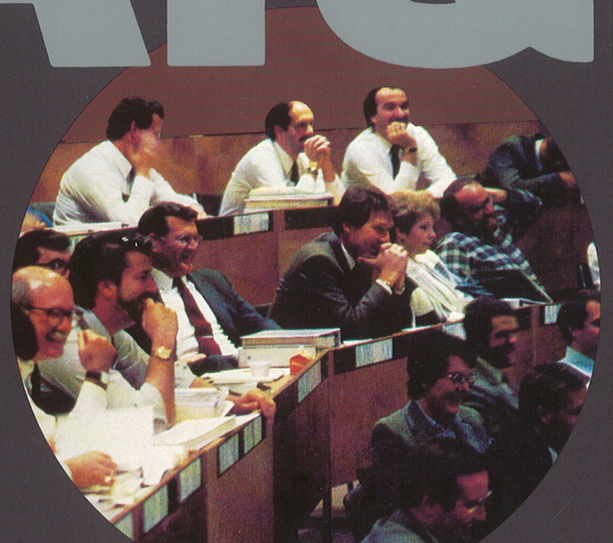
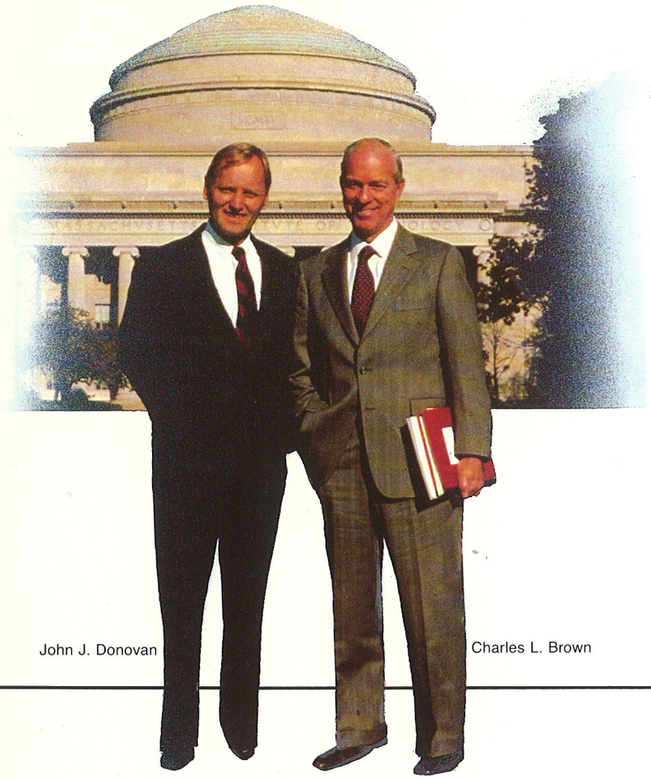
Cambridge Institute for Information Systems
219 Vassar Street, Cambridge, Massachusetts 02139 • (617) 876-2338

AT&T



CAMBRIDGE INSTITUTE FOR INFORMATION SYSTEMS

CAMBRIDGE, MASSACHUSETTS



John J. Donovan

Charles L. Brown

THE CHALLENGE

The challenge of the modern world is to effectively use information for improvements in understanding, productivity, quality of life and world harmony.

"What's needed now, in my judgement is a new vision, similarly shared. The Information Age network that we envision would increase the range of perception of a single individual to include all of the information available anywhere in the network's universe."

CHARLES L. BROWN
Chairman of the Board AT&T

"These advanced technologies and global networking capabilities will enable any individual to share and process knowledge. These technologies, available now, must be understood, articulated and applied."

JOHN J. DONOVAN
Chairman
Cambridge Institute

MISSION AND PURPOSE

Randall L. Tobias

Robert E. Allen

The Institute is dedicated to the education of professionals to take their place on the forefront of the information age network, using computers and communication.

"Cambridge classes should be an inspiration to others who will come here. Also, it should give customers confidence that we know what we are doing and that we have people who are deeply dedicated to providing customer satisfaction in this field."

CHARLES L. BROWN
Chairman of the Board AT&T

"We must make sure we use the tools we have to begin strengthening the teamwork between Information Systems and Communications. We all can and must learn more about each other's products and services."

RANDALL L. TOBIAS
Chairman
and Chief Executive Officer
AT&T Communications

"The main thrust of this program is to provide our people the ability to effectively represent the strength of AT&T products and architecture in the marketplace."

ROBERT E. ALLEN
Chairman and Chief
Executive Officer
AT&T Information Systems

THE RESULTS

Cambridge's unique curriculum of substance, articulation and application is effective.

"Six weeks into the year I am 242% over quota. This is attributable to the classes I took at Cambridge which provided the base to discuss my customers' data problems with insight. The knowledge I gained at Cambridge enables me to send out a newsletter on UNIX to my customers every six weeks, you wouldn't believe the sales calls I've received from that newsletter."
Mimi Larsen (AE-IC, Fresno, CA)

"In AT&T's $233 million sale to the U.S. Department of Agriculture, I participated in the primary architecture and review of the proposal and set up the integration of key demonstration software that resulted in the sale of 6000 3B2's, 11000 PC's, 6000 modems, peripherals and other equipment. Without Cambridge I would have been a spectator. My education at Cambridge was key to the success of this sale. It was not until I faced this customer that I (as so many of my colleagues have said) understood how important the fundamental education at Cambridge was. Technical advances in the field occur every six months. In this sale, the government wanted a seamless integration of a diverse set of software and hardware products. What I learned at Cambridge about DBMS's allowed me to talk to vendors. What I learned about record locking allowed me to help my customer understand their needs, and helped us articulate a technical solution to those needs. Every member of an account team who must handle a complex sale, must go to Cambridge."
Robert Schoderbek (TC III, Federal Systems, Silver Spring, MD)

"From personal attendance, I say the material presented is critical to the success of my organization." **Alan Mendelsen (Area Vice President, Computer Systems Division, Value Added Sales, Morris Plains, NJ)**

"I have noticed a refreshing eagerness and confidence on the part of my people who have returned from Cambridge in their approach to the marketplace. For example, after completing the Cambridge Operating Systems course, Ken Johnson, a technical consultant from my office, was able to effectively articulate the background functions and multitasking features of the 3B's. This was responsible for the successful sale of a 3B5 to the customer — an IBM plant in Boulder."
David Newquist (Systems Manager, Englewood, CO)

"I gained a deeper understanding of today's information management and movement technology and the ability to articulate my understanding. My customers are highly technical and make extensive use of data bases, I now feel comfortable explaining the AT&T options available to them." **Carolyn Schultz (AE, AT&T Communications, Parsippany, NJ)**

"The account teams in my branch could not have accomplished their recent successes without this education. For example, for the state government in New Jersey we were able to demonstrate AT&T's unique connectivity in the relevant manner learned at Cambridge using 3B's and software developed by Computer Systems to close three system sales with more to come." **Earl Siegman (Branch Manager, Princeton, NJ)**

"The attraction of Cambridge is their ability to present complex technical ideas in simple English and at the same time to respond to technical questions with technical precision." **William B. Cook, (Managing Director, Morgan Stanley & Co., Inc.)**

"The technical expertise and experience gained at the Cambridge Center was one of the most valuable tools I used to win the U.S. Customs office automation contract worth $40 million. Being able to both demonstrate and explain the interactions between the multiple applications programs (the unique AT&T tinkering concept taught in Cambridge), UNIX and UNIX shell running on over 900 PC's, 700 3B2's and 26 3B5's gave the client the reassurance that we had our technical act together and gave me the confidence to respond to their questions. I feel that all sales professionals within AT&T should attend Cambridge." **Gary La Porta (NAM, Federal Systems, Silver Spring, MD)**

"This training enabled me to convince a customer to purchase 60 7300 PC's. (Instead of IBM PC-AT's) This was done through product demonstrations similar to those taught at Cambridge of the 7300 vs. the AT and a review of the capabilities of UNIX and AT&T's commitment to it. I am presently working on a sale involving a 3B5 and 3B5AP." **Edward J. May (TC, Rolling Meadows, IL)**

"This software is invaluable to my effectiveness as a service person. Everyday I must use software developed by the Cambridge Technology Center (the 'wait-for' program) which allows me to automate the retrieval of data from TSMS, CATS, and a UNIX mail system in Hadley Road. In addition, I plan to use the software multiplexing programs to allow multiple sessions to run over a single phone line to increase access to the TSMS system, which currently has 70 users dialing into three dial-up lines." **Edward Flanagan (Field Engineer, FAST, Woburn, MA)**

"The Cambridge curriculum opens new visions and worlds for our people. John Donovan and Stu Madnick have put together a combination of lectures, demonstrations, and lab problems that bring to life the power of our hardware and software. For the MVS and SNA environments, as well as for stand-alone applications, the participants will learn how the AT&T solutions are truly superior to most alternatives available today." **Bernard F. Sergesketter (Regional Vice President, Chicago, IL)**

"As a manager, I can from my vantage point, see the difference that the Cambridge Center curriculum makes to my personnel. The level of confidence that they gain as a result of enhanced knowledge and skills makes all the difference in the world. We are currently working with Florida Power and Light on a 3B2-400 application that is menu driven to download mainframe files to the 3B2, edit the files and then upload back to the mainframe. With the skills our people acquired at Cambridge, their articulation of the solution was effective. It made a big difference!" **Rolando Cruz (Systems Manager, Miami, FL)**

"The Cambridge program has helped me achieve in excess of 150% of this year's data objective through sales of 3B's, PC's and other data products. This program has shown me how to surround my customers' IBM environment with UNIX." **John deCastro (AE, Oakland, CA)**

THE EDUCATION ENVIRONMENT

The Cambridge Institute, an independent educational organization, is dedicated to a continuation of an 8 year partnership with AT&T to providing substantive technical, management and marketing education as well as research and development exclusively to AT&T. The new Information Management and Movement courses provide the substance to enable AT&T people to meet their sales objectives, manage their people and resources, provide quality service, and develop customer solutions in the field of Information Management and Movement. All courses focus on and provide the substance and ability to:

- Understand customer applications and AT&T's unique position in the field of Information Management and Movement, such as:
  - Customer needs and their business issues.
  - AT&T hardware and software architecture.
  - How to integrate voice products with data products.
  - Integrate voice and data products with customer's existing investment, such as mainframe SNA.
- Articulate AT&T's unique advantages in computers and communications.
- Apply and implement AT&T architecture to improve customer productivity and efficiency; solve business problems and enhance customer's competitive edge.

The educational environment created allows the participants and staff to join together, to succeed together, sharing the knowledge, abilities, and technology that will assure AT&T's success.

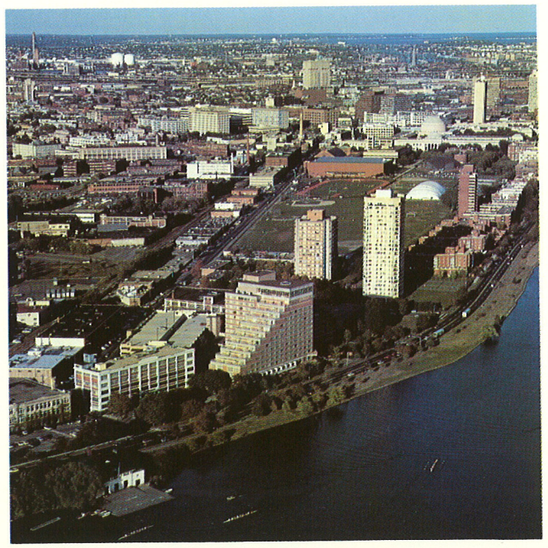
THE FACILITY

The Facility, adjacent to the M.I.T. athletic fields, is surrounded by the Cambridge universities of M.I.T. and Harvard. Boston, adjacent to Cambridge, has been the center of government, education, commerce, medicine, banking and the arts. A collage of old and new.

THE FACULTY

To train a new generation of professionals for Information Management and Movement, the school engages a faculty of more than 50 members that combines scholarship with practical experience.

Pictured here (from left) Linda Chow educated Wellesley and M.I.T., creative-graphics; lecturer Ed Crowley educated M.I.T. and University of Heidelberg, Germany, former lecturer Northeastern University and systems developer C.S. Draper Laboratory; Professor Stuart E. Madnick, Associate Professor M.I.T. and co-developer of the Cambridge programs; Betsy Frey educated Harvard University, formerly manager Digital Equipment Corporation, lecturer, in charge of all networking; Larry Krakauer, educated Princeton and formerly an MIS manager, Corning Glass.



MIT and the Hyatt Regency Hotel, adjacent to the Cambridge Institute

THE PARTICIPANTS

A key strength and benefit to participation in the IMM series has been the attendance by diverse members of AT&T: marketing, services, management, data systems and product people who need to articulate AT&T's advantage and implement solutions. Virtually all divisions of AT&T are represented in the classes.

THE PROGRAM DEVELOPERS

PROFESSOR STUART E. MADNICK

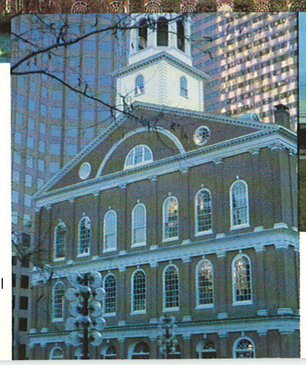
Stuart Madnick achieved a Bachelor of Science, Master of Science, and doctorate in computer science at MIT while simultaneously earning a master's degree from the MIT Sloan School of Management. Stu is currently an Associate Professor at MIT where he received the Carlton Tucker Award for excellence in teaching. He is a founder of the MIT Center for Information Systems Research and currently serves as an associate editor of the *ACM Transactions* on Database Systems. Stu co-founded MITROL, Inc., which became a subsidiary of General Electric. He is co-author of several textbooks, including *Computer Security, Operating Systems,* and *Software Project Management.* Among his technical contributions are the development of fundamental work in hierarchical file systems and text processing.

PROFESSOR JOHN J. DONOVAN

John Donovan has a unique education, a PhD in Info-Sciences from Yale, where he also studied linguistics, mathematics, engineering and medicine followed by a post-doctorate fellowship from MIT. John is an Associate Professor at MIT's Sloan School of Management. He is an entrepreneur and founder of several successful companies including Cambridge Institute for Information Systems, International Computation Inc., Institute for Medical Information Services Inc., all predicated on the use of technology in solving business problems. He has numerous awards, including Tufts Medical School Commendation for outstanding contributions to medicine and the David Schultz Award for excellence in teaching at MIT. Included in John's other past professional activities are his appointment as member Presidential Advisory Commission on USSR/USA Technology, and national lecturer, Association for Computing Machines, Assistant Clinical Professor Tufts Medical School, Associate Professor of Electrical Engineering MIT. John has authored some 39 professional publications and has published five books including *Systems Programming, Software Projects and Operating Systems* which has been published in six languages.

SETTING
Boston and Cambridge, a combination of old and new, of Art, Finance, Technology and Education.

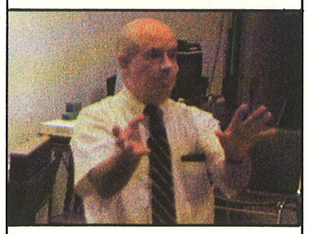
Harvard University



Faneuil Hall

The Cambridge Institute

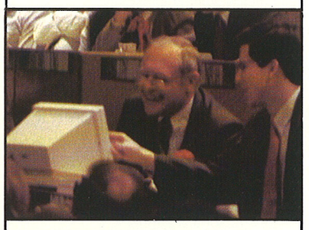
Graham Allison
Dean, John F. Kennedy School of Government, Harvard University



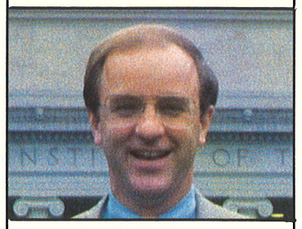
James E. Olson
President and Chief Operating Officer
AT&T

Jack Scanlon
Group Vice President
Computer Systems Division
AT&T Information Systems

Arno A. Penzias
Vice President of Research
AT&T Bell Laboratories
Nobel Prize Laureate



Sam R. Willcoxon
Executive Vice President
AT&T Communications



Randall L. Tobias
Chairman and Chief Executive Officer
AT&T Communications

William B. Cook
Managing Director
Morgan Stanley & Co., Inc.

James Edwards
President
Computer Systems Division
AT&T Information Systems

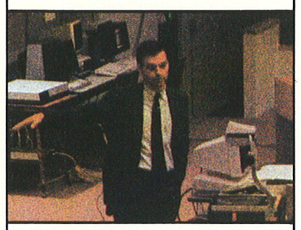
Darryl Hartley-Leonard
President, Hyatt Hotels Corporation

In addition to exposure to an outstanding faculty, participants are exposed to a diverse group of visiting speakers including university professors, customers and AT&T executives.

Robert M. Kavner
Senior Vice President
Chief Financial Officer AT&T

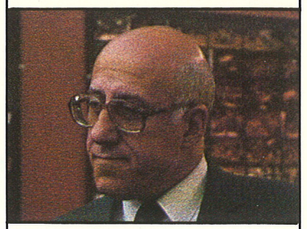
Ian M. Ross
President
AT&T Bell Laboratories

Morris Tanenbaum
Executive Vice President AT&T



John S. Reed
Chairman and
Chief Executive Officer
Citicorp

Richard C. Holbrook
President
Large Business Systems
AT&T Information Systems



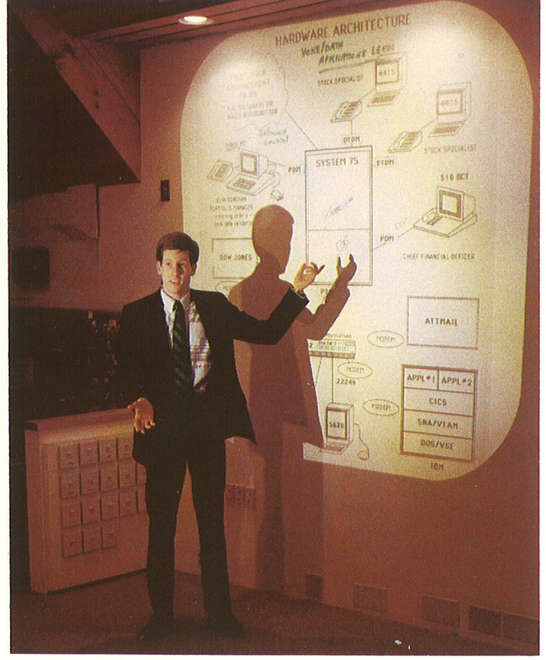
Peter T. Milano
President
Services Division
AT&T Information Systems

William F. Buehler
Group Vice President
General Business Systems
AT&T Information Systems

Thomas R. Thomsen
President
AT&T Technology Systems

Robert J. Casale
Executive Vice President
Business Markets
AT&T Information Systems

Robert E. Allen
Chairman and
Chief Executive Officer
AT&T Information Systems



Gordon MacKinney, AT&T intern, presenting AT&T's Integration Architecture.

CAMBRIDGE OFFERS SEVERAL PROGRAMS

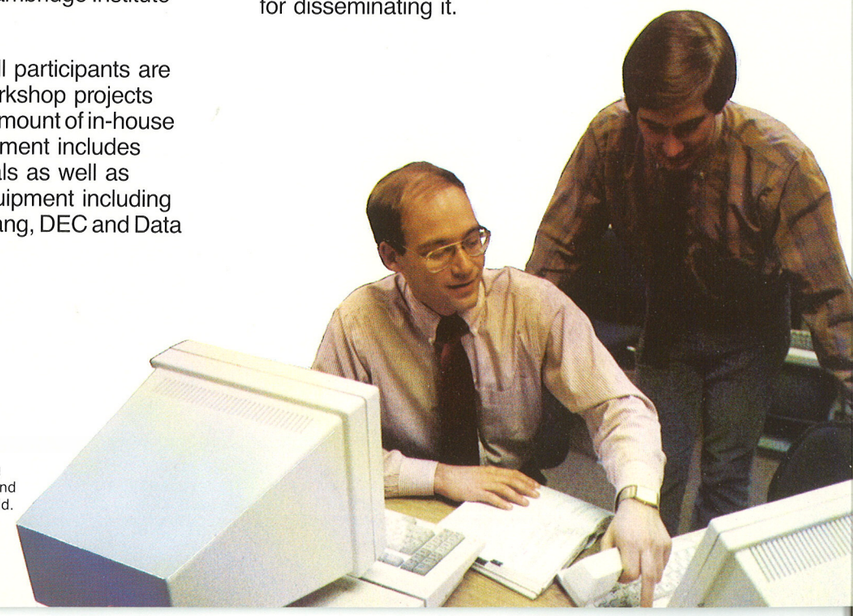
- **Information Management and Movement Series** — Four courses are a must for any AT&T person who must market, implement, or understand AT&T products.
- **Executive Program** — Designed for all AT&T management executives.
- **Customer Program** — Special programs for key executives responsible for information management decisions.
- **Internship Program** — A 3-12 month assignment of field personnel to work with the Cambridge Institute and Technology Center's staff.

In addition to attending lectures, all participants are heavily involved with hands-on workshop projects which take full advantage of a vast amount of in-house and remote equipment. This equipment includes AT&T's 3B processors and terminals as well as competitors' environments and equipment including SNA, IBM System 36, IBM 3083, Wang, DEC and Data General.

All participants receive hands-on experience in developing total solutions to customer needs using integration of computers and communications. The AT&T communication hardware at Cambridge (including Merlin, ISN, System 75, 3BNET, 6500) and the software created jointly by Cambridge and AT&T, provide a unique environment for hands-on experience with voice and data integration exploiting AT&T Communications networking capabilities. Through an on-going relationship with AT&T product people the latest products (processor terminals, switch, etc.) are made available to participants.

CAMBRIDGE TECHNOLOGY CENTER

Coupled closely with the Cambridge Institute is the Cambridge Technology Center which has a contractual agreement exclusively with AT&T. The Cambridge Technology Center is an independent corporation devoted exclusively to research and development in the application of AT&T products and architecture. The Technology Center is working closely with AT&T's research and product development people on voice and data projects such as integration of 3B's with switches and seamless integration of AT&T application programs. The results of the Cambridge Technology Center are immediately integrated into the Training Center programs, hence providing an immediate transfer of AT&T technology and market strategy. The Cambridge Technology Center is a vehicle for creating knowledge, and the Cambridge Institute is a vehicle for disseminating it.



Howard Kolodny and James Markiewicz, members of the Cambridge Staff creating projects for use in development, teaching and solutions for participants to use in the field.

CAMBRIDGE INSTITUTE IS SURROUNDED BY OTHER IMPORTANT SOURCES OF ENDEAVOR AND INTEREST.

1. Cambridge Institute for Information Systems
2. Massachusetts Institute of Technology
3. Hyatt Regency Hotel
4. Cambridge Technology Center
5. M.I.T. Sloan School of Management
6. John F. Kennedy School of Government, Harvard
7. Harvard Business School
8. Harvard Stadium
9. Harvard Square
10. Downtown Boston
11. Logan Airport
12. John F. Kennedy Presidential Library

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