement on p. 86)

The Reich Group
Seven Penn Center
1635 Market Street, #200
Philadelphia, PA 19103
Ph. 800/331-9316
Fax 215/972-1777
Contact: Mort Reich
200 -30-200 - 200

Research, Inc.
531 Plymouth Rd., Ste. 510
Plymouth Meeting, PA 19462
Ph. 215/941-2700
Fax 215/941-2711
Contact: Phyllis Santoro
15-12-15-15

The Response Center, Inc.
3440 Market Street, 1st Flr. East
Philadelphia, PA 19104
Ph. 215/222-2800
Fax 215/222-3047
Contact: Patrick Baldasare
70-50-70-0

Ricci Telephone Research, Inc.

30 So. Sproul Rd.
Broomall, PA 19008
Ph. 215/356-0675
Fax 215/356-7577
Contact: Sal Ricci or Chris Ricci
25-0-25-25
(See advertisement on p. 87)

Robinson Associates, Inc.
500 So. Roberts Road
Bryn Mawr, PA 19010
Ph. 215/527-3100
Fax 215/527-2421
Contact: Louise Waltman
20-0-20-20

RSVP Interviewing Services

1916 Welsh Road
Philadelphia, PA 19115
Ph. 215/969-8500
Fax 215/969-3717
Contact: Neil J. Blefeld
100-30-100-100

Survey America
1350 S. Pennsylvania Ave.
Morrisville, PA 19067
Ph. 215/736-1600
Fax 215/736-5984
Contact: Douglas Elliott
30-30-30-30

ALL TELEPHONE RESEARCH SERVICES
DATA GATHERING
IS OUR ONLY BUSINESS

Our 18th Year

CONSUMER ■ EXECUTIVE ■ COMMERCIAL
PROFESSIONAL ■ MEDICAL ■ POLITICAL
AGENT/DEALER ■ TRADE

- free questionnaire pretests
- remote monitoring
- product placement and callback interviewing

We are an independent, owner-on-premises company, dedicated to the highest standards of competence and integrity in telephone interviewing, supported by forty-three years of marketing and research experience in administering your project properly. We are the best in what we do... gathering data by telephone. No isolated or remote management levels, no burdensome expense producing gimmicks, no affiliation with full service research companies. Our clients know we are what we say. They will be happy to tell you.

Convenient Suburban Philadelphia Location

RICCI TELEPHONE RESEARCH, INC.

30 South Sproul Road, Broomall, PA 19008



215-356-0675

FAX: 215-356-7577

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Tel-One Corporation
Two Electronic Drive
Horsham, PA 19044
Ph. 215/784-5935
Fax 215/784-5900
Contact: Neal Dranoff
300-250-300-300

TMR, Inc.

1974 Sproul Road
Broomall, PA 19008
Ph. 215/359-1190
Fax 215/353-5946
Contact: Tom Ramsburg
50-50-50-50
(See advertisement on p. 31)

The Vanderveer Group
555 Virginia Drive
Ft. Washington, PA 19034
Ph. 215/646-7200
Fax 215/641-1898
73-0-73-0

The WATS House
3440 Market Street
Philadelphia, PA 19104
Ph. 215/222-5600
Contact: Dan Margherita
70-70-70-70

PITTSBURGH

Campos Market Research
216 Blvd. of the Allies
Pittsburgh, PA 15222
Ph. 412/471-8484
Fax 412/471-8497
Contact: Rene Campos
40-20-40-40

Clark & Associates
120 So. Whitfield St.
Pittsburgh, PA 15206
Ph. 412/361-3200
Fax 412/361-5103
Contact: John Clark
10-5-10-0

Direct Response Marketing
4240 Greensburg Pike
Pittsburgh, PA 15221
Ph. 412/271-4300
Fax 412/271-7121
Contact: Cindy Gaich
35-23-23-0

Gilmore Research Group
100 Forbes/Kossmann Bldg., #1130
Pittsburgh, PA 15222
Ph. 412/346-8885
Fax 412/471-8362
Contact: David Skidmore
20-18-20-20

Pert Survey Research
454 Perry Hwy.
West View, PA 15229
Ph. 203/242-2005
Fax 203/242-4857
Contact: Patty Crawford
30-0-30-30

STATE COLLEGE

Diagnostics Plus
111 Sowers Street
State College, PA 16801
Ph. 814/231-7670
Fax 814/231-7672
Contact: Joan M. Sabatino
10-10-10-0

RHODE ISLAND**PROVIDENCE**

Advantage Research Corp.
610 Ten Rod Road
No. Kingstown, RI 02852
Ph. 401/294-6640
Fax 401/294-6661
Contact: Rick Nagele
25-0-0-0

Alpha Research Associates, Inc.
395 Smith Street
Providence, RI 02908
Ph. 401/861-3400
Fax 401/861-0062
Contact: Anthony B. Pesaturo
22-0-22-0

SOUTH CAROLINA**CHARLESTON**

Bernett Research
2150 Northwoods Blvd.
E1B Northwoods Mall
No. Charleston, SC 29418
Ph. 803/553-0030
Contact: Gloria Duda
6-0-6-0

COLUMBIA

MarketSearch Corp.
2721 Devine Street
Columbia, SC 29205
Ph. 803/254-6958
Fax 803/799-9180
Contact: Melinda Mukofsky
55-0-55-0

Metromark Field Services
3030 Devine Street
Columbia, SC 29205
Ph. 803/256-8694
Fax 803/254-3798
19-0-15-0

GREENVILLE

Carolina Market Research
88 Villa Road
Greenville, SC 29615
Ph. 803/233-5775
Fax 803/233-6181
Contact: Elizabeth B. Buchanan
12-0-12-0

Research Inc.
33 Villa Rd., Ste. 202
Greenville, SC 29615
Ph. 803/232-2314
Fax 803/232-1408
Contact: Deborah S. Ott
30-0-4-0

SOUTH DAKOTA**SIOUX FALLS**

American Public Opinion Survey
and Market Research Corp.
1324 So. Minnesota Avenue
Sioux Falls, SD 57105-0625
Ph. 605/338-3918
Fax 605/394-7473
Contact: Warren R. Johnson
30-30-30-30

TENNESSEE**CHATTANOOGA**

Wilkins Research
1921 Morris Hill Rd.
Chattanooga, TN 37421
Ph. 615/894-9478
Fax 615/894-0942
Contact: Madge Wilkins
36-0-36-0

MEMPHIS

Accudata/Chamberlain Mkt. Rsch.
1036 Oakhaven Rd.
Memphis, TN 38119
Ph. 901/763-0405
Fax 901/763-0660
Contact: Valerie Jolly
10-0-10-10

Market Development Associates
5050 Poplar Ave., Ste. 821
Memphis, TN 38157
Ph. 901/682-1011
Fax 901/682-5352
Contact: Elizabeth Norwood
10-10-10-10

PWI Research
1755 Lynnfield Rd., Ste. 249
Memphis, TN 38119
Ph. 901/682-2444
Fax 901/682-2471
Contact: Karen Reddin
36-8-36-36

NASHVILLE

Quality Controlled Services (QCS)

Fairlawns Building
5203 Maryland Way, Ste. 150
Brentwood, TN 37027
Ph. 800/637-0137 or 800/325-3338
Fax 615/661-4035
Contact: Nancy Proctor
15-2-15-0
(See advertisement on p. 55)

20/20 Research
2303 21st Ave. So., 2nd Flr.
Nashville, TN 37212
Ph. 800/737-2020
Fax 615/385-0925
Contact: Greg Fuson
20-20-20-20

TEXAS

AMARILLO

Opinions Unlimited Inc.

8201 S.W. 34th
Amarillo, TX 79121
Ph. 806/353-4444
Fax 806/353-4718
Contact: Anndel Hodges-Martin
50-35-50-50
(See advertisement on p. 89)

AUSTIN

First Market Research Corp.

2301 Hancock Drive
Austin, TX 78756
Ph. 512/451-4000
Fax 512/451-5700
Contact: James Heiman
27-0-27-27
(See advertisement on p. 71)

The Gallup Organization-Austin
1016 LaPosada, Suite 290
Austin, TX 78752
Ph. 512/454-5271
Contact: Dave Pleiss
100-75-100-100

NuStats, Inc.
901 W. MLK Blvd.
Austin, TX 78701
Ph. 512/469-6400
Fax 512/469-6408
Contact: Bruce Walters
100-20-100-100

Tammadge Market Research
1616B Rio Grande
Austin, TX 78701
Ph. 512/474-1005
Fax 512/370-0339
Contact: Melissa R. Pepper
35-30-35-35

DALLAS/FORT WORTH

Edward Blank Associates
100 So. Industrial Blvd.
Eules, TX 76040
Ph. 212/741-8133
Contact: Ed Blank
175-175-175-175

Edward Blank Associates
1201 No. Watson Rd., Ste. 100
Arlington, TX 76006
Ph. 212/741-8133
Contact: Ed Blank
75-75-75-75

Decision Analyst, Inc.
2221 East Lamar Blvd.
Arlington, TX 76006
Ph. 817/640-6166 or 800/272-5974
Fax 817/640-6567
Contact: Ramona Pearcey
51-38-51-0

DSS Research
711 E. Lamar Blvd., #101
Arlington, TX 76011
Ph. 817/265-2422
Fax 817/261-0707
Contact: Roger Gates
50-50-50-50

Fenton Swanger Rsch., Inc.
14800 Quorum Dr., Ste 250
Dallas, TX 75240
Ph. 214/934-0707
Fax 214/490-3919
Contact: Ann Fenton
30-10-30-0

Focus On Dallas
12240 Inwood Rd., #400
Dallas, TX 75244
Ph. 214/960-5850
Fax 214/960-5859
Contact: Kelly Lynn Ireland
15-0-0-0

Linden Research Services, Inc.
4800 So. Hulen
Ft. Worth, TX 76132
Ph. 817/370-7678
Fax 817/370-9019
Contact: Rhonda Linden
6-0-6-0

M/A/R/C
1700 Wilshire
Denton, TX 76201
Ph. 817/566-6668
Fax 817/566-0671
Contact: Alice Bell-Baland
123-123-123-123

Probe Research Inc.
2723 Valley View Ln.
Dallas, TX 75234
Ph. 214/241-6696
Fax 214/241-8513
Contact: Richard Harris
27-0-27-0

Quality Controlled Services (QCS)

14679 Midway Road, Ste. 102
Dallas, TX 75244
Ph. 800/421-2167 or 800/325-3338
Fax 214/490-3065
Contact: Joyce Clifton
12-0-12-0
(See advertisement on p. 55)

Savitz Research Center, Inc.
13747 Montfort Dr., Ste 111
Dallas, TX 75240
Ph. 214/386-4050
Fax 214/661-3198
Contact: Nancy Monnier
80-40-80-80

OPINIONS
unlimited



What Makes Us Different, Makes Us Better

- Results You Can Trust •
- Service You Can Rely On •
- Firm Budgets and Deadlines •
- On-Site/Remote Monitoring •
- CATI using Ci2 or any
DOS-Based package •
- Experienced Ci2 •
- Programers on Staff

Opinions Unlimited: Different and Proud of It!

50 Station WATS • Moderator-Designed Focus
High Traffic Regional Mall/CRT

For a two hour bid or more information,
contact: Anndel Hodges or Neil Norwood

1-800-658-2656

CQDES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRT'S - No. of stations using CRT'S for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

EL PASO

Aim Research
10456 Brian Mooney
El Paso, TX 79935
Ph. 915/591-4777
Fax 915/595-6305
Contact: Linda Adams
20-4-4-0

HOUSTON

CQS Research, Inc.
1726 Augusta, #150
Houston, TX 77057
Ph. 713/783-9111
Fax 713/783-4238
Contact: Noel Roulin
80-0-80-80

Creative Consumer Research
3945 Greenbriar
Stafford, TX 77477
Ph. 713/240-9646
Fax 713/240-3497
Contact: Patricia Pratt
50-12-50-0

The Gallup Organization-Houston
14405 Walters Rd., Ste. 200
Houston, TX 77014
Ph. 713/444-0040

Fax 713/586-1606
Contact: Susan Boe
160-160-160-160

Higginbotham Associates, Inc.
3355 W. Alabama, Ste. 530
Houston, TX 77098
Ph. 713/626-3033
Contact: Marie Kraft
20-0-15-1

In-Touch Research, Inc.
5855 Sovereign, Ste. 200
Houston, TX 77036
Ph. 713/773-8300
Fax 713/773-8306
Contact: Debbie Thigpen
22-0-22-0

MVA Research
1726 Augusta, #100
Houston, TX 77057
Ph. 713/783-9109
Fax 713/783-4238
Contact: Michael Pope
80-0-80-60

Quality Controlled Services (QCS)
1560 West Bay Area Blvd., Ste. 130
Friendswood, TX 77546
Ph. 800/522-2385 or 800/325-3338
Fax 713/486-3831
Contact: Diana Reid
20-0-20-20
(See advertisement on p. 55)

The Woodward Group
10101 S.W. Freeway, Ste. 335
Houston, TX 77074
Ph. 800/678-7839
Fax 713/772-0265
Contact: Kerry A. Palermo
16-0-16-0

LUBBOCK

United Marketing Research
1516 53rd Street
Lubbock, TX 79412
Ph. 800/888-8463
Fax 806/744-0327
Contact: James Petrillo
120-52-120-120
(See advertisement on p. 90)

SAN ANTONIO

Creative Consumer Research
5411 Bandera Rd., Ste. 307
San Antonio, TX 78238
Ph. 512/520-7025
Fax 512/680-9906
Contact: Richard Weinhold
25-0-25-0

Galloway Research Service
4346 N.W. Loop 410
San Antonio, TX 78229
Ph. 512/734-4346
Fax 512/732-4500
Contact: Linda Brazel
66-48-66-66

VNU Operations Center
4944 Research Dr., Bldg. F
San Antonio, TX 78240
Ph. 800/395-0709
Contact: David Lustig
60-60-60-60

UTAH**PROVO**

BRG Research Service
50 East 500 No.
Provo, UT 84601
Ph. 801/373-9923
Fax 801/374-2751
Contact: Laurie Rowley
25-0-25-25

Western WATS Center
288 W. Center Street
Provo, UT 84601
Ph. 801/373-7735
Fax 801/375-0672
Contact: Ron Lindorf or Ed Ledek
175-175-175-175

The Wirthlin Group
1998 South Columbia Lane
Orem, UT 84058
Ph. 801/226-1524
Fax 801/226-3483
Contact: Kevin Crandall
117-96-117-117

Superior Quality.....Superior Rates.....**United Marketing Research.....****Simply Superior.....**

For over 15 years, United Marketing Research has been proving its strength as the pragmatic choice for data collection services. UMR is an organization dedicated to superior quality, superior client service, and competitive rates. For information on how to become part of our growing list of satisfied clients, call today.

- 119 Interviewing Stations
- 52 CRT Stations
- Data Entry/Coding/Tabulations
- Focus Group Facilities

UMR

Call Jeff Raymond at 1-800-888-8463
Ask about our "Partnership" plan.....

SALT LAKE CITY

Discovery Research Group of Utah
5525 So. 900 East
Salt Lake City, UT 84117
Ph. 801/288-8890
Fax 801/288-8897
Contact: Tom McNiven
152-62-152-152

Kagel Research
2875 S. Main St., Ste. 102
Salt Lake City, UT 84115
Ph. 801/467-4479
Fax 801/467-5117
Contact: Len Carter
7-7-7-0

Paria Research Group
390 West 800 North
Orem, UT 84057
Ph. 801/226-8200
Fax 801/226-4819
Contact: Stephen Zimmerman
75-50-75-75
(See advertisement on p. 15)

Utah Market Research
Ruth Nelson Research Svcs.
Crossroads Plaza Mall
50 West Memorial Dr.
Salt Lake City, UT 84144
Ph. 801/363-8726
Fax 801/321-4904
9-0-9-0

Valley Research & Survey
1104 E. Ashton Ave., #108
Salt Lake City, UT 84106
Ph. 801/467-4476
Fax 801/487-5820
Contact: Sally Christensen
11-11-11-4

VERMONT

BURLINGTON

Macro International Inc.
Data Collection Center
126 College Street
Burlington, VT 05401
Ph. 800/639-1310
Fax 802/863-8974
72-72-72-60

VIRGINIA

NORFOLK

ASI Market Research, Inc.
11835 Canon Blvd., Ste. B-103
Newport News, VA 23606
Ph. 804/873-6100
Fax 804/873-6102
Contact: David Stanley
100-75-100-75

Edward Blank Associates
Pembroke Five, Ste. 200
Virginia Beach, VA 23462
Ph. 212/741-8133
Contact: Ed Blank
125-125-125-125

Continental Research Ascts.
4500 Colley Avenue
Norfolk, VA 23508
Ph. 804/489-4887
Contact: Nancy Glassman
14-4-0-0

Issues & Answers Network, Inc.
2551 Eltham Ave.
Norfolk, VA 23513
Ph. 804/855-1300
Fax 804/853-8873
Contact: Peter McGuinness
80-80-80-80

Issues & Answers Network, Inc.
2697 International Pkwy.
Virginia Beach, VA 23452
Ph. 804/427-1438
Fax 804/427-1648
Contact: Peter McGuinness
64-64-64-64

Quick Test Opinion Centers
816 Greenbriar Circle, Ste. 208
Chesapeake, VA 23320
Ph. 804/523-2505
Fax 804/523-0463
Contact: Gerri Kennedy
16-0-16-0

The Strategy Group
4008 Glen Road
Virginia Beach, VA 23452
Ph. 804/498-0121
Fax 804/498-0144
Contact: Angela Girouard
12-12-12-12

RICHMOND

North American Research
3703 Carolina Avenue
Richmond, VA 23222
Ph. 803/329-4400
Fax 804/329-4368
Contact: Kirk Brady
28-0-28-28

Southeastern Institute of Research
2325 W. Broad Street
Richmond, VA 23220
Ph. 804/358-8981
Fax 804/358-9761
Contact: Robert Miller
45-0-45-45

WASHINGTON

SEATTLE

Consumer Opinion Services, Inc.
12825 1st Avenue South
Seattle, WA 98168
Ph. 206/241-6050
Fax 206/241-5213
Contact: Jerry Carter
17-0-17-0
(See advertisement on p. 32)

Decision Data, Inc.
200 Kirkland Ave., Ste. C
Kirkland, WA 98033
Ph. 206/827-3234
Fax 206/827-2212
Contact: Russ Riddle
17-17-17-17
(See advertisement on p. 43)

Gilmore Research Group
2324 Eastlake Ave. E., #300
Seattle, WA 98102
Ph. 206/726-5555
Fax 206/726-5620
Contact: Shirley Montgomery
47-39-47-47

GMA Research Corp.
11808 Northrup Way, #270
Bellevue, WA 98005
Ph. 206/827-1251
Fax 206/828-6778
Contact: Cheri Williams
34-28-24-24

Market Data Research Corp.
955 Tacoma Ave. So., Ste. 101
Tacoma, WA 98402
Ph. 206/383-1100
Fax 206/383-0852
Contact: Gene Starr
22-7-22-22

Market Trends, Inc.
3633 136th Place S.E.
Bellevue, WA 98006
Ph. 206/562-4900
Fax 206/562-4843
Contact: Nancy Hardwick
31-31-31-31

M.A.C. Specialists
4500 9th Ave. N.E., #316
Seattle, WA 98105
Ph. 206/545-8144
Fax 206/547-3953
15-15-15-15

SPOKANE

Inland Market Research Center
1715 "B" N. Atlantic
Spokane, WA 99205
Ph. 509/326-8040
Fax 509/328-4709
Contact: William Plucker
19-0-17-0

CODES - (e.g., 25-0-25-0)

1. STATIONS - No. of interviewing stations at this location
2. CRTS - No. of stations using CRTS for interviewing
3. ON-SITE - No. of stations which can be monitored on-site
4. OFF-PREMISES - No. of stations which can be monitored off-premises

Robinson Research, Inc.
E. 130 Indiana, Ste. B
Spokane, WA 99207
Ph. 509/325-8080
Fax 509/325-8068
Contact: Bill Robinson
15-15-15-15

WEST VIRGINIA**CHARLESTON**

McMillion Research Service
119 Eastwood Acres
Nitro, WV 25143
Ph. 304/755-5889
Fax 304/755-9889
Contact: Sandy McMillion
30-20-20-0

Ryan-Samples Research, Inc.
1012 Kanawha Blvd.
Charleston, WV 25301
Ph. 304/343-7655
Fax 304/342-1941
Contact: Rod Holyman
20-15-15-20

HUNTINGTON

McMillion Research Service
Huntington Mall
Huntington, WV 25623
Ph. 304/755-5889
Fax 302/755-9889
Contact: Sandy McMillion
11-11-0-0

WISCONSIN**APPLETON**

Quality Controlled Services (QCS)
1348 American Drive
Neenah, WI 54956
Ph. 414/731-2241 or 800/325-3338
Fax 414/722-3914
Contact: Sharon Cornell
18-18-18-0
(See advertisement on p. 55)

GREEN BAY

Wisconsin Research
1270 Main Street
Green Bay, WI 54302
Ph. 414/436-4646
Fax 414/436-4651
Contact: Barbara Smits
20-8-20-0

MADISON

Wisconsin Interviewing Service, Inc.
4801 Forest Run Rd.
Madison, WI 53704
Ph. 608/222-6666
Contact: John Vanderhoof
20-0-20-0

MILWAUKEE

Bisbing Research, Inc.
6525 W. Bluemound Rd.
Milwaukee, WI 53213
Ph. 414/774-0623
Fax 414/774-0385
Contact: Ron Bisbing
40-10-40-40

Consumer Pulse of Milwaukee
275 W. Wisconsin Ave.
The Grand Avenue Mall #3004
Milwaukee, WI 53203
Ph. 414/274-6060 or 800/336-0159
Fax 414/274-6068
Contact: Kathy Jorsch
12-4-12-0

Dieringer Research Associates Inc.
3064 N. 78th Street
Milwaukee, WI 53222
Ph. 414/445-1717
Fax 414/449-4540
Contact: Nancy Nichols
36-0-36-0

Lein/Spiegelhoff, Inc.
235 N. Executive Dr., Ste. 300
Brookfield, WI 53005
Ph. 414/797-4320
Fax 414/797-4325
Contact: Arlene Spiegelhoff
40-30-30-30

Mazur/Zachow, Inc.
4319 No. 76th Street
Milwaukee, WI 53222
Ph. 414/438-0806
Fax 414/438-0355
Contact: Barbara Steigerwald
15-0-15-15

Milwaukee Market Research, Inc.
2835 North Mayfair Road, Ste. 2
Milwaukee, WI 53222
Ph. 414/475-6656
Fax 414/475-0842
Contact: Susan Lehman
16-10-16-0

Pert Survey Research
1209 W. Layton
Milwaukee, WI 53221
Ph. 203/242-2005
Fax 203/242-4857
Contact: Patty Crawford
45-45-45-45

RACINE

Millward Brown, Inc.
1100 Commerce Drive
Racine, WI 53406
Ph. 414/886-7400
Fax 414/886-7406
75-50-75-75

RIVER FALLS

Rockwood Research Corp.
208 So. Main Street
River Falls, WI 54022
Ph. 715/426-5700
Fax 715/426-5705
Contact: Lisa Schwartz Morse
20-15-15-15
(See advertisement on p. 73)

CANADA**ONTARIO**

Consumer Contact, Ltd.
2450 Victoria Park Ave.
Willowdale, ON M2J 4A2
Ph. 416/493-6111
Fax 416/493-0176
Contact: John Stanton
24-24-24-0

Market Facts of Canada, Ltd.
77 Bloor Street W.
Toronto, ON M5S 3A4
Ph. 416/964-6262
Fax 416/964-5882
Contact: Gail Durance
18-18-18-0

QUEBEC

Consumer Contact, Ltd.
4369 St. Denis Street
Montreal, PQ
Ph. 416/493-6111
Fax 416/493-0176
Contact: John Stanton
20-11-20-0

Solumar/Market Facts of Canada
12 McGill College
Montreal, PQ H3B 4G7
Ph. 514/875-7570
Fax 514/875-1416
Contact: Denis Grenier
18-13-18-0

INTERNATIONAL**FRANCE**

Focus World, Inc.
88 Rue De Lourmel
Paris, France 75015
Ph. 908/946-0100
Fax 908/946-0107
Contact: Paulette Eichenholtz
20-0-20-0

Trade Talk

continued from p. 94

researchers can expect to obtain from them. Pope frequently adds helpful advice on avoiding common pitfalls in the various research areas. The book closes with some equally helpful chapters, including "Ten Tips on Being a Savvy Research Client" and "How to Work with a Research Company."

These and other chapters offer researchers a nice side benefit because they may serve as good primers for people you work with who aren't familiar with how, for example, ad research is done. Pope explains things with very little jargon, so non-researchers can understand what he's talking about. If you need to justify the decision to use or not to use a technique or to explain to management what RDD and CATI are, "Practical Marketing Research" will come in handy.

Competitive intelligence

This month's second book is about research of a different kind, albeit one that some market researchers know very well: competitive intelligence. "Analyzing Your Competition" is published by FIND/SVP, a New York consulting and research firm that specializes in information research.

Part of almost any research project is finding out what your competition is doing and measuring the opinions of its customers—especially if they also happen to be your customers. That's where competitive intelligence (CI) comes in. In conjunction with marketing research, a comprehensive CI effort can tell you a great deal about the other players in your industry. As author Tim Powell states in the preface: "...95

percent of competitive business information comes from publicly available sources. The companies who really excel at CI are not the ones with secret CI techniques, or even those who practice corporate espionage. The companies who are most successful at CI are those who are able to use this information to see trends and anticipate future moves and who are able to act on this information. Integrating CI findings into the decision-making fabric of the organization is key for success."

Many sources

While there are firms, such as FIND/SVP, that will do the searching for you, if you have access to a good library, you have access to many sources of CI. The bulk of "Analyzing Your Competition" is made up of listings of these sources and of the names, addresses and phone numbers of hundreds of other information sources you can write or call, from the State of Texas Patent Depository to the Office of Thrift Supervision.

The book's nearly 300 pages are divided into chapters and subsections focusing on information types (e.g., securities information, products, management, advertising and promotion) and various private, federal, state and international sources. Fortunately, Powell gives some guidance, both in introductory chapters and throughout the book, on how to use the information once you get your hands on it. □

"Practical Marketing Research" (\$32.95, hardcover, 314 pages), by Jeffrey L. Pope, is published by AMACOM Books, New York (800-538-4761).

"Analyzing Your Competition" (\$95, hardcover, 293 pages) by Tim Powell, is published by FIND/SVP (212-645-4500).

CLASSIFIED ADS

WANTED: FOCUS FACILITY OPERATIONS MANAGER

For new facility in Chicago. Experienced only.
Call (201) 836-1500. Ask for Rea.

Quality and Service AT the Right Price

→RAPID TRANSCRIPT

Focus Group and Interview Transcription

Call 7 Days a Week
Since 1985

Joy Biletz
215-362-5838

Discount Rates for Letter Perfect or Draft Documents
References Upon Request/Coll for o Price List

SALES OFFICES

Headquarters: Quirk's Marketing Research Review, 6607
18th Ave. So., Minneapolis, MN 55423. Phone & FAX 612-
861-8051.

West Coast: Lane Weiss & Associates, 10 Black Log Rd.,
Kentfield, CA 94904. Phone 415-461-1404, FAX 415-461-
9555.

Coming in
August:
1993-94 Researcher
SourceBook

Experience Is The Best Teacher:

We cordially invite you to learn marketing research methods and applications from the professionals who have done more customized marketing research and have taught it to more people than **anyone else in the world.**

When you attend a Burke Institute seminar, you participate in more than an exciting, on-target learning experience. You learn from what we have learned by doing tens of thousands of marketing research studies. Our seminars reflect this invaluable depth of real-life expertise, not available to you anywhere else.

It is just one of the many reasons for the rave reviews we have received worldwide from past participants at more than 1,800 marketing research seminars conducted by us during the past 18 years. Here are just a few verbatims from recent seminar evaluations:

1. The best seminar in marketing I've ever taken. Very timely. The content is absolutely excellent. Speaker - excellent, engaging. It's nice to have someone who can help us to understand... Finally, a marketing seminar which is both in-depth and practical.

Director of Market Research, Faultless Starch/Bon Ami

2. Fantastic - I finally understand the stuff that good college professors could not explain if their lives depended on it. Great manual. Speaker is really great - I have learned more from him in 2 days than I did in 2 years in grad school!

Market Administrator, GTE Directories

3. If the wealth of information, knowledge and understanding I walked away with could be converted to money, I would be a millionaire from hereafter. I was never more impressed with an instructor and a seminar as I was with this. Workbook like none I have ever been exposed to... somewhat similar to the Encyclopaedia Britannica. Speaker dynamic, exciting, brilliant, showed tremendous interest in the subject as well as each participant.

Project Coordinator, General Foods

4. Super - best 2 day seminar I've ever had. Totally targeted. Best workbook I've seen in terms of walking away with a great memory jogger. Super speaker.

Manager, ICI Pharmaceuticals

5. I have listed more than 30 ideas for immediate implementation at my company. Outstanding speaker - expert, enthusiastic, as good a listener as he is a teacher.

Manager, Consumer Research, Heinz

6. Fantastic and on-track! The manual will be a great addition to our reference library! Priceless! So well laid out. Speaker excellent, interesting - on-track.

Product Researcher, Midmark Corporation

7. The best (seminar) I've attended. Outstanding association of statistics to marketing research problems. Linked statistical background of MBA to study concerns I face everyday. (The speaker) explains statistics and methods better in 2 days than most professors have done in a semester of undergrad and grad work.

Business Research Analyst, Dow Chemical

8. Fantastic! Even though I have an M.S. in stats I have never had such a clear picture of how to apply stat techniques before. Wonderful examples to explain the theories, ideas, philosophies-superb (speaker)! Helped to motivate me to expand my use of different techniques and explore more possibilities.

Marketing Research Analyst, Consumer Power Company

9. "Intensive" is an understatement. But I sure feel I got my money's worth. I got everything I came for, and more. Incredibly helpful and useful information. Terrific workbook. Unique instructor... someone who can "do" and "teach". Wonderfully enthusiastic.

Principal, CreBive Focus

10. Incredible - better than I expected. "Biggest Bang for the Buck" of any seminar I've ever attended. Fantastic.

Marketing Research Analyst, Depuy

**The
Burke
Institute**

The BASES Group

Cincinnati Corporate Headquarters

50 E. Rivercenter Boulevard

Covington, Kentucky 41011

(800-543-8635 ext. 6135)

©1993, The Burke Institute

The Burke Institute

Partial Schedule of Seminars Through August 1993

101. Practical Marketing Research San Francisco Nov. 2-4 Chicago Nov. 23-25 Cincinnati Dec. 14-16 Chicago Jan. 18-20 New York Feb. 8-10 Cincinnati Mar. 1-3 Boston Apr. 12-14 Cincinnati May 3-5 New York May 24-26 Atlanta June 21-23 Boston July 12-14 Cincinnati Aug. 2-4	502. Generating and Evaluating New Products and Services Cincinnati Jan. 14-15 Chicago Apr. 29-30
104. Questionnaire Construction Workshop Los Angeles Nov. 9-11 New York Jan. 25-27 Cincinnati Mar. 8-10 Cincinnati May 10-12 Atlanta June 28-30 Cincinnati Aug. 9-11	504. Advertising Research Cincinnati Nov. 19-20 Cincinnati Feb. 24-25 New York Apr. 22-23 Cincinnati July 22-23
105. Questionnaire Design: Applications and Enhancements Los Angeles Nov. 12-13 New York Jan. 28-29 Cincinnati Mar. 11-12 Cincinnati May 13-14 Atlanta July 1-2 Cincinnati Aug. 12-13	505. Positioning and Segmentation Research Cincinnati Nov. 17-18 Cincinnati Feb. 22-23 New York Apr. 20-21 Cincinnati July 20-21
201. Focus Groups: An Introduction San Francisco Nov. 5-6 Boston Apr. 15-16	506. Customer Satisfaction Research Cincinnati Nov. 2-3 Chicago Jan. 21-22 New York June 10-11
203. Focus Group Moderator Training Cincinnati Nov. 17-20 Cincinnati Jan. 4-7 Cincinnati Feb. 2-5 Cincinnati Mar. 2-5 Cincinnati Mar. 30-Apr. 2 Cincinnati June 15-18 Cincinnati July 20-23	601. How to Summarize, Interpret and Explain Marketing Research Data Cincinnati Jan. 18-19 Cincinnati Apr. 5-6 New York May 27-28 Boston July 15-16
301. Writing and Presenting Actionable Marketing Research Reports Cincinnati Dec. 7-9 New York Feb. 15-17 Cincinnati Mar. 22-24 New York June 7-9 Cincinnati Aug. 23-25	602. Tools and Techniques of Data Analysis Cincinnati Nov. 30-Dec. 3 Cincinnati Feb. 9-12 Cincinnati Mar. 15-18 Chicago May 18-21 New York July 6-9 Cincinnati Aug. 17-20
401. Managing Marketing Research Cincinnati Dec. 10-11 New York Feb. 18-19 Cincinnati Mar. 25-26 Cincinnati Aug. 26-27	603. Practical Multivariate Analysis Cincinnati Jan. 20-22 Cincinnati Apr. 7-9 Cincinnati June 2-4 New York July 28-30
501. Applications of Marketing Research Cincinnati Dec. 17-18 New York Feb. 11-12 Cincinnati Mar. 4-5 Cincinnati May 6-7 Atlanta June 24-25 Cincinnati Aug. 5-6	701. International Marketing Research New York Jan. 12-13
	702. Business to Business Marketing Research Cincinnati Nov. 4-6 Cincinnati Jan. 11-13 Chicago Apr. 26-28
	Four-Week Certificate Program Cincinnati Mar. 1-26 Cincinnati Aug. 2 - Aug. 27
	2-Week Segments Cincinnati May 3-14 Atlanta June 21-July 2

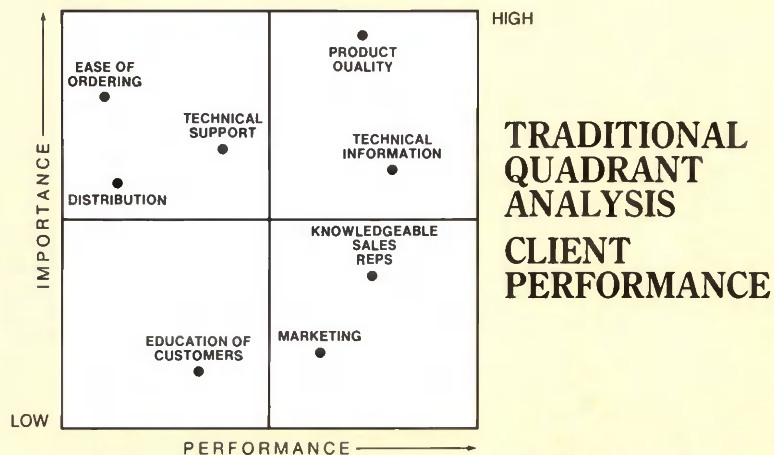
Please call Lisa Raffignone at 800-543-8635 (ext. 6135) for schedule information for the following seminars which are also currently offered by the Institute:

- Introduction to Marketing Research
- Marketing Research for Decision Makers
- Focus Groups: An Applications Workshop
- Effective In-person Presentation of Marketing Information
- Pricing Strategy and Research
- Using Multivariate Analysis: A P.C. Based Workshop
- Experimental Designs for Marketing Research
- Industry Specific Seminars
 - Healthcare
 - Pharmaceutical
 - Telecommunications
 - Financial Institutions
 - Public Utilities
 - Automotive/Transportation
- Planning Marketing Strategies and Tactics Using Actionable Research
- Effectively Selling Marketing Research Services
- Negotiating Marketing Research Contracts
- Strategic Market Simulation

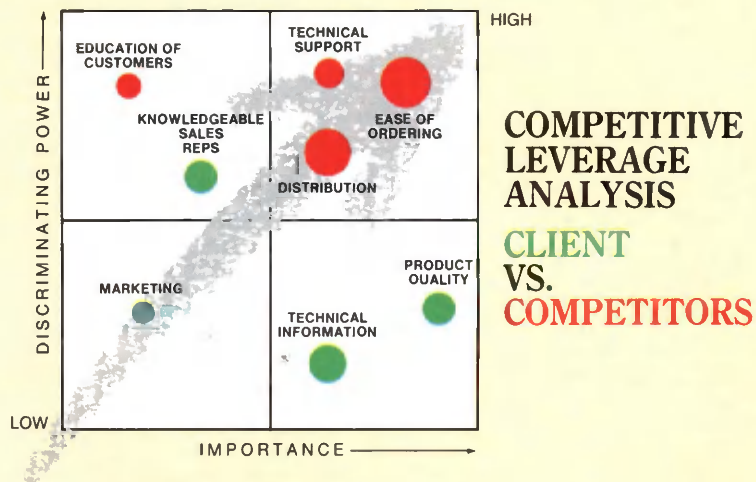
ALL OF THE ABOVE SEMINARS ARE AVAILABLE FOR IN-HOUSE PRESENTATION.

Please look over the list of our current seminars. Then call us toll-free. We will help you select the best seminar or other educational opportunity to meet your specific needs. Please call Lisa Raffignone, Marketing Manager, or Dr. Sid Venkatesh, President, at 800-543-8635 (ext. 6135) or 606-655-6135.

What's missing from this picture?



Discriminating Power!



In traditional quadrant analysis, the characteristics of your product are graphed by importance and performance. The picture may be interesting, but incomplete. Even distorted. A critical dimension measuring the discriminating power of your product is missing. In order to really understand why customers buy what they buy, you need to know just what features differentiate your product from your competitors'.

At Chilton Research Services we have developed a technique that depicts this discriminating power. We call it **Competitive Leverage Analysis or CLA**. Our clients call it "indispensable."

Call today for more information on **CLA**. Find out how our staff of analytical experts can help you make the best use of your data.

CHILTON RESEARCH SERVICES

Radnor, PA 215/964-4602

A PART OF CAPITAL CITIES/ABC, INC.