

Software Design Associates, Inc.

# How to select a data processing service.

You're a professional. You got where you are by making carefully thought-out, well-informed decisions. When you have a challenging assignment, you take it apart piece by piece, carefully study its many facets. Then you make your decisions, test them, put them to work.

We're professionals, too. We go very carefully about our business of supplying prudent, economical, useful software services to our clients. All the standards you'd expect from a professional. We're thorough, we document, we get the job done.

How can you be sure we can solve your problem? We think our proven track record in consulting, design, implementation and maintenance on data base systems, on-line systems, and batch systems will measure up. And our technical expertise in maintenance, conversion, software, minicomputers, development and documentation speaks for itself.

So do our over 100 clients in manufacturing, banking, car rental, insurance, utilities, and dozens of other fields.

But don't take their word for it. Or ours. Being the professional you are, we know you have to convince yourself. That's why we've tailored this package for you.

So, go ahead. Take a closer look. Satisfy yourself about the kind of company we are. Then make your own decision. And put SDA to work.

# DEVELOPMENT AND DOCUMENTATION

Data Processing Services from SDA



## Just take your pick.

MARTIN L. ARONOW

SDU

SOFTWARE DESIGN ASSOCIATES, INC. 1620 ROUTE 22 UNION, NJ 07083 (201) 687-5910

# DEVELOPMENT AND DOCUMENTATION

Data Processing Services from SDA





Software Design Associates, Inc.

#### "How can you be sure we can solve your problem?"

## Development

Since 1968 Software Design Associates has been performing development projects on nearly every mainframe and minicomputer there is. We have people skilled in virtually every computer language and operating system. And, we can offer you the benefit of our experience in dealing with a wide and diverse range of applications.

As a result, you will find SDA development services helpful no matter how basic or complex your problem is.

For example. If you need your problem defined, programs developed and the entire effort managed—SDA can do it. On the other hand, if you already have your specifications and want someone to do the programming—SDA can do the job. Or, if you're looking for a people resource to supplement your present staff—SDA can provide experienced personnel with technical, applications, and management skills.

SDA can offer you these services because of the approach we've taken toward the development phase of our work. It's an approach based on talented and experienced people.

At SDA we have more than 200 staff members. Virtually all of them carry a degree — many have advanced degrees in the sciences and arts. All participate in continuous training programs — both internally and externally — and are up-to-date with the state of the art.

We also maintain these high personnel standards in our on-going recruiting program. At SDA we are continuously hiring new people on the basis of their skills, rather than for specific assignments.

To us, development means planning, management, top down design, structured programming. A carefully developed approach for providing the best, most reliable system for large-scale and minicomputer applications.

SDA has taken its experience in maintenance programming and utilized it to develop programming standards and approaches that facilitate future maintenance. We have also established a set of documentation standards that place emphasis on labeling, numbering, and program organization conventions.

We have put reliable standards above unbridled creativity. Because, while you need software that's imaginative and resourceful, you also want standards of development you can depend on.

And these standards of reliability and maintainability are what SDA development is all about. It's the kind of long-range thought you'll come to expect from us.

Our people are trained to thoroughly review all facets of each project up front. To study, think, and plan before they move. The result is an effort that comes in on time and under budget. A system that is exactly tailored to your needs.

So if you have a development problem, talk to us. We think you'll find SDA is the answer.

#### "All the standards you'd expect."

## **Documentation**

Here's a quick review of SDA's documentation services. They are the result of a a unique approach to documentation that is built around technical writers...not programmers. Each level of documentation is developed for its ultimate user by people capable of communicating with that user.

Operations documentation is developed by writers experienced in computer operations. User documentation is developed by methods people, not computer programmers. SDA documentation is designed with the user in mind.

If you want to know if these documentation standards are up to your problem. Take a look.

## MAINTENANCE AND CONVERSION

Data Processing Services from SDA





Software Design Associates, Inc.

## "We're thorough, we document, we get the job done."

#### Maintenance

Building systems takes talent, experience, imagination, a commitment to quality. But what happens when the system is in place?

You need maintenance. You need solutions to personnel and technical problems. You need to keep the system working and responding in your business—with the least possible drain on your staff resources.

Software Design Associates has carefully cultivated personnel policies that make us the kind of maintenance support resource you're looking for. We rotate our people. Keep them stimulated with varied assignments. And make available to them many opportunities for continuing their education and growth.

The more than 200 permanent, technical SDA staff members and affiliated staff professionals form a fluid, dynamic resource from which we can draw competent, responsive service personnel to maintain your system.

These skilled professionals are our major resource. Our single most important investment. We treat them with respect and we reward their excellence. We expect their best. And we get it.

That means you get maintenance support you can count on. And that you can free up valuable staff for other assignments in your company—large numbers of programmers who otherwise would be assigned to permanent maintenance duty.

So, when your system is being redesigned or converted, and the old system has a limited lifespan, you have maintenance depth that lets you move key people from maintenance assignments to developmental tasks. You, therefore, can put your human resources where they are most critically needed.

We are prepared to maintain programs where little or no documentation exists. If none exists, we create it. If documentation does exist, we upgrade it. In all cases we fully maintain the programs.

This is the kind of maintenance strategy we've used in places like:

**An insurance company,** where we are maintaining second generation Autocoder programs while a new system is being developed. A communications firm, where our staff is generating one-time programs in a report generation language.

A commercial bank, where we are maintaining second generation Autocoder programs while bank employees with that skill have been promoted to more strategic assignments.

A brokerage firm, where we are maintaining third generation COBOL programs while the client's staff develops new systems.

A utility firm, where we operate and maintain an information system that is run annually to save the client allocating personnel for an infrequently used system.

A union, where we maintain a system we developed on a turnkey basis.

**A commercial bank**, where we provide "on call" maintenance for a Demand Deposit Accounting System written in Autocoder on a retainer basis.

So, whatever your need, this is the kind of maintenance support you can expect from SDA.

#### "We supply prudent, economical, useful services."

## Conversions

You're rebuilding a system. Your demands have been changing, and your system must respond. Conversion becomes imperative. You need a technique for preserving the investment you already have in the system, while upgrading its performance.

At Software Design Associates, we believe that the conversion approach you select should depend on your program requirements. COBOL programs are most effective with reasonable internal documentation. So in this case we don't use a translator. However, if conversion is from one assembly language to another, translation could be the answer.

It's simple: the demands of the system dictate the conversion techniques.

This kind of pragmatic simplicity is the common thread in our conversion philosophy.

We abhor waste. We utilize the basic structure of a system. If the existing output formats are viable, we use them. The same goes for existing data elements, editing and processing requirements. Rebuilding the programs within the system is economical. It's wise. It saves you money.

We call this approach "renovation." Because it's so much like what a construction crew does with a useful, functional building that needs upgrading.

We take an out-of-date, deteriorating system — usually written in a first or second generation language — and reduce it to its basic, valuable structure.

Then we can modernize and rebuild the structure. We can convert the labeling of data elements. We can reconstruct the organization of files. We can update the data acquisition and editing techniques.

The result is a system that contains the best of its past while developing the greatest potential for its future. A system written in a higher level language. It performs the same functions. But it's been modernized. It's flexible. It can change.

This cost effective, technically feasible approach works. At SDA we know because we've proved it. On conversion and renovation projects like:

A large demand deposit accounting system from DOS COBOL to OS COBOL for a bank.

**A billing system** from second generation Autocoder to third generation COBOL for a utility, utilizing structured programming and HIPO charts.

A second generation information system to a third generation COBOL system with no changes in files or reports for a government agency.

Programs and data from one database system to another for an industrial firm.

**OS Assembler programs** to DOS Assembler programs to allow for running on small remote computers for a credit firm.

The secret to thorough, reliable maintenance and conversion is a philosophy of careful, structural examination — and the wise use of people and resources to make your system work for you.

If you'd like to be in on the secret, contact Software Design Associates, Inc.



**Software Design Associates, Inc.** 270 Madison Avenue New York, New York 10016 (212) 686-2032

## **CLIENT LIST**

## Software Design Associates, Inc., has provided data processing services for the following clients:

AIRCO, Inc. Almqvist-Wiksell Information Corp. AT&T American Airlines American Bankers Assn. American Bible Society American Broadcasting Co. American Can American Cyanamid Co. American Express Company American International Group American Reinsurance Co. ASCAP Auerbach Corporation Aurora Products Corp. Avis Rent A Car System Avon Products Inc. Bache Halsey Stuart Baker & Taylor Company Bankers Trust Co. **Bell Laboratories** Blue Cross/Blue Shield of Connecticut Blue Cross/Blue Shield of Delaware Blue Cross/Blue Shield of New York Blyth Eastman Dillon & Co. BMW of North America Borden, Inc. Bradford National Clearing Corp. Branch Motors, Inc. Brown, Brothers Harriman Burns & Roe Burroughs Corp. Canada Dry Capitol Record Club Celanese Corporation Central Hudson Gas & Electric Co. Chase Manhattan Bank, N.A. **Chemical Bank** Chemical Construction Corp. City of New York Colgate-Palmolive Company Colonial Penn Group Combustion Engineering Inc. Con Edison Container Transport International Inc. Continental Group Coopers & Lybrand **CPC** International Dell Publishing Co.

D.H.J. Industries E.P. Dutton, Inc. Edison Electric Institute Engelhard Industries Equitable Life Assurance Exxon Corporation Fairchild Publications Fashion Institute of Technology Fiat Motors of North America First National City Bank First Pennsylvania Bank FMC General Adjustment Bureau General Electric International Gibbs and Hill Gimbels Philadelphia Great American Ins. Co. Great Northern Nekoosa Corp. GTE Guardian Life Frank B. Hall & Co., Inc. Health Insurance Plan Hearst Publications Hertz Corporation Hoffman-La Roche, Inc. Howard Stores Hunter College, C.U.N.Y. **IBM** Corporation Interpublic Group of Co.'s Interstate Dept. Stores Irving Trust Company I.U. International **INCO** Limited ITT Joint Computer Center, Inc. Thomas J. Lipton, Inc. Lederle Labs Loral Corporation Managistics, Inc. Manufacturers Hanover Trust McGraw Hill Media Payment Corporation Metropolitan Life Insurance Co. Midlantic National Bank Morgan Guaranty Trust Co. Morgan Stanley Co., Inc. National Cash Register National Lead Nestle Company



News Election Services NYC Housing Dev. Admin. NYC Transit Authority New York Telephone Company Nichimen Corporation North American Philips Corp. North American Rockwell Olin Chemical Ortho Pharmaceutical Corp. Pan American World Airways Paramount Pictures J.C. Penney Company PepsiCo, Inc. Pepsi-Cola Pfizer, Inc. Prudential Life Insurance Co. Public Service Electric & Gas **Readers** Digest **Riverside Research Institute** Riviana Salomon Brothers Savin Business Machines Corp. Schroder Bank So. New England Telephone Smith Barney Harris Upham Inc. Standard Security Life Sun Chemical Company Sun Information Services Taxicab Industry Pension Teachers Ins. & Annuity Teleprocessing Ind., Inc. Teleprompter Ticketron Time, Inc. Time Square Stores Corp. Turner Construction Co. Union Carbide United Merchants and Manufacturers U.S. Dept. of Transportation U.S. Federal Energy Admin. U.S. Federal Trade Commission U.S. Small Business Admin. U.S. Trust Company United Technologies Corp. Western Union Telegraph Co. Weston Instruments White, Weld & Company

#### SOFTWARE DESIGN ASSOCIATES, INC. 260 Madison Avenue, New York, NY 10016 (212) 686-2032

- 270 Madison Avenue New York, New York 10016 (212) 686-2032
- 625 North Michigan Avenue Suite 500 Chicago, IL 60611 (312) 642-6043
- 33 Lewis Street Greenwich, CT 06830 (203) 661-5390
- The Exchange, Suite 306, Room 5 270 Farmington Avenue Farmington, CT 06032 (203) 677-6693
- 1620 Route 22, Union, NJ 07083 (201) 687-5910
- 275 South 19th Street Suite 1500 Philadelphia, PA 19102 (215) 545-0494

## SOFTWARE PRODUCTS AND MINICOMPUTER SYSTEMS

Data Processing Services from SDA





Software Design Associates, Inc.

## "We bring high standards of reliability to what we do."

## **Software Products**

When you shop for software, what do you look for? A hedge against the rising cost of software. Your hardware expenses may be falling—but, simultaneously, software costs are rising fast.

This means one thing. That the software you buy has to be maintainable. Reliable. You need software you can count on.

How do you find it? What do you look for?

You look for reliability.

The mark of quality of a software package comes from the flexibility of its architecture. It's built in. It has to be. You can't escape it. You've got to have it if you're going to rely on the software you pay for.

Software Design Associates builds software products that meet a broad range of requirements, and all live up to SDA's stringent quality controls. Controls you can count on.

Included in this SDA product line are software packages based upon the IBM 5110 Small Business System for first-time users. They are designed so the client can rely on them for payroll, billing, accounts receivable, accounts payable, general ledger, inventory control, and other applications. The programs are written in BASIC.

For companies that are utilizing the IBM Series/1, SDA offers a number of applications packages similar to, but more sophisticated than, those we provide for the IBM 5110. Such packages allow for multi-terminal input and larger data files. The programs are written in PL/1.

For large mainframe users, SDA software packages include our General Ledger, Accounts Payable, and Accounts Receivable Systems. These packages operate individually or as an integrated accounting system. The programs are all written in COBOL and operate on most mainframe computers that support an ANSI COBOL Compiler.

SDA software means quality you can count on. Packaged or custom. A standard of excellence. Flexibility. The SDA software package.

#### "We think our proven track record in consulting, design, and implementation speaks for itself."

## **Minicomputer Systems**

When you're in the market for minicomputer hardware, what do you want from a minicomputer supplier?

Independence? Software know-how? Long-lasting vendor relationship? A proven track record?

Software Design Associates can give you a comprehensive custom or turnkey service with a difference. The difference is our track record. SDA's people, experience, clients. SDA's vast body of software accomplishments.

SDA's software maintenance capability. (We do not have a hardware maintenance staff; but we will arrange an advantageous hardware package—either with the manufacturer or an independent maintenance contractor.)

SDA can offer you the assurance of unclouded professional judgment. We're independent of any single hardware manufacturer. The only interest we serve is your interest. We have working relationships with virtually all of the hardware manufacturers. But we select the hardware configuration that is most advantageous to you.

Software Design's experience in systems and program development, as well as our depth of technical capability, is part of the operational strategy built into SDA's structure.

And this strategy is based on careful planning.

You've heard a lot of talk about this kind of planning. But many software people don't actually know how to plan.

SDA turnkey and/or software projects start with detailed plans that have been agreed upon up front. Dynamic plans that can grow—allowing for deviations and adjustments.

Without this kind of far-sighted, detailed planning, you could be the victim of a myriad of unforeseen problems. Problems that could lead to more costly and delayed implementation.

SDA's project review committee is your insurance against such unexpected disaster. They review, analyze, test the plan to see if it is feasible, applicable, realistic. They make sure it can be brought in on time, and then they hold SDA's staff to the timetable.

At SDA, due dates are sacred.

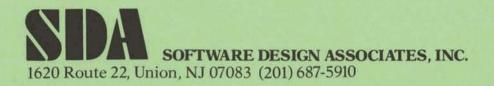
So, if you're interested in minicomputer development, we can help. With a complete consulting service, including:

- Installation planning
- Hardware configuration
- Financing
- Software configuration
- Application software
- Conversion assistance
- On-site operator training
- Software maintenance
- Forms and supplies

When you're looking for minicomputer hardware, think about the difference SDA can offer. Track record. Experience. Independence. Long-lasting relationships. Software know-how. It's a package that gives you assurance in a bewildering minicomputer marketplace.



**Software Design Associates, Inc.** 270 Madison Avenue New York, New York 10016 (212) 686-2032



**Technical Consultant** ......\$325.00 per day Extensive data processing and high level management experience as well as a broad background in a variety of industries, applications, languages, software and hardware.

Sr. Programmer Analyst ......\$235.00 per day Experienced in systems design, program design and specifications, and programming using many higher level languages. Also has experience using data base management systems in the implementation of applications. Able to work independently or with a team and has good communications and writing skills.

**Programmer Analyst ......\$215.00 per day** Experience in program design and programming including computer conversions and program maintenance and development. Experienced in creating programming specifications to create a structured program.

**Sr. Programmer** ......**\$195.00 per day** Has experience in programming in higher level languages and requires minimal supervision. Experienced in structured programming.

**Programmer** ......\$175.00 per day Has experience in coding, testing, debugging, documenting and implementing programs from written specifications with some supervision and direction.

Associate Programmer ......\$140.00 per day Has a degree in computer sciences and has completed the SDA Business Data Processing Course which provides an interface between academic world and business data processing. Capable of coding from written detailed specifications with close supervision and direction.

Special Skills Mini-Computers and Telecommunications Sr. Consultant . . . . . . . . . \$355.00 per day Consultant . . . . . . . . . . . . \$305.00 per day Programmer Analyst . . . . . . . . \$255.00 per day

Note: These fees are effective as of January 1,1979. These prices are exclusive of Federal, State, County or Local sales, property, use and other taxes which may be applicable.

#### SOFTWARE DESIGN ASSOCIATES, INC.

Offices in: New York, NY 🗆 Chicago, IL 🗆 Philadelphia, PA 🗆 Farmington, CT 🗆 Greenwich, CT

SOFTWARE DESIGN ASSOCIATES, INC. 1620 Route 22, Union, NJ 07083 (201) 687-5910

## Schedule of fees

**Technical Consultant** ...... **\$325.00 per day** Extensive data processing and high level management experience as well as a broad background in a variety of industries, applications, languages, software and hardware.

**Consultant ...... \$275.00 per day** Experienced in project leadership in a variety of environments. A background in user interface coupled with excellent writing skills. Programming experience with on-line systems and large scale systems.

**Sr. Programmer Analyst .... \$250.00 per day** Experienced in systems design, program design and specifications, and programming using many higher level languages. Also has experience using data base management systems in the implementation of applications. Able to work independently or with a team and has good communications and writing skills.

**Programmer Analyst ...... \$225.00 per day** Experience in program design and programming including computer conversions and program maintenance and development. Experienced in creating programming specifications to create a structured program.

**Programmer** ...... **\$175.00 per day** Has experience in coding, testing, debugging, documenting and implementing programs from written specifications with some supervision and direction.

Associate Programmer .....\$150.00 per day Has a degree in computer sciences and has completed the SDA Business Data Processing Course which provides an interface between academic world and business data processing. Capable of coding from written detailed specifications with close supervision and direction.

Note: These fees are effective as of January 1, 1980. These prices are exclusive of Federal, State, County or Local sales, property, use and other taxes which may be applicable.

#### SOFTWARE DESIGN ASSOCIATES, INC.

Offices in: New York, NY 🗆 Chicago, IL 🗆 Philadelphia, PA 🗆 Farmington, CT 🗆 Norwalk, CT

Software Design Associates, Inc. Founded in 1968 (212) 686-2032 Offices In: New York City, Greenwich, Conn., Union, N.J., Philadelphia, Pa. Ser.

C'AR -

