

THE COMPUTER GLOSSARY

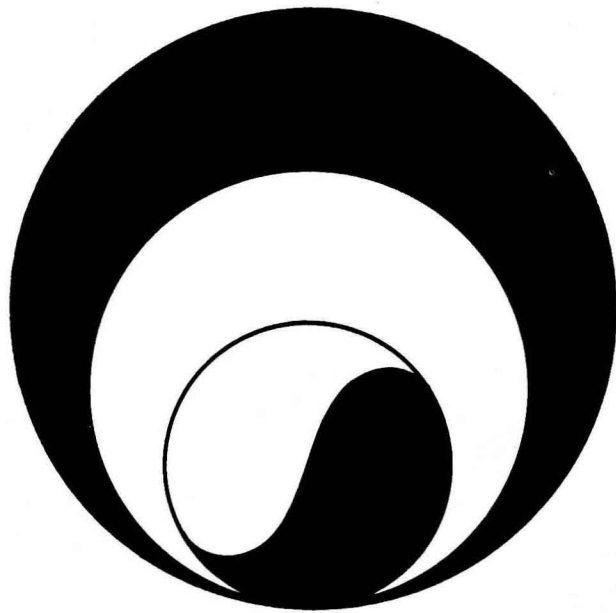
IT'S NOT JUST A GLOSSARY!™



FOR EVERYONE by ALAN FREEDMAN

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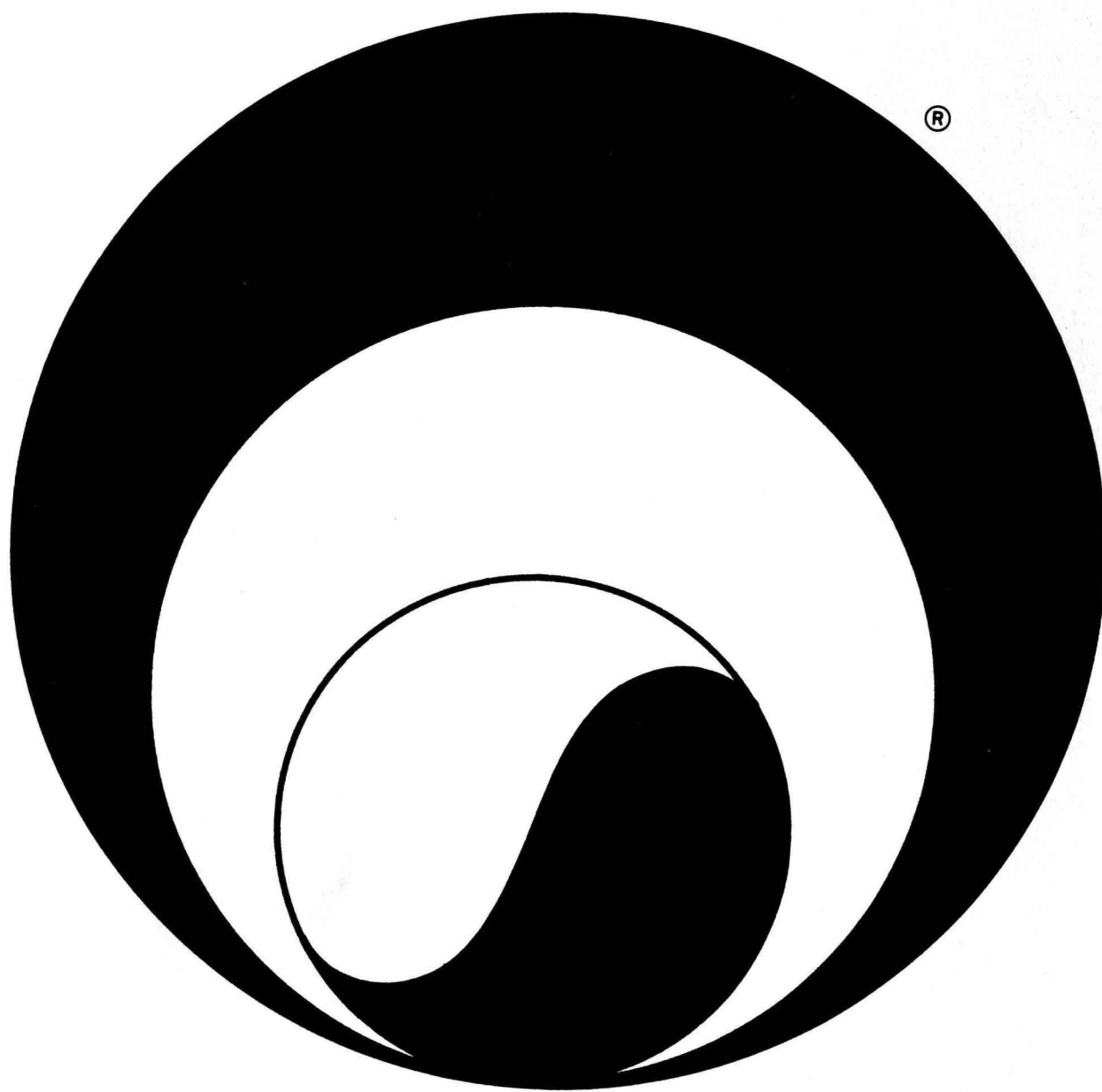
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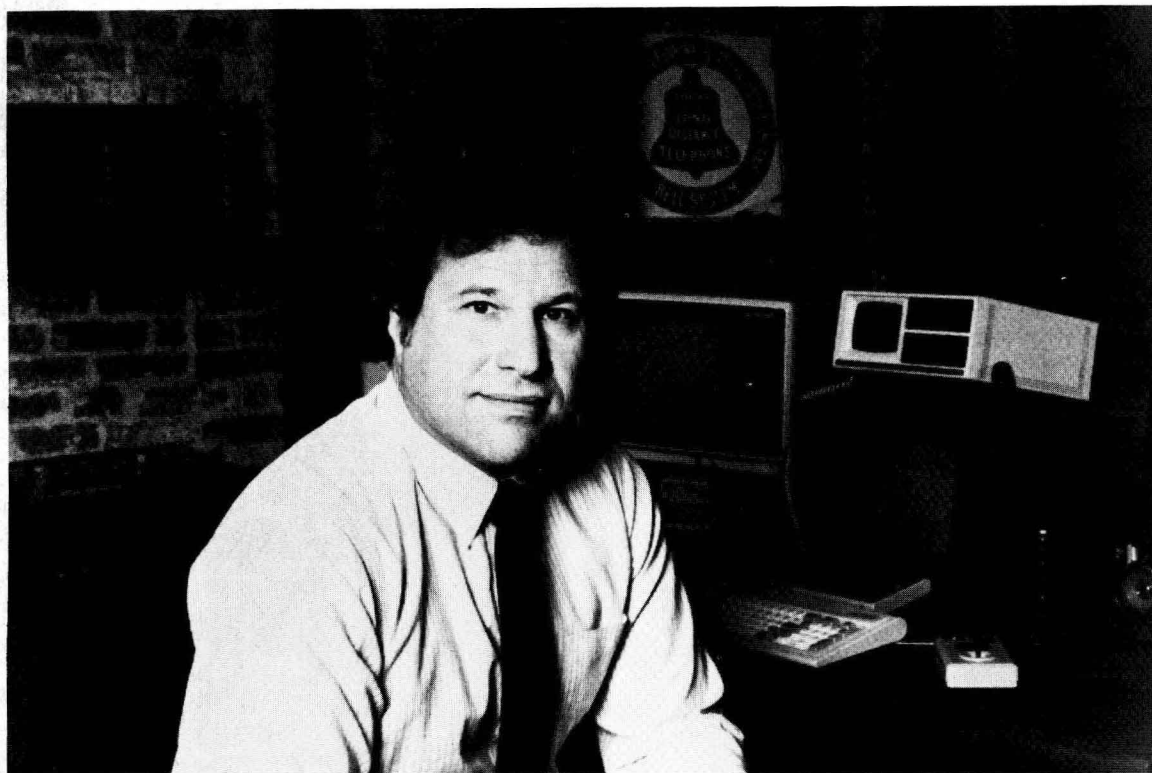
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about the author

Alan Freedman is the President of THE COMPUTER LANGUAGE COMPANY INC., an organization devoted to computer education and training for non-technical people. His COMPUTER LITERACY® seminar has helped to raise the level of technical awareness for thousands of managers in organizations like AT&T, the New York Stock Exchange, New England Telephone Company, Hershey Foods, Knight-Ridder Newspapers, McGraw-Hill, Connecticut General Life Insurance Company and The New York Times.

With over 20 years experience in every aspect of the computer world, Alan Freedman has become well known for his special ability to present complex, abstract concepts in a simple and concrete manner. He puts the whole thing into a "meaningful perspective" for the non-technical person.

Alan Freedman is the author of THE COMPUTER COLORING BOOK®, the first coloring book for executives, also published by Prentice-Hall, and dBASE II FOR THE FIRST-TIME USER, published by Ashton-Tate. He is currently at work developing his "Train the Trainer" program, designed for in-house trainers in large organizations.

I hope you find this Glossary a valuable companion as you wade through the mysterious world of COMPUTERS. The jargon will only get worse, and yet the basic concepts behind today's technology have not really changed at all. Many sophisticated state-of-the-art HARDWARE and SOFTWARE products now in use were conceived and developed many years ago. The COMPUTER industry is just beginning to mature. If mistakes have been made along the way, it's all part of the growing-up process in a "Future Shock" world.

Just because COMPUTERS are getting smaller in size, don't underestimate their capabilities or their complexity. In the near future, no area will be untouched by them. If you invest your time in learning about these amazing devices now, you'll be able to recognize all the potential APPLICATIONS for your personal and business use.

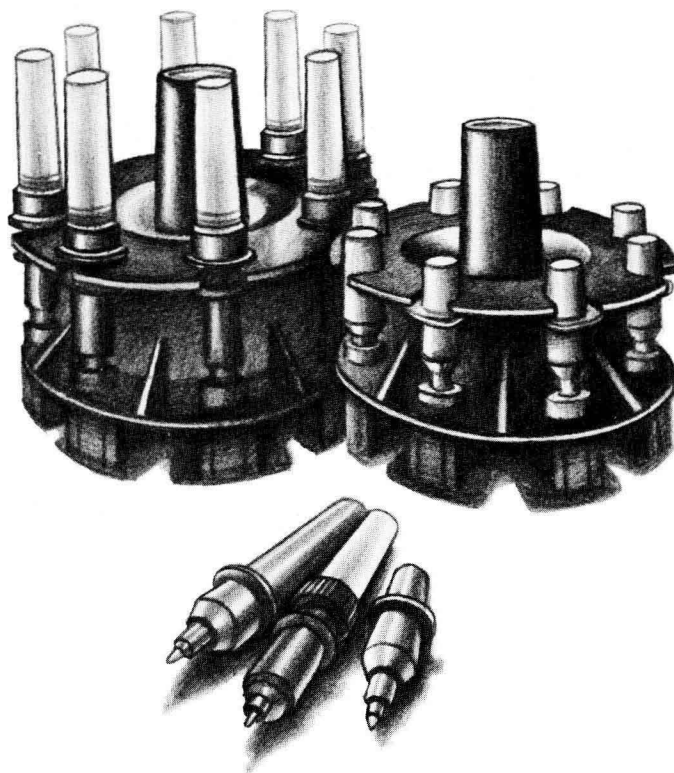
This Glossary represents the results of over ten years of work, reducing technical COMPUTER jargon into a perspective which can be understood by everyone.

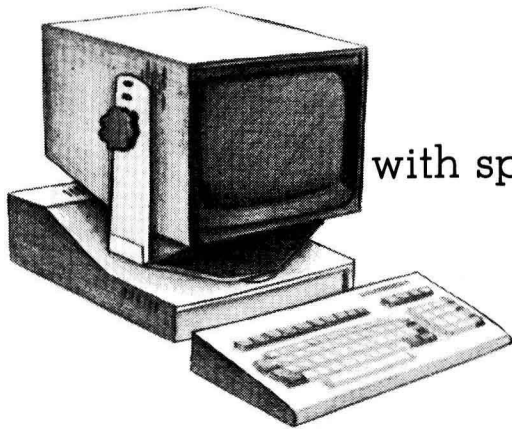
The TEXT was created on a MICROCOMPUTER using WORD PROCESSING SOFTWARE and was ELECTRONICALLY manipulated to the stage you are reading. The Glossary, which contains over 500,000 CHARACTERS of TEXT and more than 1,000 definitions, was EDITED dozens of times and copied over and over again onto a FLOPPY DISK. In the three years between the creation of the First Edition and the printing of the Third Edition, over 300 million pulses were ELECTRONICALLY transferred into and out of the COMPUTER. The Glossary was transferred from the MICROCOMPUTER by direct cable connection to the PHOTOTYPESETTER which composed the pages you are reading (minus the handwriting).

Please write to me at The Computer Language Company, and let me know your reaction to this Glossary. The feedback I've received from thousands of managers in my seminars has helped me to develop it. Your help will continue to make it better.

Good Luck.

illustrated by
Eric Jon Nones





with special thanks to:

Irma Lee Morrison

Vice President

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New York, New York

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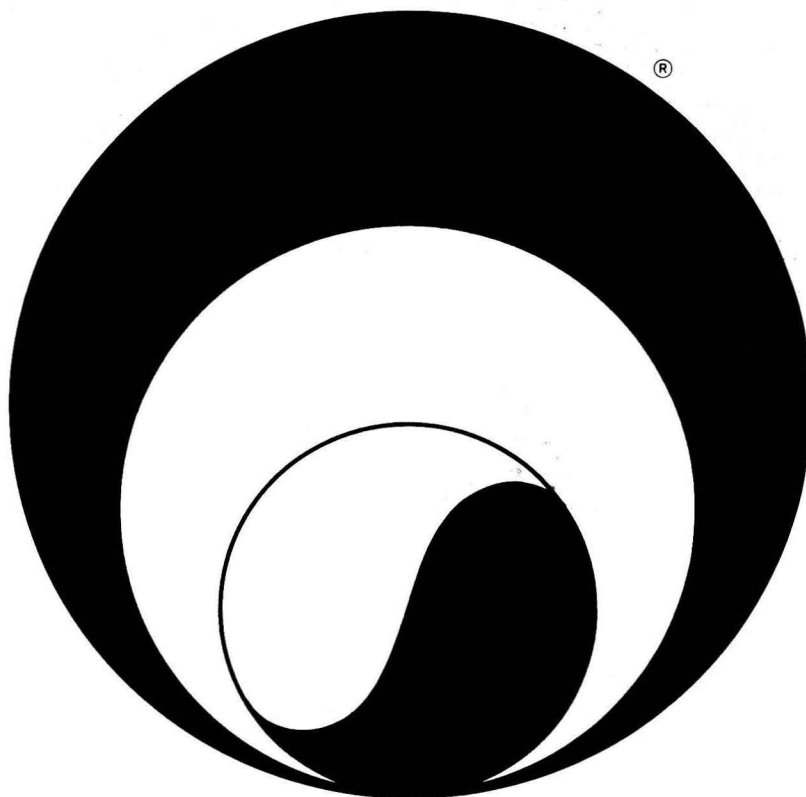
IT'S NOT JUST A GLOSSARY!

...it's a guide to "Computer Literacy"

Regular reading of this Glossary will help you keep up with the terminology, concepts and perspective necessary to get the most out of COMPUTERS and COMPUTER professionals. This Glossary has been cross-referenced as an additional help to non-technical people. Every time you see a term in capital letters (after the first sentence which is always capitalized), you know you can look up its definition elsewhere in the Glossary and expand your understanding of the subject.

If you hear a term that is not in the Glossary, it may be an acronym for a vendor's particular HARDWARE or SOFTWARE product. It may be the model name or number for a CPU, TERMINAL, OPERATING SYSTEM, PROGRAMMING LANGUAGE or DATA BASE MANAGEMENT SYSTEM. Find out what category it falls into and then look it up in the Glossary.

On the next six pages are overviews for the business manager, the student, and the first-time personal computer buyer. They will provide you with an outline to work your way through the Glossary depending on your immediate interest.



to the business manager

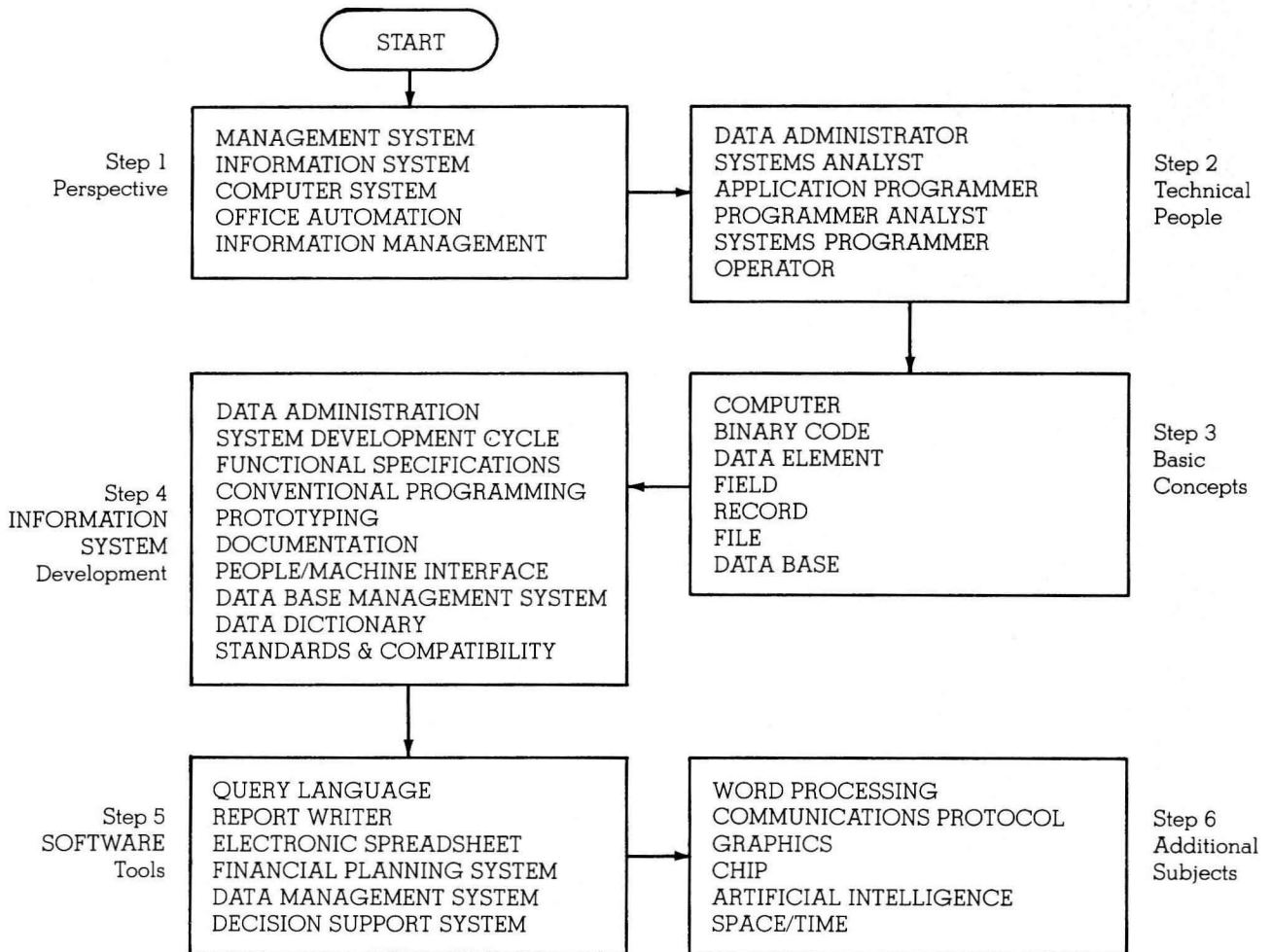
The MANAGEMENT SYSTEM is you and your associates setting objectives and ensuring that they are accomplished. INFORMATION SYSTEMS help you run and control your daily operation. DECISION SUPPORT SYSTEMS help you plan your operations and let you see the impact of your management decisions. COMPUTER SYSTEMS store, retrieve and PROCESS the INFORMATION you require.

Managers involved with vendors and SYSTEMS professionals should understand the SYSTEM DEVELOPMENT CYCLE, which is the series of steps that transforms INFORMATION requirements into working INFORMATION SYSTEMS. The SYSTEMS ANALYSIS & DESIGN phase must be performed slowly and carefully. The FUNCTIONAL SPECIFICATIONS, which are the design and blueprint of the INFORMATION SYSTEM, must be thoroughly understood by the USER. PROTOTYPING the new SYSTEM, if possible, can lead to a better definition of requirements. If PROTOTYPING is not possible, then once the USER has signed off on the design, the PROGRAMMING should be done as quickly as possible.

Be aware of the importance of well-designed PEOPLE/MACHINE INTERFACES, the advantages of DATA BASE MANAGEMENT SYSTEMS (for providing flexibility for future changes), and the problems with STANDARDS & COMPATIBILITY.

You ought to think about the kinds of ad hoc questions you want your SYSTEM to answer. The COMPUTER'S ability to quickly manipulate DATA into meaningful INFORMATION may provide the largest payback to management. DECISION SUPPORT tools should be considered and integrated into the INFORMATION SYSTEM design from the beginning. USER-FRIENDLY QUERY LANGUAGES, REPORT WRITERS and FINANCIAL PLANNING SYSTEMS give you hands-on capabilities.

COMPUTERS are invaluable for business, but they are not magic. Your thorough understanding of their application is essential.



to the student

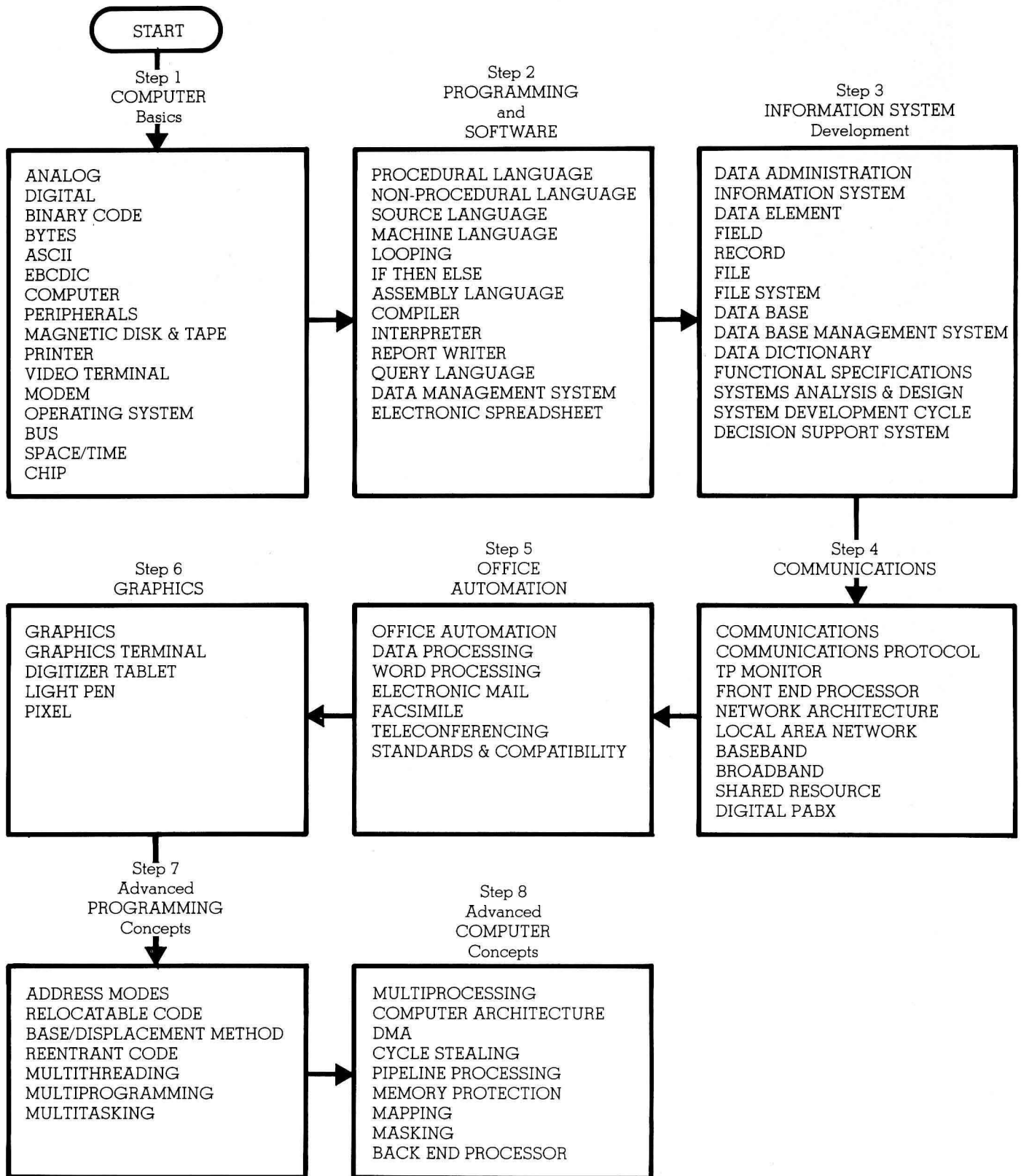
A solid foundation of basic COMPUTER concepts will be extremely helpful for understanding the myriads of new ELECTRONIC products that are coming in the future. In addition, you'll be able to apply the COMPUTER in your own unique way for solving problems in your profession.

If you're planning a career in the INFORMATION PROCESSING industry, you have many choices. You can be involved at the ELECTRONICS level as a COMPUTER DESIGNER, or as a FIELD SERVICE engineer. As a SYSTEMS ANALYST or APPLICATION PROGRAMMER you can work on problems in any kind of industry. As a SYSTEMS PROGRAMMER you can work as a technical CONSULTANT within a USER organization, or you can design and develop SYSTEM SOFTWARE for vendors. If business operations intrigue you, the fields of MANAGEMENT SCIENCE and DATA ADMINISTRATION are open to you. Sales and marketing of COMPUTER products also offer a wide variety of opportunities for people who enjoy COMPUTERS.

Take some time to learn and understand the differences between the COMPUTER SCIENCES and the INFORMATION SCIENCES. In theory, they are distinct fields, each with different objectives and disciplines. In practice, they are thoroughly intertwined and the casual observer often cannot perceive their differences.

Also, read the overview to the business manager (previous page). It will help you look at the world of COMPUTERS from a USER'S point of view.

Getting comfortable with COMPUTERS will give you an advantage in any field, whether you're a proprietor in a small business or an engineer in the most advanced technologies. No matter what your chosen profession, the COMPUTER can be used to help you perform that job faster and more accurately.



to the personal computer buyer

Before you purchase a PERSONAL COMPUTER you should define your needs carefully. The more specific your requirements, the better your choice will be. All COMPUTERS are not equal. A particular COMPUTER SYSTEM may be fantastic for GRAPHICS and terrible for WORD PROCESSING or vice versa.

COMPUTER SOFTWARE is not easy to evaluate, but it should be done before the HARDWARE selection is made. Every type of SOFTWARE PACKAGE has its own set of evaluation criteria. What makes one ELECTRONIC SPREADSHEET better than another has nothing to do with what makes one WORD PROCESSING PACKAGE better than another.

Once a particular COMPUTER vendor has been selected (based on the availability of SOFTWARE) the COMPUTER SYSTEM can be sized according to its DISK storage and MEMORY capacities. DISK capacity determines the maximum size of the FILES that can be stored. MEMORY capacity determines the size (and complexity) of the PROGRAMS it can run.

Remember, the moment you purchase a PERSONAL COMPUTER, you have set standards for the future. In time, your investment in SOFTWARE PACKAGES and/or your own custom-developed PROGRAMS, may be considerable. Moving your SOFTWARE to a different COMPUTER SYSTEM later on may not always be possible.

PERSONAL COMPUTER buyers should become familiar with COMPUTER fundamentals and have an understanding of the primary categories of SOFTWARE PACKAGES that are available. Most importantly, the first-time buyer should "test-drive" each prospective machine. Sit down at the TERMINAL and try your hand at a couple of SOFTWARE PACKAGES. It's not going to be any easier when you get it home.

