The computer industry has been fundamental to the creation and nurturing of the management of information resources. Although information and manual information resources had been studied extensively by areas such as accounting, it was the development of the computer industry that gave the management of information resources its current character.

Jeffrey Yost is the Associate Director of the Charles Babbage Institute for the History of Information Technology at the University of Minnesota. His book is a well-written and often entertaining historical account of the development of the computer industry with a strong emphasis on the business, government and academic contributions to its development. The Table of Contents lays out the various developmental phases of the computer industry in eight chapters: 1) the prehistory of the computer industry, 1880-1939; 2) the advent of the mainframe digital computer, 1940-1957; 3) the broadening scale and scope of the mainframe computer industry, 1957-1964; 4) the industry’s supercomputing and minicomputing sectors, 1957-1975; 5) the rise of software as a service, product, business, and industry, 1955-1975; 6) the infrastructure for long-term change, 1962-1974; 7) the personal computer and personal-computer software, 1975-1990; and 8) the computer networking revolution and computer industry, 1990-2004.

The chapters are preceded by a timeline of significant events beginning with the ENIAC project in 1943 and ending with the Google public offering in 2004. This timeline is very useful in that it helps to guide the reader through the myriad chapter details.

I don’t want to suggest that Yost’s account is simply names and dates. His writing style is consistent with accomplished storytelling. It is this story-telling aspect of the book that I found most engaging. For example, he relates the story of how a young Thomas Watson, Sr. managed to lose his job in Buffalo, NY in 1895 for drinking in a saloon while his horse, buggy and merchandise were stolen. Not to be deterred, Watson found a sales job at National Cash Register (NCR)’s Buffalo office and after four years was named sales manager of NCR’s faltering Rochester, NY office. In just three months he managed to turn the office into one of NCR’s most successful operations. This story has a lasting repercussion. It explains Watson’s paternalistic prohibition against drinking which was understood implicitly first at the Computing-Tabulating-Recording Company and later at IBM.

Yost’s history details how IBM became a giant of the computer industry. But his account
also details the contributions of other companies such as NCR, the Remington Company, the Burroughs Adding Machine Company, Sperry Corporation, General Electric, RCA, Control Data Corporation, Digital Equipment Corporation, Data General, Hewlett-Packard, Cray Research, Apple Computer, Dell Computer, and Cisco Systems, among others. Software contributions are also highlighted with accounts of the Computer Usage Company, Computer Sciences Corporation, the System Development Corporation, Electronic Data Systems, Applied Data Research, Informatics, Cullinane Corporation, Xerox Corporation and Microsoft Corporation.

Yost’s book is noteworthy for its appreciation of the role of business management in the development of the computer industry. For example, the depression years of the 1930s saw annual profits of all leaders except IBM in the U.S. office machine (not, computer) industry decline. IBM’s revenues and profits increased during these years. Yost provides three reasons for IBM’s good fortune: 1) its reliance on leasing rather than selling its machines; 2) its steady revenue streams from the sale of punched cards; and 3) Thomas Watson, Sr.’s refusal to cut IBM’s manufacturing and sales workforce despite hard economic times. These management themes continued through the years and provided the basis for IBM’s continued success under the stewardship of Thomas Watson, Jr.

An Appendix contains company profiles of major computer industry players focusing on historic and current financials. A section on Suggestions for Further Reading and Research is very intelligently written and offers insights along with suggestions. Finally, an Index contains useful entries for the many companies, personalities, and government agencies mentioned in the book.

I recommend this book highly for just about anyone interested in the past, present and future of the computer industry. It’s a keeper.