

25

Y E A R S

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ADPSO Chairs:

- 87 Goldberg
- 88 Courtney
- 89 Welke
- 90 Eshea
- 91 Hamilton
- 92 Laurence
- 93 Keane
- 94 Mann

Twenty-five years ago, ADAPSO was formed by a small group of data processing entrepreneurs. Through their efforts and a myriad of other hardworking volunteers, ADAPSO has become a powerful voice for the computer software and services sector.

This book represents an attempt to provide a series of "snapshots" from the association's 25 year history in parallel with the first 30 years of the software and services industry. Thousands of people have contributed to ADAPSO's growth and success, and hundreds of thousands have helped build the computer software and services industry. It is impossible to provide a complete history in these limited pages.

The book is designed to bring back memories of years gone by, worlds conquered or lost, people who made things happen, and the entrepreneurial spirit that makes this industry so exciting. Perhaps it will evoke a smile, a tear, or start a discussion. If we have overlooked something near and dear to your heart, please add it where you feel it belongs. Remember, it's your book.

This piece celebrates the people who built this industry when there were no rules, and those individuals who continue to conquer tomorrow's horizons. It is dedicated to those of whom the great American philosopher Pogo reflected, "We are confronted by insurmountable opportunities."

November 4, 1986

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and services  
industry  
association



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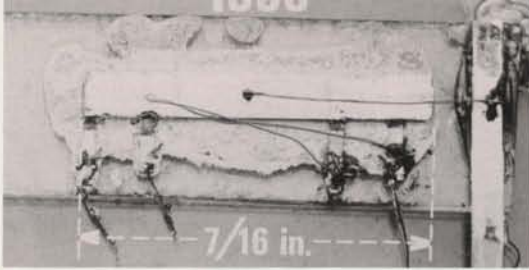
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# 25

**Y E A R S**



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**1956**

IBM signs a consent decree with the Department of Justice that forces IBM to form a separate subsidiary for its computing services division, Service Bureau Corporation (SBC). This paves the way for computer services companies to become established and marks the future of the independent computer services industry.

Firms begin to locate in California's Santa Clara Valley, signaling the beginning of today's Silicon Valley.

**1957**

Arthur D. Little study estimates the total future computer purchase value to be approximately \$2.4 billion. The firm prefaces its study by noting its findings are dependent upon technology remaining at its current state.

The first live user-written FORTRAN program runs successfully on its second attempt at Westinghouse-Bettis.

**1958**

SAGE, the Air Force's on-line, real-time air defense system, premieres at McGuire Air Force Base in New Jersey.

1. The TI oscillator, the first working model of an integrated circuit, is developed by Texas Instruments' Jack St. Kilby.

2. The first completely transistorized supercomputer, the CDC 1604, is designed by Seymour Cray of Control Data Corporation.

**1959**

LISP, a language for list processing, goes into use. An acronym for LISt Processor, it introduces the concept of artificial intelligence for computers.

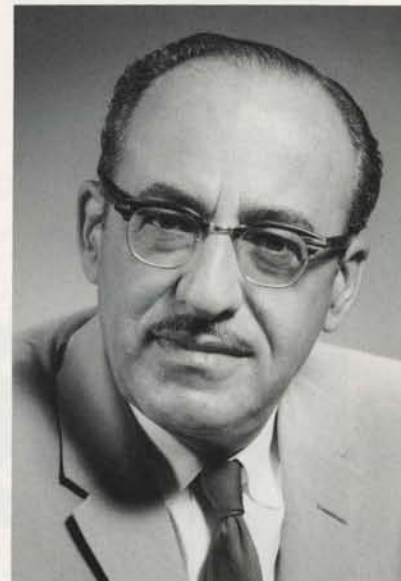
3. Led by Grace Hopper, the Committee on Data Systems Languages, CODASYL, establishes a common language for business data processing. Common Business Oriented Language, COBOL, is published shortly thereafter.



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## 1960

Organizational meetings are held throughout the year by companies serving clients through data processing centers to determine whether or not these firms have enough in common to justify forming a trade industry group.

Grace Hopper of Univac and Howard Bromberg of RCA show COBOL compatibility by successfully trading programs between RCA 501 and Univac II computers.

Richard Nixon is projected the winner in the presidential election based on CBS's computer data and software while NBC's computer data and software predicts John F. Kennedy.

## 1961

4. A non-profit trade association of "the most reputable data processing service bureaus in the United States, Canada and abroad" is formed. After considering names like the Office Services Institute, Inc. and the Data Activating Technical Association (DATA), the group settles on the Association of Data Processing Service Organizations. Romuald Slimak of Sperry Corporation is elected President.

The number of full-time programmers and operators tops 60,000.

5. William Evans, left, is the first ADAPSO staff member, serving as Executive Vice President and Secretary.

Projects planned for ADAPSO's first year include publishing a directory of data processing service centers, conducting two educational symposia, preparing a Code of Ethics, and working to develop accounting systems for independents, a newsletter, a salary survey, and a group insurance program.

6. Bell Laboratories' Nike Zeus project—the first time a computer is used in designing another computer.

## 1962

7. Clifford G. Green of Statistical Reporting and Tabulating, Ltd. is elected 1962-63 ADAPSO President.

ADAPSO takes its first position on bank involvement in the computer services industry and issues the following statement:

"ADAPSO strongly opposes the bill which permits bank service corporations to perform computer services for persons other than banks in competition with data processing

More than 10,000 computers are estimated to be in use worldwide. More than 9,300 are said to be in the United States.

More than 110 professional services firms are formed during the early part of the year.

The computer industry enjoys its first \$1 billion year, according to IEEE statistics.



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businesses. Bank service corporations would have unfair competitive advantages such as: 1. built-in customer lists composed of bank depositors and borrowers, 2. sale of computer services at or below cost merely to meet overhead, and 3. providing services free or at nominal charge to attract new business for banks. We urge that hearings be reopened or that the bill be amended to require that bank service corporations provide services exclusively to banks."

1. ADAPSO introduces its first logo, resembling a reel of computer tape paired with a couple of punched cards. It is hoped this insignia will become an international seal of acceptance and reliability for the data processing services industry.

Interest in ADAPSO's Management Symposia grows as 51 registrants participate in ADAPSO's Philadelphia Management Symposium, October 15, at the Burroughs Corporation in Paoli, Pennsylvania.

ADAPSO committees include Accounting Systems, Auditing, Code of Ethics, Professional Relations, Membership, Personnel Testing, Public Information and Salary Survey.

2. As of January 15, ADAPSO boasts 24 charter members and an overall membership of 41 corporate members, 1 branch member, 6 associate members, and 1 individual member. The first issue of ADAPSO's newsletter, *ADAPSO News*, is published.

**1963**

4. H.W. Robinson of C-E-I-R, Inc. is elected 1963-64 ADAPSO President.

ADAPSO voices its opinions regarding unfair competition and the inherent dangers of banks offering public data processing services during visits with the Comptroller of the Currency, Small Business Administration, the Department of Justice and several congressional committees.

IBM San Jose develops a voice response computer.

*Beat the Dealer*, authored by Dr. Edward O. Thorp, details the use of computers for working out the odds in black jack. So successful is the system that Thorp is promptly banned from the game in a few casinos.

IBM introduces disk file storage with its 1440 series. Disks resemble phonograph records and hold 3,000,000 characters.

3. American Airlines initiates SABRE, the first computerized airline reservation system, still one of the largest data bases in use today.

Univac drops marketing of round hole punched cards, leaving only the IBM Hollerith punched cards.

The first Univac I is retired to the Smithsonian after more than 73,000 hours of use.

Use of computers is spreading. Metropolitan and Travelers insurance companies sign major network contracts while more than 1,400 educational institutions are said to be using data processing services.



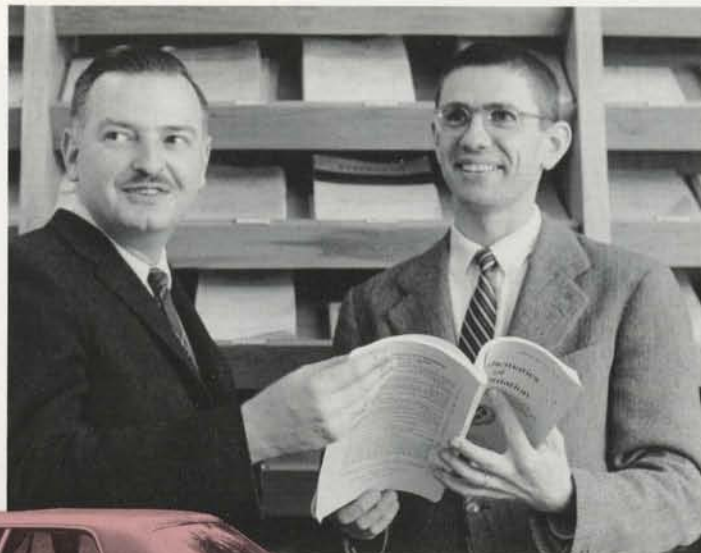


5.



ADAPSO members number 72 as of September 1. Fourteen active committees are in existence including Bank Survey, Government Liaison, Liability Determination and Standards.

*Foundry* publishes the entire list of ADAPSO members with the article, "Are You Ready for Data Processing?"



6.

Displaying its social conscience, ADAPSO works with the ALTRO Health and Rehabilitation Service of New York City to provide jobs for young people who have been unable to complete high school.

*ADAPSO News* is now edited and published as a regular section of bi-monthly *Systems* magazine.

7.



## 1964

7.

Ray W. Johnson of Systems Data Processing Company is elected 1964-65 ADAPSO President.

ADAPSO's Simplified Accounting Committee suggests a method of financial record keeping for independent data processing service organizations. The heart of the system is a flexible chart of accounts for both balance sheets and operating statements.

Copies of *ADAPSO's Salary Survey* are forwarded to all members, the Department of Justice and the Federal Trade Commission.

ADAPSO's Government Liaison Committee works to induce the Department of Commerce, through the U.S. Census of Production, to ascertain annual service bureau volume.

5.

After more than five years of research, General Motors Research Laboratories produces the first computer-designed auto part—the trunk lid for the 1965 Cadillac.

Japan has 2,000 computers in operation, second only to the United States.

Word processing arrives as IBM introduces its Magnetic Tape Selectric Typewriter.

A programmer found guilty of stealing nearly \$5 million worth of his employer's software is sentenced to five years. *Texas vs. Hancock* is the first computer-oriented crime resulting in criminal prosecution.

6.

Thomas Kurtz and John Kemeny of Dartmouth College develop BASIC, Beginners' All Purpose Symbolic Instruction Code, aimed at non-professional computer users.



## 1965

1. Samuel J. Tesaro of S. J. Tesaro & Company is elected 1965-66 ADAPSO President.

ADAPSO expresses concern regarding computer manufacturers engaging in data processing services by offering data transmission and timesharing.

The Small Business Administration publishes ADAPSO-authored articles on the uses of data processing centers. The association's name recognition continues to increase with business and government.

Congressman Multer and Senator Proxmire continue to meet with ADAPSO representatives to hear of the association's continued interest in curtailing bank activities in the data processing field.

ADAPSO drafts a letter to the U.S. postal authorities requesting third class mail rates for certain tabulating cards and other forms of information retrieval.

## 1966

3. Salvatore Parisi of Tabulating & Data Processing Corporation is elected 1966-67 ADAPSO President.

Former ADAPSO Presidents Robinson and Tesaro appear before the House Subcommittee on Banking and Insurance expressing ADAPSO's opposition to banks offering public data processing services. ADAPSO resolves to "assist and participate in judicial proceedings instituted to end the unlawful marketing of electronic data processing services by banks."

4. The first nationally and internationally marketed systems software package—Applied Data Research's Autoflow (automatic programming documentor)—is introduced.

Government data processing procurement standard procedures are introduced, as the Brooks Act becomes law.

More than 4,000 companies involved in data processing, automatic control, communications, integrated circuits and laser technology were founded prior to 1965.

General Electric offers the first commercially viable on-line timesharing system.

2. IBM delivers its System/360 with a minimum of software, an indication that the fledgling independent computer software industry is credible.

Digital Equipment Corporation designs the first minicomputer with most features of large machines but a slower processing speed and less memory capacity.

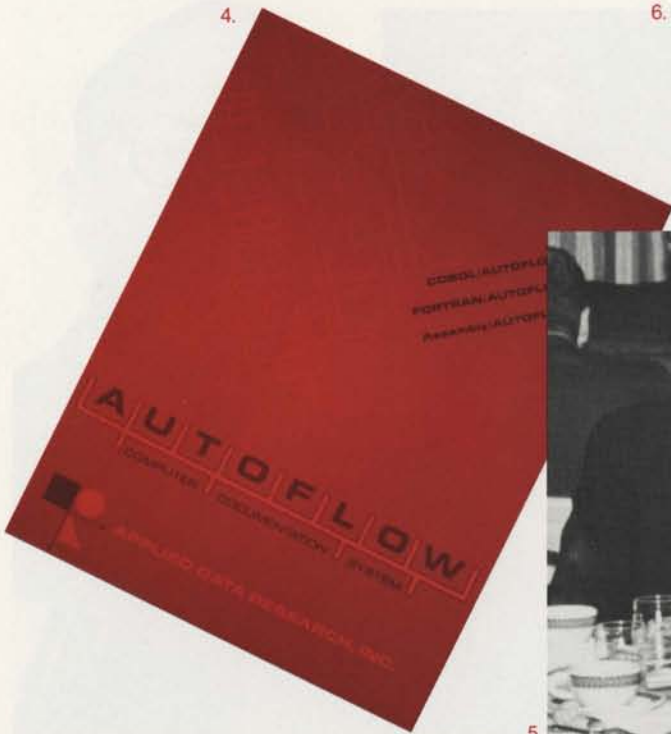
The first solid-state hand-held calculators are introduced by Texas Instruments.

The Federal Communications Commission announces the First Computer Inquiry, investigating when computer use by common carriers constitutes communication subject to regulation under the Communications Act and when it constitutes unregulated data processing.

master charge  
THE INTERBANK CARD

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ADAPSO participates in the American Standards Association X3 project sponsored by the Business Equipment Manufacturers Association.

5. Signaling the association's continued growth and involvement in legal issues, ADAPSO retains the New York-based law firm Kaye, Scholer, Fierman, Hays & Handler and the services of future ADAPSO General Counsel Milton Wessel.

ADAPSO solicits members' opinions on patent and copyright protection for programming methods and apparatus in anticipation of the substantial legal importance these issues will have in the future. ADAPSO's opinion is disseminated to the government as the industry's first policy statement on software property rights.

The International Computation Centre in Rome invites ADAPSO to participate in their upcoming international meeting on data processing services issues.

### 1967

7. Frank Lautenberg of Automatic Data Processing, Inc. is elected 1967-68 ADAPSO President.

Between building, buying and selling computer services firms, Bernie Goldstein goes on the road full-time to sell ADAPSO memberships.

ADAPSO publishes its first research study indicating the U.S. data processing services industry generated \$600 million in annual revenues.

Computer crime continues. A bank programmer is found guilty of programming a computer to overlook all his overdrafts. *U.S. vs. Bennett* is the first federal case involving the criminal use of a computer.

Scientific Data Systems institutes separate pricing for software from its hardware offerings.

Credit Data Corporation goes into operation, the first credit bureau to be automated. Privacy becomes a major issue.

Installations begin for the first commercially marketed applications product, Alltax, which calculates payroll taxes.

The dawn of the plug compatible mainframe industry arrives, as Telex designs an IBM compatible tape drive.

The federal government has more than 2,600 computers in operation. The Department of Defense claims the lion's share with more than 1,960.

Computer dating services spring up, expanding the use of computers into the country's social environment.

6. California Bank Card Association introduces its Master Charge system, adding much momentum to the credit card era in the United States.

Richard Greenblatt enters his Mac Hack IV in the Massachusetts Championship Chess Tournament. This marks the first time a chess software program competes successfully against human competition at a championship level.



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June 14, 1967 — ADAPSO files suit against the U.S. Comptroller of the Currency and the American National Bank in Minneapolis, Minnesota. The suit, *ADAPSO vs. Camp*, argues that banks cannot provide data processing services to the public under the provisions of the Federal Banking Act.

ADAPSO passes a resolution directed to the Federal Communications Commission which states "there is a serious and growing threat that the governmentally granted monopolies held by common communications carriers will give them an unfair competitive advantage in the marketing of electronic data processing services" and "the Association recommends that organizations affiliated with common carriers shall not be permitted to market EDP services commercially except at prices and/or terms which do not have the effect of injuring competition."

1. Jerome L. Dreyer is named the first full-time Executive Vice President to replace retiring part-time Executive Vice President W. H. Evans. ADAPSO moves to New York City.

## 1968

3. Leonard J. Palmer of Computer Servicers, Inc. is elected 1968-69 ADAPSO President.

ADAPSO changes its bylaws to grant software companies full member status. Most software products firms join the newly established Association of Independent Software Companies instead.

Another programming language, Pascal, is being prepared by Professor Niklaus Wirth.

The U.S. standard for COBOL is officially approved.



6. **Computer Services**

5. **Be a Revolutionary!**

Join the information processing revolution at your local data center. Don't conform to old methods of data processing. We will provide you with reports and current information on your business the modern way without the high costs and overhead normally associated with computers and electronic data processing. We have good management and technical know-how from people committed to providing results.

**USE YOUR LOCAL DATA PROCESSING CENTER.**  
(Central address and phone number here).

Member  
ADAPSO  
The Mark of Responsibility. Look For It!



## 1969

ADAPSO establishes an Employee Benefits Insurance Program with the Prudential Insurance Company and The Leterman-Gortz Corporation.

Twenty-two banks change to One Bank Holding Companies in an attempt to continue or to start offering electronic data processing services to the public and avoid being affected by an adverse decision in *ADAPSO vs. Camp*.

4. John L. Roy of United Data Processing Services is elected 1969-70 ADAPSO President.

6. ADAPSO begins publishing the *ADAPSO Journal* and *Annual Directory* in cooperation with Technology Publishing Corporation. The first issue is published November 14, 1969.

Attorney General Ramsey Clark files antitrust litigation against IBM Corporation on the last day of the Johnson Administration. After extended hearings, filings and discussions, the Justice Department drops the case in 1982.

7. ADAPSO forms the Computer Timesharing Section as distinguished from the Data Center Section. Joan Van Horn serves as first President.

ADAPSO representatives testify before the House of Representatives Committee on Banking and Currency on the One Bank Holding Company Act.

5. ADAPSO secures listings under "Data Centers" in the Yellow Pages in fifteen cities.

At ADAPSO's urging, the Internal Revenue Service issues a ruling allowing an optional approach to expensing software development costs for tax purposes.

2. Martin Goetz of Applied Data Research obtains the first patent for a software program, a sort.

Intel Corporation introduces the Intel 4004, containing a central processing unit of 2,250 miniaturized transistors on a wafer-like chip. The era of the microcomputer is upon us.

IBM issues a pricing announcement on June 23, 1969, stating that the firm would begin to price some of its software separately from its hardware starting January 1, 1970. Commonly referred to as "unbundling," this legitimizes the independent computer software industry.

The initial version of Unix is developed at Bell Laboratories. Though not enjoying commercial success until much later, Unix will become the one that other interactive multi-user timesharing operating systems compare themselves with.

U.S. Court of Customs and Appeals rules that a software program can transform a typical computer into a patentable, special purpose machine.

In the biggest industry acquisition to date, Xerox Corporation acquires Scientific Data Systems for \$1 billion. Several years later, SDS founder Max Palevsky proves to be the only winner as Xerox abandons the computer business.



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## 1970

1. Bernard Goldstein of United Data Centers is elected 1970-72 ADAPSO President.

ADAPSO develops a paper on uniform accounting procedures for data centers.

ADAPSO issues a position paper on computer related privacy problems and calls for the establishment of a Presidential Commission to study the issue. The Commission is created during the Ford Administration a few years later.

In February, the U.S. Supreme Court issues a ruling favorable to ADAPSO and Data Systems, Inc. in *ADAPSO vs. Camp*. The case enables ADAPSO to have standing on behalf of the industry to sue national banks and a government agency over banks offering data processing services to the public under the Federal Banking Act.

ADAPSO assists in the development of CADAPSO, initially a Canadian subsidiary of the U.S. industry association.

2.

The One Bank Holding Company Act passes Congress and is signed into law. It seems to preclude banks from offering computer services to non-financial institutions. Bernie Goldstein and Jerry Dreyer meet with Congressman Wright Patman, Chairman of the House Banking Committee, during the BHC hearings.

## 1971

The Federal Reserve Board issues Regulation Y under the new One Bank Holding Company Act. The regulation is nebulous at best and allows banks to provide data processing services to the public if "the value of the services performed for such persons is not a principle portion of the value of all such services performed." ADAPSO challenges the Federal Reserve Board's interpretation of Regulation Y.

International marketing problems arise as Japan denies entry and transoceanic offerings by U.S.-based network services companies.

Several of the biggest computer services firms suffer economic woes.

IBM plug compatible mainframe vendor Amdahl Corporation is founded, the first U.S. firm to market Japanese hardware.

The computer industry suffers its first major slump.

ENIAC turns 25.



ADAPSO drops its case against American National Bank and the Comptroller of the Currency because banks wishing to supply data processing services will simply convert to One Bank Holding Companies. The Federal Reserve Board's ruling provides more latitude for banks to enter the data processing services business than the Federal Banking Act.

ADAPSO institutes its first management seminars apart from association conferences. Twenty-seven member companies participate.

ADAPSO's *Computer Services Journal* stops publication due to low advertising during a lean industry year. In order to continue member communication, ADAPSO's *Data Newsletter* is begun.

## 1972

ADAPSO completes a merger with the Association of Independent Software Companies under the leadership of Larry Welke. The organization is ultimately renamed the ADAPSO/Software Industry Association and becomes a section. The ADAPSO membership now consists of software products, professional services, timesharing and data center members.

4. International Computer Programs, Inc. bestows its first Million Dollar Software Awards, with 24 firms earning these prestigious merit badges for a total of 25 products. Masterminded by ICP President Larry Welke, these awards verify that the computer software industry is viable and here to stay.

*Comshare, Inc. vs. Computer Complex*: The U.S. District Court establishes that trade secret law can be applied to protect proprietary rights in software products as long as adequate steps are taken to protect the secret.

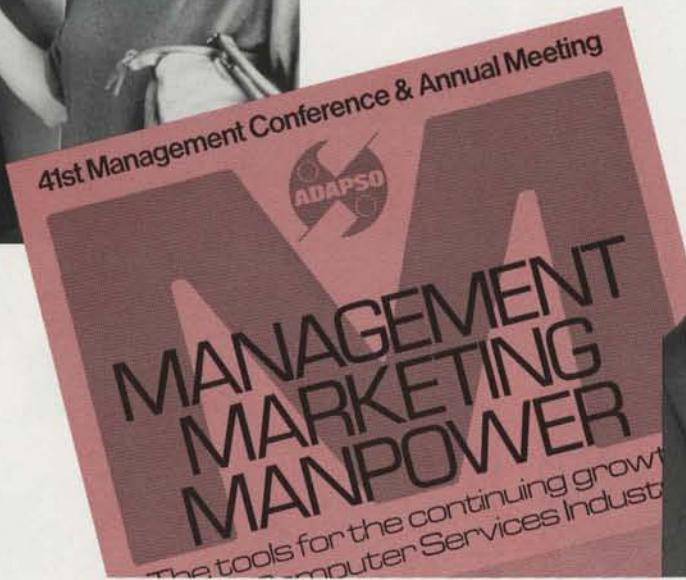
Video games burst on the scene when Atari founder Nolan Bushnell invents and markets the first commercially successful video game, Pong.

3. Seymour Cray forms Cray Associates and continues developing supercomputers.

Computer software and services go to the Olympics. Computers are utilized as primary judges for times and finishes at the Summer Olympics in Munich, Germany.



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ADAPSO issues a position paper on incremental marketing of computer services as an unlawful tie-in sale stating that tie-ins between communications or banking services and hardware sales will be detrimental to the independent computer software and services industry.

ADAPSO works with Congress and the Federal Home Loan Bank Board in an attempt to stop the Board from offering data processing services to its member companies in competition with independent computer services firms.

On September 12, 1972, U.S. District Court Judge David Edelstein hears a motion brought by ADAPSO and presented by General Counsel Milton Wessel to have Pretrial Order #4 lifted in the *U.S. vs. IBM* antitrust case. Pretrial #4 precludes the press or any other interested

parties from receiving information on the case. Although Judge Edelstein dismisses the motion on the basis that ADAPSO does not have standing in the case, later in the day he opens the proceedings and requires the government, IBM and the Justice Department to "make the appropriate modifications to give the press all the freedom needed to cover the case." The ruling forces the government to pursue the case vigorously.

## 1973

2.

Thomas J. O'Rourke of Tymshare is elected 1973 ADAPSO President.

CADAPSO establishes independence from ADAPSO in representing the Canadian-based industry.

ADAPSO participates in a California lobbying effort to have software products and custom programming considered intangible services for state tax purposes, thereby avoiding sales taxes. The fight is still going on in 1986.

IBM transfers ownership of Service Bureau Corporation to Control Data Corporation for \$1 million in settlement of the most famous lawsuit filed in the industry to date.

Transborder data flow becomes an issue when Sweden passes a data protection law.





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4.

ADAPSO and member United Data Processing file a complaint in the Washington, D.C. Federal Circuit Court against the Federal Home Loan Bank Board and Federal Home Loan Bank in Cincinnati. ADAPSO argues that the FHLB Board has exceeded its authority under the Federal Home Loan Bank Act by allowing regional offices to provide data processing services to member banks in competition with the private sector.

### 1974

4. Robert W. Olsen of Computer Services Corporation is elected 1974-75 ADAPSO President.

ADAPSO moves from New York City to Montvale, New Jersey.

ADAPSO develops a position paper urging Congress to consider a "responsible and logical approach to antitrust claims against IBM, incorporating mediation, arbitration and litigation and avoiding unnecessary burdens, inconsistent results, duplication and waste to the maximum reasonable extent."

ADAPSO membership reaches 275 companies.

ADAPSO holds its first Financial Analysts Meeting in New York City to discuss industry growth and investment opportunities. The meeting is considered successful because 12 analysts attend.

### 1975

ADAPSO develops a position paper calling for a moratorium on state and local privacy legislation that is making it virtually impossible for remote processing services firms to operate under varying rules based on clients' locations. ADAPSO urges restraint until the Federal Privacy Protection Study is completed.

The Federal Electronic Funds Transfer Commission is finally appointed by the president, but no computer representatives are included.

5.

The first National Computer Conference is held in New York.

3.

8" floppy disks begin replacing punched cards as the medium of choice for information storage.

Salaries for data processing management professionals average more than \$1,900 per month.

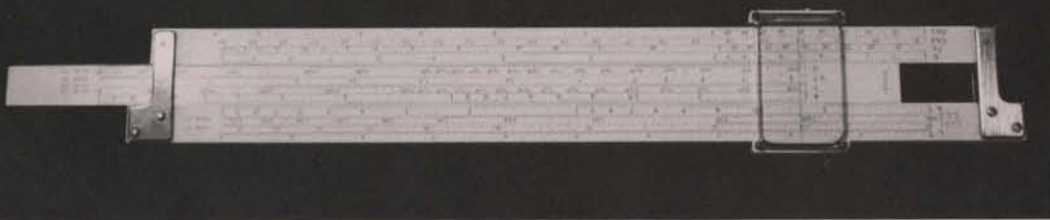
1. Bank terminals begin to show up in grocery stores, signalling the beginning of the automatic teller machine era.

The programming language C is introduced. PL/1, the first high level language written for microcomputers, is introduced by Intel.

Protection against misuse of government data base systems gets a boost with the passage of the Privacy Act of 1974.

Artificial intelligence progresses beyond academia and into the commercial business environment as query languages become popular, offering conversational English dialogue between users and their machines.

Bill Gates and Paul Allen, who subsequently form MicroSoft Corporation, adapt BASIC to run on microcomputers.



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3.

## 1976

2. Leon Weisburgh of Anstat is elected 1976 ADAPSO President.

ADAPSO/Software Industry Association establishes a Manufacturers Relations Committee to meet with IBM representatives on a regular basis to discuss issues of mutual interest and concern.

The U.S. Federal District Court rules in favor of ADAPSO and against the Federal Home Loan Bank Board stating that the FHL banks did not have the statutory authority to engage in the sale of data processing services, and establishes a permanent injunction against the FHLB Board from authorizing such services. The Bank Board appeals the decision.

ADAPSO representatives meet with the European Computing Services Association members and agree to establish the first World Computing Services Industry Congress to be held June 1978 in Barcelona, Spain.

Increased activity on behalf of the industry in Washington, D.C. requires ADAPSO to file as a lobbying organization. ADAPSO representatives testify before the McClellan Committee on software protection, and meet with representatives of the Federal Reserve Board on bank involvement in providing data processing; the General Accounting Office on government procurement practices; and key legislators on privacy issues.

Computers continue to get smaller, as IBM announces a computer the size of a briefcase.

Microcomputer operating system CP/M is made available by Digital Research.

The Altair 8800 is introduced, capturing the cover of the January issue of Popular Electronics. Featuring a do-it-yourself kit price of \$395, an Intel 8080 microprocessor and 256 bytes of memory, it is felt by many to be the first home computer.

The Consumer Communications Reform Act of 1976 is introduced with backing from AT&T. Known as the Bell Bill, it would allow AT&T to enter the computer services market with nominal separation. The bill is stopped, and AT&T must continue to operate under guidelines established by the 1956 consent decree.

IBM Canada introduces the Information Center. The underlying concept is that when users are provided with proper tools and assistance, they can create their own applications, thereby enabling data processing professionals to address the organization's more complex problems.

The Japanese government continues to pour money into its data processing industry with annual infusions of as much as \$135 million.

The Copyright Act of 1976 passes effective 1978, deferring the computer program issue. The Commission on New Technological Uses of Copyrighted Works, better known as the CONTU Commission, is formed to investigate the issue.



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4.

ADAPSO persuades the federal government to allow those performing consulting contracts to bid for needed add-on work.

### 1977

5.

Louis E. Pfeiffer of A. O. Smith Corporation is elected 1977 ADAPSO President.

4.

ADAPSO publishes its first formal annual report. Featured on the cover is the association's new logo.

ADAPSO's 11th Annual Industry Report prepared by INPUT indicates the computer services industry has reached \$6.3 billion in annual revenues and will grow at a compounded annual rate of 18% through 1981.

3.

Representatives from ADAPSO participate in Congressional and Federal Communications Commission hearings on the Consumer Communications Reform Act, the FCC's Second Computer Inquiry, the Consultation Committee for International Telephone & Telegraph, electronic funds transfer, privacy and security, and transborder data flow between countries.

ADAPSO's education program sponsors its first roundtable for company presidents to exchange ideas and experiences.

ADAPSO wins two major victories in New York where the State Tax Commission rules that computer software and most computer services are not taxable under existing law.

ADAPSO's position against the Federal Home Loan Bank Board is unanimously upheld in the Circuit Court of Appeals.

1.

Major slide rule producer Keuffel and Esser halts production of the slide rule and donates the last one to the Smithsonian.

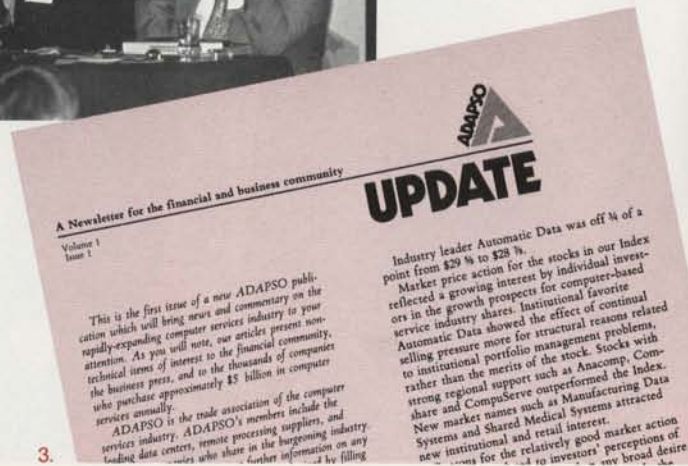
Steven Wozniak and Steven Jobs work in Jobs' garage to create the Apple computer.

Computing is reaching the masses as ComputerLand opens its first store.

Data storage becomes more compact and powerful, as 5¼" floppy disks with the capabilities of 8" disks are made available.

Computer clubs begin to spring up for microcomputer users.

Camp Retupmoc (computer spelled backward), one of the first computer camps, opens in Indiana.



## 1978

1. Richard L. Crandall of Comshare, Inc. is elected 1978 ADAPSO President.

Reflecting its role as the primary advocate for the computer software and services industry, ADAPSO moves its headquarters to metropolitan Washington, D.C.

2. ADAPSO cosponsors, along with the European Computing Services Association and the Japan Software Industry Association, the First World Computing Services Industry Congress in Barcelona, Spain. More than 700 delegates from 26 countries participate, including 80 representatives from the U.S.

ADAPSO works to produce favorable tax decisions in New Jersey, Wisconsin and Massachusetts. In California, the association is instrumental in establishing a blue-ribbon committee of top industry executives and representatives of the State Tax Commission to review adjustments in state tax regulations.

ADAPSO participates with the Office of Management and Budget on revisions to Circular A-76 relating to the federal government's policies for acquiring software systems and data processing.

3. ADAPSO begins publication of *UPDATE*, a newsletter on the software and services industry distributed to financial analysts, stockbrokers, bankers and other members of the financial community.

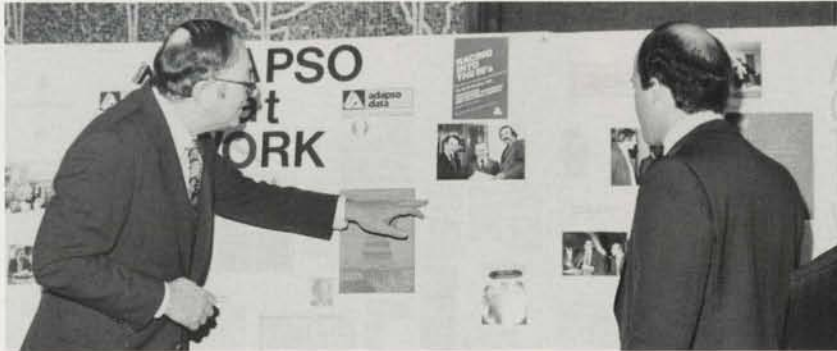
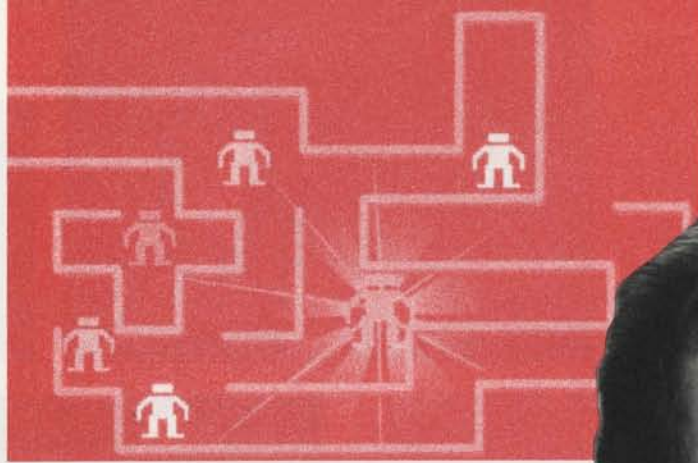
One of the first microcomputer bulletin boards, the Computerized Hobbyist Bulletin Board, goes on-line.

One of the largest computer crimes hits Security Pacific National Bank, as Stanley Rifkin implements a wire transfer scheme to appropriate \$10.7 million.

Software packages like WordStar and Magic Wand help microcomputers replace stand-alone word processors.

Massachusetts-based Cullinane Corporation, which would later change its name to Cullinet Software, Inc., becomes the first software products firm in many years to have a public stock offering. This breaks the ice for similar companies to go public during the next few years.

4.



5.

ADAPSO creates its first formal Long Range Plan addressing fair competition, fair regulation, visible value-added, financial and bank relations, improving the job market and serving as the source of authoritative industry data.

ADAPSO continues to meet with representatives of the American Institute of Certified Public Accountants on the role of accountants and accounting firms in the computer services industry.

### 1979

5. John P. Imlay, Jr. of Management Science America, Inc. is elected 1979 ADAPSO President.

ADAPSO's efforts are successful in convincing the Financial Accounting Standards Board to allow the option of expensing or capitalizing software development costs.

ADAPSO helps establish the Software Exchange Program, featuring increased communications with IBM Corporation, designed to provide a timely exchange of information on such topics as product announcements.

Daniel Bricklin and Robert Frankston create VisiCalc, one of the first electronic spreadsheets. Personal computers are now seriously considered for business uses.

The home computer market abounds with such popular micro-computers as the Apple II, Radio Shack's TRS-80, and the Commodore PET.

Electronic information services become more popular as firms such as CompuServe and The Source open their doors. Home computer users can now access airline schedules, restaurant guides, stock market updates, newspapers and a variety of other information.

4.

Video game machines like Pac Man, Space Invaders and Centipede appear almost everywhere as video arcades become extremely popular.

1.



In an attempt to limit the boundaries within which a bank holding company can be involved in the information products and services industry, ADAPSO persuades the Board of Governors of the Federal Reserve System to review Citicorp's application to enter unregulated markets.

ADAPSO publishes the first two installments of its Contracts Reference Directory — *Program License Agreement with End User and Professional Services Agreement*. ADAPSO pens the brochure, "Your Reward in Professional Software Services," designed for use by members when recruiting employees.

ADAPSO voices concern to the National Technical Information Administration on U.S. Postal Service involvement in electronic mail service. Several years later, the Postal Service drops the program.

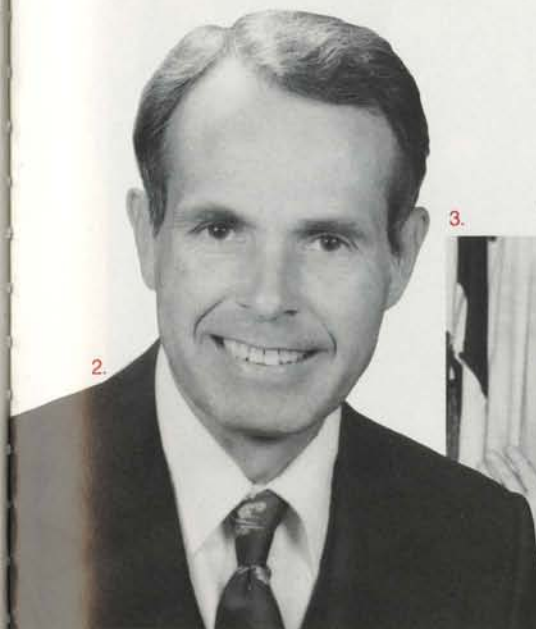
1.

Stephen Beach testifies before the Senate Subcommittee on Communications to state ADAPSO's pro-competitive position on the revision of the Communications Act of 1934. Congress later decides not to rewrite the law.

ADAPSO files comments with the FCC on Computer Inquiry II. Among its comments, ADAPSO calls for proper definitions of data versus voice communications and for the prevention of competitive advantages that would unfairly benefit common carriers.

The Department of Defense approves the design for Ada as the computer language to be embedded in U.S. weapon systems.

Acceptance of data bases is growing, as a great many mainframe users begin to install them.



## 1980

2. A. S. "Buck" Blankenship of Data Processing of the South, Inc. is elected 1980 ADAPSO President.

ADAPSO brings suit against Citibank of New York in Federal District Court and challenges three applications from bank holding companies seeking to form subsidiaries in the software and services industry. In the Citibank suit, ADAPSO alleges that Citibank and the Comptroller of the Currency have exceeded the limits of the National Bank Act.

ADAPSO's public communications efforts result in a September 1, 1980, cover story in *BusinessWeek* on the software and services industry.

3. Former President Gerald Ford, Shoichi Akazawa, executive vice president of Fujitsu, Ltd., author and futurist Alvin Toffler, and humorist Art Buchwald keynote the World Computing Services Industry Congress II. Hosted by ADAPSO and held in San Francisco, the meeting attracts 750 industry executives from 32 nations.

ADAPSO distributes to Fortune 1300 companies the brochure, "The Sound Management Approach to Solving Your Data Processing Personnel Requirements," stressing the importance of establishing proper independent vendor/client relationships when contracting for outside professional software services.

ADAPSO's Tax Survey makes its debut, providing members with up-to-date information on the tax treatment of software and services on a state-by-state basis.

The first ADAPSO/Broadview Index reports 42 announcements totaling \$164 million in consideration in the first six months of the year. The index tracks mergers and acquisitions activity in the information products/services industry.

AT&T, hampered by legal hassles, settles out of court with Wyly Corporation for \$50 million and loses a \$1.8 billion judgment to MCI.

Computer Inquiry II proposes deregulation for all but basic transmission services, opening the door for competition in the enhanced services marketplace.

Recommendations on copyright protection for software programs are made by the Commission on New Technological Uses of Copyrighted Works (CONTU Commission) and incorporated into the Copyright Act of 1976.



## 1981

1. Robert Weissman of National CSS, Inc. is elected 1981 ADAPSO Chairman.

ADAPSO works with the Small Business Administration and the Department of Commerce in publishing "USA Trade Tips," a booklet containing information on many ADAPSO members' software products that is distributed to U.S. consulates in more than 50 countries.

ADAPSO expresses concern to the Securities and Exchange Commission after the SEC withdraws Accounting Series Release (ASR) 264 and proposes to withdraw ASR 250, signaling a backing off by the SEC in its opposition to CPA firms offering non-audit services to their audit clients.

ADAPSO convinces Multibank and Conifer bank holding companies to establish their data processing subsidiaries under the principles of structural separation.

ADAPSO representatives testify before House and Senate subcommittees seeking amendments to S. 898, The Telecommunications Competition and Deregulation Act of 1981. Some of the amendments are included in the bill as passed in the Senate and ensure necessarily stringent safeguards between AT&T and the Bell System's proposed computer services subsidiary.

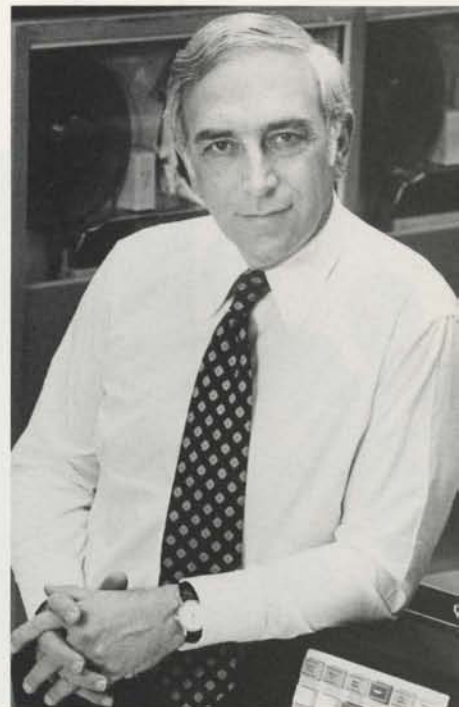
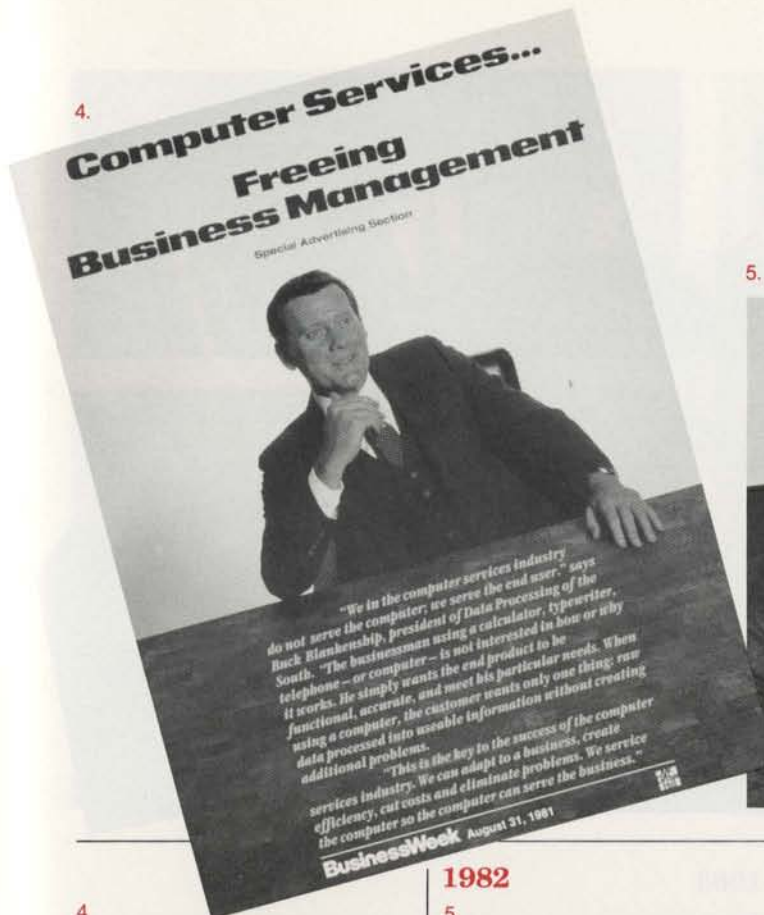
Machine processes implemented in software are patentable, Supreme Court ruling states.

3. IBM rocks the microcomputer market with the IBM PC. MicroSoft President Bill Gates develops the operating system for the machine, MS-DOS, creating the standard operating system for micros.

The Osborne I portable computer is introduced. Marketed by Adam Osborne and featuring an impressive arrangement of bundled software, it lists for less than \$1,800. Vendors of similar systems drop their prices to stay competitive.

Tracy Kidder's insightful book, *Soul of A New Machine*, is published.





4. ADAPSO's first major editorial/advertising supplement appears in the August 31 issue of BusinessWeek.

2. Twenty-one post-secondary students pursuing careers in the computer services industry receive between \$250 to \$1,000 as recipients of ADAPSO's first Fellowship-Grant Awards. Company contributions matched by ADAPSO funds enable distribution of more than \$55,000 during the next several years.

## 1982

5. Lawrence J. Schoenberg of AGS Computers, Inc. is elected 1982 ADAPSO Chairman.

Formation of Integrated Systems/OEM, Professional Services, and Microcomputer Software sections enable ADAPSO to provide additional programs for these types of firms while increasing their participation in the association's decision-making process.

ADAPSO implements the computer services industry's first expense and operating ratios survey giving companies the opportunity to compare their revenue and expenditure percentages with other firms.

6. Former ADAPSO chairman and newly elected New Jersey Senator Frank Lautenberg is guest of honor at a victory party thrown for him by the ADAPSO membership during ADAPSO's 57th Management Conference in November. Lautenberg also serves as a keynote speaker.

AT&T and the Department of Justice settle their long court battle. AT&T keeps Bell Labs, Western Electric and Long Lines, but forfeits the local operating companies.

Cyberphobia, fear of computers, affects more than 30% of daily computer users, a St. Joseph's University, Philadelphia, Pennsylvania survey finds.



1.



2.



The ADAPSO-cosponsored World Computing Services Industry Congress III is held in Copenhagen, Denmark, attracting more than 700 delegates from 39 countries. Other cosponsors are CADAPSO, the European Computing Services Association and the Japan Software Industry Association.

ADAPSO establishes its Political Action Committee and distributes campaign donations to 11 Congressional candidates, 9 of whom are elected.

## 1983

1.

Fred S. Lafer of Automatic Data Processing, Inc. is elected 1983 ADAPSO Chairman.

ADAPSO's 10th Annual Computer Services Industry Financial Forum expands to a full day program featuring 23 participating member companies and small group sessions. More than 350 members of the financial community and the press attend.

ADAPSO files friend of the court briefs in the *Apple vs. Franklin* case on the protection of software embedded in computer chips.

3.

ADAPSO sponsors its first Congressional Reception on Capitol Hill, bringing together more than 40 members of Congress, 200 Congressional staff persons, 100 members of the software and services industry and the ADAPSO staff.

DP manager's annual salary reaches \$26,000, A. S. Hansen reports.

Wall Street recognizes a bright future for software and services firms, as more than 25 companies go public.

Pronto, Chemical Bank's home banking service, is available through more than 200 banks nationwide.

2.

Lotus 1-2-3 explodes on the market. The first integrated software package for PCs, it features an electronic spreadsheet, graphics and information management capabilities on a 5¼" disk. So strong are its capabilities that it replaces VisiCalc as the industry standard for electronic spreadsheets while ringing up more than \$53 million in sales in just one year.

3.



4.



ADAPSO leads the fight to defeat H.R. 4102 and S. 1660, bills that would eliminate the residential portion of the local access charge costs. In this effort, ADAPSO joins with more than 20 other trade associations to form the Alliance for Telephone Progress Coalition.

ADAPSO, St. Paul Fire & Marine Insurance Company and Alexander & Alexander, Inc. develop errors and omissions and general business insurance programs for ADAPSO members.

4.

Time magazine names the computer "Man of the Year," the only inanimate object ever to earn this award.

James Porter, Lawrence J. Schoenberg and William Graves express ADAPSO's opinions on the capitalization of software development costs to the American Institute of Certified Public Accountants. After more than a year of work, the AICPA issues an exposure draft suggesting capitalization of some development costs.

A major victory is recorded for software developers, as the U.S. Supreme Court refuses to review a ruling by the Wisconsin Supreme Court that found the accounting firm of Arthur Young & Company guilty of misappropriating trade secrets from M. Bryce & Associates, Inc., an Ohio-based information processing company.

ADAPSO is instrumental in having the FCC's access order modified to remove remote processors from common carrier status, saving those firms millions of dollars in communications costs.

Software developers introduce micro-to-mainframe software links. Microcomputer users can now access data directly from mainframes while sharing programs and files with other connected PC users.

5.



5.

ADAPSO works with the IRS to avoid implementation of proposed regulations that would preclude most software development costs from R&D tax credit eligibility.



## 1984

1.

Douglas C. Altenbern of Endata, Inc. is elected 1984 ADAPSO Chairman.

ADAPSO joins the Industry Coalition on Technology Transfer, a group of high technology trade associations, to oppose U.S. export regulations that would unnecessarily reduce the competitiveness of U.S. firms in the international marketplace.

Former ADAPSO Chairmen U.S. Senator Frank Lautenberg and Dun & Bradstreet Corporation President Robert Weissman are among the keynote speakers at the World Computing Services Industry Congress IV in Tokyo.

ADAPSO's 62nd Management Conference in Miami features keynote presentations by Charles Brown, chairman of AT&T, and Edmund G. Brown, Jr., former governor of California. More than 600 software and services executives attend.

ADAPSO lodges protests with the Japanese Ministry of International Trade and Industry on Japan's proposal to significantly reduce copyright protection and allow for compulsory licensing of software programs wherever the Japanese government felt it would be in its best interest. The changes are not implemented.

ADAPSO establishes a west coast branch office.

The U.S. Court of Appeals for the District of Columbia rules against ADAPSO's appeal and in favor of bank holding company activity in the computer software and services industry. ADAPSO's 20 year challenge to banks entering the industry comes to a close, but not before a solidly independent software and services industry has been formed.

General Motors enters the data processing industry in a huge way with its acquisition of computer services firm Electronic Data Systems Corporation. With a record ticket price of \$2.5 billion, it accounts for almost 60 percent of the year's total dollar volume for mergers and acquisitions in the industry.

Computers continue to get smaller as Seiko Instruments develops a wrist watch computer.

IBM acquires communications equipment leader Rolm Corporation seeking a competitive advantage against AT&T.

THE WHITE HOUSE  
WASHINGTON  
October 4, 1985

I am pleased to send greetings to the members of the Association of Data Processing Service Organizations as you gather for your 63rd Management Conference here in Washington.

As representatives of roughly 800 computer software and service firms, you keep our nation on the cutting edge of high technology. Just as importantly, the tremendous growth in your industry since 1970 has created thousands of American jobs and has helped to propel our economy forward.

The computer software and services industry is one of the fastest-growing sectors of our economy. Many industries are becoming increasingly dependent on the computer to handle their information needs. The information age represents the best of American know-how capabilities represent the best of American know-how and ingenuity in shaping technology to meet the needs of the future.

Your continued efforts to develop state-of-the-art equipment, increase public awareness of the industry's potential, service the industry, and encourage research will help us maintain our lead in the international information marketplace. This is critical if we are to see further improvement in our standard of living. I am grateful for your contribution to U.S. competitiveness. Computer technology has come a long way since the early days of the Fifties. But the best is yet to come.

You have my continued commitment to leadership in technology advancement.

Ronald Reagan



## 1985

ADAPSO arranges cooperative purchasing of selected goods and services for its members. Agreements are penned with Deltak, National Information Systems, Data Securities International, Ziff-Davis Publishing, Auerbach Publishers, Datapro Research, National Car Rental and Hertz Corporation.

ADAPSO produces a brochure on microcomputer training and education, distributing in excess of 15,000 copies.

2.

Arthur M. Kramer of Mobix Partners is elected 1985 Chairman of ADAPSO.

ADAPSO works with Senators Sam Nunn (D-GA) and Frank Lautenberg (D-NJ) on the introduction of S. 786, The Information Age Commission Act of 1985. The bill would establish a two-year commission to review the effect of computer technology on society, educational institutions and national defense, investigate methods to maintain U.S. leadership in computer technology, and seek ways to encourage the innovative use of computers.

3.

ADAPSO hosts a congressional reception on Capitol Hill during its Washington, D.C. management conference, attracting more than 600 government representatives and computer software and services executives. Concluding the conference is ADAPSO's Tax Reform Forum featuring Congressman Richard Gephardt (D-MO), Senator David Boren (D-OK), Senator Dave Durenberger (R-MN) and Deputy Assistant Secretary for Tax Issues J. Roger Mentz from the Department of the Treasury.

ADAPSO joins the International Intellectual Property Alliance and participates in meetings with the World Intellectual Property Organization in Geneva, Switzerland to work for effective international protection of computer programs.

ADAPSO and other organizations work with the Financial Accounting Standards Board on the adoption of FASB Number 86, which establishes new accounting procedures for software development costs and recognizes software as an asset.

Financial sophistication in the industry reaches a new level as the first unfriendly takeover sees \$19 million Sterling Software, Inc. acquire \$191 million Informatics General Corporation.

Apple Computer and Cullinet Software advertise during the Superbowl.



7.

**Thou Shalt Not Dupe**

2.



## Software pirates ruined our reputation

Software piracy is a Federal crime. At ADAPSO, the computer software and services industry association, we're doing everything we can to help business leaders like you understand the problem.

We can protect the integrity of your company and protect it from liability by actively discouraging software piracy. ADAPSO can provide you with materials that can help, such as sample policy statements and information booklets for your employees.

Return the coupon to receive a full packet of information. It's free. And it could very easily keep your company off the hook.



Software Piracy is a Federal Crime

More than 1,000 people attend seminars cosponsored by ADAPSO and the Department of Commerce on new export regulations for computer software and systems. ADAPSO successfully lobbies Commerce to streamline the regulations while increasing the types of software that can be exported and number of countries that are eligible to receive it.

2. ADAPSO helps draft sections on computers and communications systems in the Electronic Communications Privacy Act, a bill introduced by Senator Patrick Leahy (D-VT) and Representative Robert Kastenmeier (D-WI). P. Michael Nugent of Electronic Data Systems Corporation testifies on ADAPSO's behalf during the hearings.

1. ADAPSO launches an aggressive campaign to reduce unlawful software duplication. Along with co-plaintiff MicroPro International, ADAPSO participates in successful litigation against Wilson Jones and American Brands Corporation for willful copyright violations. The accompanying public awareness campaign generates more than 200 articles on the subject during

the next two years. ADAPSO also distributes more than 500,000 copies of its software protection brochure, "Thou Shalt Not Dupe," and assists associations in Canada, England, South America and Australia in developing similar campaigns. ADAPSO earns the 1985 Gold Circle Award for the best public awareness campaign by an association.

Revenues for the information services industry reach \$48 billion dollars.



## 1986

3. George Raymond of Automatic Business Centers, Inc. is elected 1986 ADAPSO Chairman.

ADAPSO celebrates its 25th Anniversary with a gala management conference and black tie dinner in Phoenix.

Along with the Microsoft Customer/Vendor Advisory Board, ADAPSO establishes guidelines for creating microcomputer software warranties in the absence of negotiated agreements.

4. Jerome L. Dreyer resigns as President of ADAPSO. Luanne James of Argonaut Information Systems, Inc. is named Interim Executive Director.

5. ADAPSO's Technical Information Service begins providing management-level reports on technology-related issues. The first two publications produced are *Software Development Technology* and *Computer Connectivity*.

ADAPSO successfully lobbies Congress to include sections in the Tax Reform Bill to exempt software companies from the personal holding company tax, extend the R&D tax credit and lower corporate tax rates.

The Federal Court of Appeals for the Third Circuit Court upholds ADAPSO's position in *Whelan Associates, Inc. v. Jaslow Dental Laboratories, Inc.*, affirming that copyright for computer programs extends beyond the literal code to include structure, sequence and organization.

ADAPSO establishes two business services to benefit members: an offshore captive insurance program to cover high-end liabilities and an industry pension administration program.

ADAPSO boasts 850 member companies.

Advancements in CD-ROM provide significantly increased storage capabilities and signal the beginning of another major leap forward for the industry.

The data processing industry produces more than 378,000,000 paychecks annually, employing 12,000 people in the process, according to *USA Today*.

## ADAPSO

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## Bibliography

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*Business Software Review*, July 1986. "Twenty Milestones in Software," "Reflections on Some Software Pioneers," International Computer Programs, Inc., 9100 Keystone Crossing, Suite 200, Indianapolis, Indiana 46240

*Byte*, September 1985. "A Microcomputing Timeline," McGraw-Hill Inc., 70 Main Street, Peterborough, New Hampshire 03458

*Datamation*, September 1982. "Thanks for the Memories," "As Time Goes By," Technical Publishing Company, 875 Third Avenue, New York, New York 10022

*Digital Deli*, 1984. "Computer Time Line," Workmen Publishing Company, 1 West 39th Street, New York, New York 10018

*The History of Computing*, 1981. CW Communications, Inc., 375 Cochituate Road, Framingham, Massachusetts 01701

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