End user searching and data: the Graduate Business Resource Center experience

by Rona Ostrow¹ Deputy Director Graduate Business Resource Center Baruch College City University of New York

Introduction

The Graduate Business Resource Center of Baruch College, C.U.N.Y. is a technology based facility located in close proximity to the School of Business but physically separated from the library. It is an attempt to serve a population of approximately 3000 graduate students and faculty in the School of Business and Public Administration without having an actual graduate level business library. Since there are so many of them, and so few of us, we have emphasized enduser applications wherever possible. Moreover, we feel that part of our mission is to prepare the graduate students for the "real" world of business they'll discover upon graduation. We aim, therefore, to make available to them those data sources which they are likely to encounter within the business community or to which they can request access once employed by a firm.

Our goals are to use access points that are as user friendly as possible and to teach the students where and how to obtain the data. We do not attempt to analyze the data, but do make available such software programs as Lotus 1-2-3 to help them analyze it on their own. Of course, many of our constituents, particularly faculty members, have complex data needs beyond those of the average student/enduser. These needs are referred to our Data Resources Service, headed by Professor Siman and our Computerized Information Services, headed by Professor Lowe. Since both of my colleagues have already addressed to you, I'd like to concentrate on those areas of our service which do indeed focus on enduser and user-friendly services and which meet the needs of the average data user at this level.

Many of our constituents need data that is readily available to them once they know it exists. For example, our students often request such data as demographics, market share, market segmentation figures, advertising reach, financials, and usage of materials in production. Our role in the GBRC is to publicize the available data, emphasize new user-friendly methods of access, and teach the endusers how to meet their own data requirements.

Spreading the Word

Publicizing the available sources is a major function of our Center. The GBRC publishes <u>NewsAlerts</u> several times each semester to alert both students and faculty to new data sources,

¹Presented at the International Association for Social Science Information Service and Technology (IASSIST) Conference held in Washington, D.C., U.S.A. on May 26–29, 1988

programs, demonstrations, and services. (See figures #1 and #2). By bringing new datafiles and services to the attention of our constituency, we are trying, in essence, to "create a market" of potential users. Typically, our users may not even be aware that such data exists and, if they are, may not realize how they can use it in their research. Some <u>NewsAlerts</u> focus on new datasets available through the Data Resources Service while others announce workshops and demonstrations of data available through commercial vendors via online information retrieval.

Teaching

This, in turn, brings us to the second major function of our program. Once we have interested our researchers in the available data we then proceed to introduce them to it. We let them try it out for themselves so that they will learn how to access data without the intervention of an intermediary. Since enduser searching is becoming increasingly the norm in the business community, we want our students to feel confident that they can access the information they need long after they've completed their degrees. In addition to the more or less formal training obtained through our seminars, we also offer point-of-use assistance through Access Guides (brochures we prepare to guide endusers) and one-on-one help in the person of trained professional consultations to assist each researcher in the selection of the most appropriate data sources available both at Baruch and elsewhere.

Availability

Finally, to fulfill the third part of our perceived mission, we bring the data to them in as user-friendly a format as possible. This has, until recently, meant that we provide the students with after-training access to the Dow Jones News/Retrieval Service (which is available to us on a prepaid monthly basis as an educational institution) and Prosearch (which provides user-friendly access to both the Dialog and BRS information services). For budgetary reasons, the latter must be monitored closely and limited to research for theses, dissertations, and articles for publication. More recently, the advent of CD Rom technology has allowed us to make several of these same data sources available to a much larger audience since they. too, are prepaid. Although our facility is still small we are able, through CD Roms, to make the Disclosure database (including Spectrum Ownership) and Standard and Poor's Corporations available to our students and faculty along with such bibliographic databases in CD Rom format as PsycLit, ABI/INFORM, and ERIC.

Dow Jones News/Retrieval Service

One of the most pressing needs for data we have at the GBRC is for company financial information. Our students are constantly on the lookout for income statements, balance sheets, key ratios and the like. One of the easiest ways to make this data available to them is through the <u>Dow Jones News Retrieval Service</u>. We have arranged to prepay for the service and have configured our PCs to automatically dial up, connect, and enter a password through Smartcom. Through <u>Dow Jones News</u>, our students have access to <u>Disclosure</u> (including extracts from over 10,000 publicly held company's 10-K report and other SEC filings see figure #4), Media General (detailed corporate financial information on approximately 4,300 companies and 170 industries). Standard and Poor's (which provides brief profiles of over 4,500 companies including earnings, dividend and market for the current and past four years). Historical Ouotes (including daily volume, high, low and close for stock quotes and composites), Historical Averages, and Current Quotes, among others. Our students make particularly good use of Dow Jones News' "Quicksearch" feature. By simply entering "//quick" and a company's ticker symbol, they can immediately key into a wealth of financial information drawing from multiple Dow Jones News/Retrieval files (see figure #5). Data includes current quotes, latest news stories, a financial and market overview, earnings estimates, company profiles, and investment research reports. (see figure #6). The students may print their Dow Jones News/Retrieval results and/or save the information to a diskette for future use.

Prosearch

<u>Dialog</u> and <u>BRS</u> databases are also available at the GBRC. To make searching available for our endusers, we provide <u>Prosearch</u> software. The software is very user-friendly. We do, however, require both students and faculty to attend a short training seminar before beginning to use it. We also provide some back-up support in the form of trained graduate student assistants who also monitor usage (this costs money per connect hour, per record downloaded or printed, etc.). Within a very short period of time most graduate students (and even most faculty) become proficient at accessing the databases with minimal assistance. Among the business, economic and demographic databases most in demand at the GBRC are the PTS family of databases (<u>Forecasts</u>, <u>Times</u>) <u>Series</u>, and <u>Annual Reports Abstracts</u> as well as the bibliographic database <u>PROMT</u> – excellent for market share information, and <u>MARS</u> – useful for targeting advertising audiences). In addition, students and faculty make great use of <u>Donnelly Demographics</u> and <u>Cendata</u> for additional demographic information (see figure #7).

In order to use Prosearch, the researcher merely highlights the desired category and subject by using the up and down keys and the return key. By the way, all of this is done while offline, so no charges are accumulating for typing time. Once the researcher has selected a subject, he or she selects a database from the "catalog cards" screen (see figure #8) and enters the search request on a grid designed to enter fields with the mere touch of a key. The researcher uses Boolean connectors in the usual way and, when the request is complete, connects automatically to Dialog or BRS by simply hitting the F5 key. Although we often send our students to the Library to use the PTS print sources, their ability to use Boolean logic easily through Prosearch greatly enhances their chances of finding the exact statistical or demographic table they need.

Graphic Presentations

We have also begun to make software available for our students to analyse and present the data they've found. Although we do not teach the use of <u>Lotus 1-2-3</u> and other statistical packages, we do have a copy available for knowledgeable students to use. We also provide access to a plotter, laser printers, and a scanner which our students use to create graphic representations of their findings (see figure #9).

CD Roms

At present, the GBRC provides access to both Standard and Poor's Corporations and Disclosure in addition to bibliographic databases in CD Rom format. Once again, having this prepaid data allows us to make it available to a much wider audience. Instead of being limited to online searching for thesis, dissertation, or publication purposes, all our constituents may access this business and financial data at any time. We hope in the near future to enhance our capabilities through the acquisition of a new CD Rom product, Lotus One Source which contains both the data our students need and Lotus 1-2-3 on a single laser disk. Another anticipated acquisition is Batelle's America 2000 software package which will enable the students to make economic projections based on extensive data included in the package.

In sum, there is quite a bit of data in the fields of business and economics which can be made available to the novice user who does not require raw data or anything very sophisticated in the way of data manipulation. The way to get this data to the user is threefold: publicity, teaching, and availability. Through our publications, training sessions, and consultations, we at the Graduate Business Resource Center try to give our students access to the data they need and, more importantly, the skills to continue to meet their own requirements for information.^µ



GBRC Announces Fall Programs, Services and Hours

Welcome to the fall 1988 semester! The Graduate Business Resource Center plans a series of workshops and new services designed to meet specific research needs

Workshops

Online Information for Endusers

Learn to access Dialog databases online without the assistance of a professional intermediary. Participanis receive training, handison experience, and access to online information. Professor Ida Lowe will conduct all seminars in Room 1224, 360 Park Avenue South. Workshops are open to all Baruch faculty and graduate students.

Dates and Times

Friday, October 21, 1988 10:00 a.m - 12:00 p.m.

Friday, November 4, 1988 10:00 a.m. - 12:00 p.m.

Thursday, December 8, 1988 3:00 p.m. - \$:00 p.m.

To register, please complete the attached application and mail to: Professor Ida Lowe, GBRC, Box 262, or pliong 725-7114.

Fall Hours

Monday-Thursday 9:30 a.m. - 9:00 p.m. Friday 9:30 a.m. - 4:00 p.m. Salurday 2:00 p.m. - 6:00 p.m.

The GBRC is not open when the College Is closed. On days when there are no classes, but the College is open, the GBRC will close at 4:00 p.m. The Information Lab willingt, at present, be open on Saturdays.

CD ROM Demonstrations

The newest innovation in information technology is the database in compact optical disk format (CD ROMs). Now, without professional assistance, any researcher may access both bibliographic and informational databases free of charge.

Currently available CD ROM databases at the GBRC include Compact Disclosure, Psyclitr, ABI-INFORM, ERIC, and Standard & Poor's Corporations.

Professor Ida Lowe will demonstrate how CD Roms can benefit retearch in a series of programs to be given at the GBRC, Room 1224, 360 Park Avenue South. The programs are open to all Baruch faculty and graduate students. Dates and Times

Dates and times

General Introduction to CD ROM Databases Thursday, October 20, 1988 12:30 p.m. - 1:30 p.m.

Bushness Information on CD ROM; ABI-Inform and PsycLit Thursday, November 3, 1988 12:30 p.m. - 1:33 p.m.

Social Sciences Information on CD ROM: Eric and PsycIIT Thursday, November 17, 1988 12:30 p.m. - 1:30 p.m.

Corporate Directories on CD ROM; Disclosure and Standard & Poor's Thursday, December 1, 1988 12.30 p.m. - 1;30 p.m. (ove:)



1985 GENERAL SOCIAL SURVEYS

The 1985 General Social Surveys (GSS) are here. Produced by the University of Chicago's National Opinion Research Center (NORC), the General Social Surveys provide a cross-sectional sample of the United States adult population. The data has been collected almost every year since 1972 (no survey was done in 1979 or 1981).

The surveys are based on a 300 question interview which identifies respondents' attitudes and opinions of such issues as the family, social mobility, social coutrol, race relations, sexual mores, and national morale. This high quality data is used for research and instruction in many fields including sociology, marketing, psychology, and consumer behavior. In '1982 the National Opinion Research Center oversampled the black population, thus providing an excellent data set for studying this minority group.

This data set is now available in machine-

radable format on computer tape at the CUNY/UCC. It is a cumulative data file, with each anoual survey contained in a separate subfile. Merging all 12 yearly files greatly simplifies the use of the General Social Surveys for trend analysis of specific questions. Subsets of the data may be created for research or instructional purposes. The subsets may be used on the mainframe, either on tape or on disk, or downloaded for use with microcomputers. Special data modules may be prepared for student exercises and classroom work using these files.

In order to access the data, you will need the following information for Tape CDA 115; File 1 is the raw datafile; file 2 is a set of SPSS control cards; file 3 contains the SPSS control cards for the first half of the data; file 4 is the SPSS control cards for the second half of the data; and file 5 is a file of SPSSX control cards for the data.

		CONTENTS OF TAPE VOLUME - CDA 115				
//FIL NUM		RECFM	LRECL	BLKSIZE	BLOCK COUNT	
t i	ICPSR.ØSS8435.A	FB	\$0	32000	744	337.1
2	ICPSR GSS8435.B	FB	80	\$120	37	4.3
3.	ICPSR.GSS8433.C	FB	80	\$120	22	3.1
4.	ICPSR.GSS8435.D	FB	80	\$120	17	2.6
5.	ICPSR.GS\$8435 E	FB	80	5120	37	4.5

Figure #3: Sample page of an <u>Access Guide.</u> Meaning
EXAMPLES: [1] or [3] [2] and underwriting
Complex Search Expressions
Use parentheses () to group terms.
EXAMPLES
oil spills and (litigation or torts) Interactive w/10 [wideo or wideordive])
and retail?
IMPORTANT KEYS
HELP. Opens and doses HELP
windows. HELP windows are specific to the user's current location in the
program
CUMIMANUS. FIESS FILTEREALEDING SEE all of the active commands on
the bottom line of the screen.
SEARCH. Press [F3] to begin a new search or modify the current search.
PRINT. Prims the current item or the
utle list
KESTART, Dearsauprevious searches and retrunk to the Main
Menu.
premies PREVIOUS SEARCH. Allows return
to a previous search exacuty where is terminated.
CHANGE DISC. Allows change to any
UMI CD-ROM disc.
ENTER. Completes entry and moves
forward through the program.
GU BACK. Moves backward through the program retracing steps.
to smaper and herear of Like any Potoscatione. Agina Octoor

iassist quarterly

Figure #4: Disclosure Database (Spectrum Comership)

DISCLOSURE INTERNATIONAL BUSINESS YACHINES CORP INSTITUTIONAL OWNERS SHARES LATEST OTR FILING

		SHARES	LATEST QTR	FILING
RANK	NAME	HELD	CHANGE	DATE
1	WELLS FARGO BANK N.A.	9,543,720	-1,205,830	06/30/87
2	MORGAN J P & CO INC	8,533,000	-271,000	06/30/87
з	BANKERS TRUST N Y CORP	7,990,373	-253,664	06/30/87
- 4	COLLEGE RETIRE EQUITIES	7,785,100	-124,600	06/30/87
5	BERNSTEIN SANFORD C & CO	5,773,247	69,055	06/30/87
6	MELLON BANK CORFORATION	5,675,094	-169,164	06/30/87
7	MICHIGAN STATE TREASURER	5,496,029	557,000	06/30/87
8	NEW YORK ST COMMON RET.	5,175,000	-111,000	06/30/87
9	WELLINGTON/THORNDIKE	4,564,513	-709,384	06/30/85
10	CHASE MANHATTAN CORP	4,311,346	-10,225	06/30/87
11	CAPITAL GUARDIAN TRUST	4,068,000	-39,200	03/31/8:
12	CAPITAL RESEARCH & MGMT	3,447,700	30,000	06/30/8
. 22	ALLIANCE_CAPITAL HEMT	3,321,999	-879,861	06/30/8:
14	STATE STREET BOSTON CORP	3,295,125	62,008	03/31/8:
15	PNC FINANCIAL CORP	3,135,723	-293,795	06/30/8
16	CALIF PUBLIC EMPL RETIRM	3,099,100	-26,500	03/31/8:
17	MANUFACTURERS HANOVER TR	3,032,505	-177,552	06/30/8
		0,002,000	2	,,.

iassist quarterly

Illustration 5

Pigure #5: "Quicksearch" start-up screen.

QUICKSEARCH

COPYRIGHT (C) 1987 DOW JONES & COMPANY, INC.

An automated method for accessing quotes, company news, financial data and profile information from eight News/Retrieval services

Press To 1 Search by company stock symbol 2 Access a QuickSearch help menu

Or enter as much of the company name as you're sure of and press return ibm

END

PRESS FOR 1 IBM CREDIT CORP.

OR ENTER ANOTHER NAME OR /T FOR TOP

Figure #6: Part of a Dow Jones News/Retrieval Quicksearch. DOW JOHES OUICKSEARCH IBH CREDIT CORP. PRESS FOR 1 CURRENT QUOTES - N/A 2 LATEST NEWS ON D. TAD - N/A TRADE TO A DE SAN DE S 7 COMPANY PROFILE 8 INSIDER TRADING BUHHARY - N/A 9 INVESTMENT RESEARCH REPORTS - N/A ------TYPE PRINT FOLLOWED BY ITEN HUNDERS, SEPARATED BY COMMAS, TO PRINT SELECTED SECTIONS OF THE REPORT AT RECULAR USAGE RATES. EXAMPLE: PRINT 1,3,9 PRESS RETURN FOR INSTRUCTIONS AND PRICING INFORMATION. #11 IBM CREDIT CORP DISCLOSURE FIVE YEAR SUNHARY EPS HET INCOME YEAR SALES 118,118,000 640,247,000 1.41 1986 103,033,000 1,46 504,176,000 1985 296,429,000 162,655,000 63,691,000 41,670,000 1.42 1984 1.40 1941 110,017,000 1.19 31,274,000 1982 0.4 69.4 +5-YR GROWTH RATE (1) IBH CREDIT CORP DISCLOSURE INCOME STATEMENT QUARTERLY REPORT FOR: 03/31/67 164,993,000 HET SALES COST OF GOODS 110,689,000 OROSS PROFIT 54,303,000 R & D EXPENDITURES 118 SELL GEN & ADMIN EXP 20,013,000 INC BEP DEP & AHORT 33,490,000 DEPRECIATION & AMONT HΆ HON-OPERATING INC HA INTEREST EXPENSE HA 33,490,000 INCOME BEFORE TAX PROV FOR INC TAXES MINORITY INT INCOME 7,614,000 Hλ INVEST GAINS/LOSSES 1A A OTHER INCOME NA 25, 176,000 HET INC BEF EX ITENS EX ITEMS & DISC OPS HA NET INCOME 25,876,000 HA OUTSTANDING SHARES

FILE 575

DONNELLEY DEMOGRAPHICS

DIALOG FILE 575

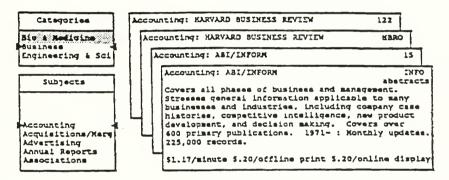
SAMPLE RECORD

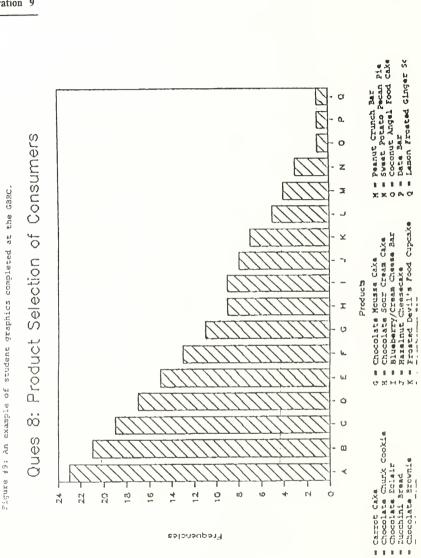
	G Accession Number *0051398					
	ST. LOUIS CITY MO	1111				/GE
ST	+State: M +City or Place: S	O T. LOUIS	S CITY MO			
			1980 Census	1984 Estimate	8 Change 80 to 84 Pr	1989 ojection_AG-
	Total Population Total Households Household Populat Average Household Average Household	ion Size	AA: 453,085 AB:178,048 AC: 443,305 AE: 2.5	440,198- 177,796- 430,418- 2.4- \$14,860-	-2.8%	423,019 AH= 172,327 413,239 2.4 \$19,279 AJ-
	Average nousenoru	THEOME	/0 :	V14,000	1	AK.=
			1980 C Number	Percent	1984 Estimate Pr	1989 ojection
	TOTAL POPULATION • 0 - 5 6 - 13 14 - 17 18 - 24 25 - 34 35 - 44 45 - 54 55 - 64 65 +	BY AGE	$\begin{array}{c} 453,085\\ BB\longrightarrow 38,447\\ BC_{2}\longrightarrow 49,814\\ BD_{2}\longrightarrow 30,175\\ BE_{3}\longrightarrow 61,143\\ BF_{3}\longrightarrow 61,774\\ BG_{4}\longrightarrow 77,347\\ BH_{2}\longrightarrow 37,347\\ BH_{2}\longrightarrow 48,526\\ BJ_{3}\longrightarrow 48,526\\ BJ_{4}\longrightarrow 79,920\\ \end{array}$		440,198 8,68 - CB= 10.78 - CC= 5.78 - CD= 12.08 - CE= 16.88 - CF= 9.68 - CG= 8.48 - CH= 10.14 - CH= 18.18 - CK=	5.3% 10.3% 17.3% 12.5% 7.9% 9.0%
CL=	FEMALE POPULATION 0 - 5 6 - 13 14 - 17 18 - 24 25 - 34 35 - 44 45 - 54 55 - 64 65 +	BY AGE	2 49,293 19,065 24,568 15,078 32,362 33,704 20,185 24,043 28,068 52,020	100.04 7.64 9.9% 6.0% 13.5% 8.2% 9.6% 11.3% 20.9%	241,490 7.6% 9.7% 5.2% 11.2% 16.0% 9.4% 8.5% 10.6% 21.7%	230,645 7.8% 9.9% 4.9% 9.4% 16.5% 12.0% 8.0% 9.5% 22.0%
	MALE POPULATION B 0 - 5 6 - 13 14 - 17 18 - 24 25 - 34 35 - 44 45 - 54 55 - 64 65 +	Y AGE	203,792 19,382 25,246 15,097 28,781 31,070 16,962 18,896 20,458 27,900	100.0% 9.5% 12.4% 7.4% 14.1% 15.2% 8.3% 9.3% 10.0% 13.7%	198,708 9.7% 12.0% 6.4% 13.1% 17.7% 9.8% 8.3% 9.4% 13.7%	192,374 9.8% 12.2% 5.9% 11.3% 18.2% 13.0% 7.3% 8.3% 13.4%
	Median Age Total I Median Age Adult I				32.4 44.0	33.5 42.9
	TOTAL POPULATION White Black Other	DB	453,085 242,576 206,386 	100.0% 53.5%	440,198 52.2% DJ= 46.8% DK= 1.0% DL=	423,019 49.7% 49.2% 1.1%
	Spanish	DD	5,531	1.28 ↔ DH:	1.30 - DN=	1.2%
	$\begin{array}{llllllllllllllllllllllllllllllllllll$	EB EC ED EE EF	59,999 	33.68 → EJ: 10.58 → EK: 17.18 → EK: 22.78 → EM: 10.18 → EI: 4.18 → EP: 1.38 → EQ: .58 → ER:	26.4% - ES= 8.6% - ET= 15.4% - EV= 26.6% - EV= 14.4% - EW= 6.0% - EX= 1.9% - EX= 1.9% - EX= .7% - LZ=	19.8% 6.4% 12.1% 27.3% 20.1% 10.2% 3.1% 1.1%

Figure #8: Prosearch selection screens.

The Database Selection Screen

After you select the high-level interface, the Database Selection screen appears:





50 -

. 8 . 8 KUDUN