

Allan L. Scherr

Born November 18, 1940, Baltimore, Md.; pioneer in the development of operating systems for large-scale computers and systems for defining and automating business processes.

Education: SB, SM, electrical engineering, MIT, 1962; PhD,¹ electrical engineering, MIT, 1965.

Professional Experience: IBM Corp.: computer hardware architect, 1965-1968, manager, Programming Systems, executive in programming and systems development, 1968-1991, vice president, technology, IBM Consulting Group, 1991-present.

Honors and Awards: IBM Outstanding Contribution Award for TSO Design and Development, 1971; ACM Grace Murray Hopper Award for pioneering work in performance analysis (of time-sharing systems), 1975; fellow, IEEE, 1983; IBM Fellow for his development of IBM's general-purpose time-sharing system, the large-scale operating system, MVS, and software support for distributed processing and communications networks, 1984.

Scherr was born in Baltimore in 1940 and in 1958 graduated from the Baltimore Polytechnic Institute. He then went on to MIT, where in 1959 he was first exposed to computers in a programming course taught by John McCarthy (the inventor of LISP) and Nat Rochester (a future IBM fellow). Scherr's concentration during his undergraduate and master's degree studies was a computer logic design. During this period he also worked as a cooperative student with IBM doing logic design with their advanced technology groups. This work resulted in several patented inventions.

In 1963 he was part of the original group of graduate students at MIT's Project MAC (which later became the laboratory for Computer Science). His PhD research involved measuring and modeling the performance of the world's first general-purpose time-sharing system, CTSS. This work, still referenced in system performance analysis literature, earned him the ACM's Grace Murray Hopper Award in 1975, and was published as a research monograph by the MIT Press.

Scherr joined IBM as a staff engineer in 1965 and worked on the architecture for what became the IBM System/370 line. His work in simulating program-addressing patterns and memory allocation were instrumental in establishing IBM's virtual storage architecture and the direction for memory allocation in OS/360.

In 1967 he led a series of studies to create a time-sharing system strategy for IBM. His proposal for a general-purpose time-sharing system was accepted and he became the manager of the group that designed and led the implementation of TSO (Time Sharing Option), today's most widely used time-sharing system.

In 1971 he participated in the IBM task force that proposed the creation of MVS, a multiple virtual storage, multiple coupled processor, high-visibility operating system for IBM's large computer systems. Scherr became the overall manager for the project until its shipment in 1974. This was the largest single software release ever produced, consisting of nearly two million lines of new and changed code on a base of over three million lines.

¹Thesis: "An Analysis of Time-Shared Computer Systems."

In 1977 he took over the management of the development of a new operating system for distributed processing (DPPX) for IBM's minicomputer line, the 8100. In 1980, after successfully shipping the first release of DPPX, Scherr was named a director of programming in the Systems Communications Division, supervising the development of IBM's networking software (VTAM, TC, NCP) and its premier transaction processing system (CICS). After a two-year assignment on the corporate engineering and programming staff, in 1983 Scherr directed the early design work for what later evolved into AS/400, IBM's midrange system line. During this period he also developed an approach to achieving unprecedented levels of productivity from engineering and programming teams.

In 1986 Scherr moved to IBM's Application Solutions Line of Business, where he directed engineering and programming groups developing products for specific application by IBM customers in various industries. In 1989 he directed the technical staff overseeing development for the entire line-of-business and coordinated the creation of an overall application architecture. He represented the application layer of software in the creation of IBM's System Application Architecture and was instrumental in setting its distributed-processing and intelligent-workstation direction.

In 1991 he became vice president of technology in the IBM Consulting Group, responsible for providing leading-edge tools and methodologies for consultants in advising clients on information technology strategy, business process reengineering, and quality.

During the last few years, Scherr has led a research effort in the definition, automation, and management of business processes. His group has developed a new approach to defining business processes that promises to revolutionize the way computers are used in business.

QUOTATION

“Most of the work I've done has been to [bring] things into existence that didn't exist before.... In a sense, my whole career's been about building organizations that didn't exist before, creating processes to do things that have never been done before, and solving technical problems that hadn't been solved before. The work I did at MIT was that way as well. There was no real foundation to build on, and I had to make it up as I went along. That's characterized, if not my whole career, at least the parts of my career that I consider the most rewarding. Pioneers are also the people that get arrows shot through them. That's the downside, and I've had my share of arrows pulled out of my hide.”¹⁵

BIBLIOGRAPHY

Biographical

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UPDATES