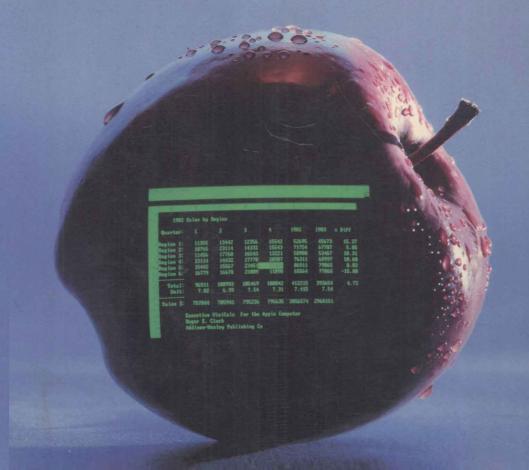
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Executive Visicalc for the Apple Computer

Roger E. Clark



Executive VisiCalc for the Apple Computer

ROGER E. CLARK

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Preface

In order to judge in advance the possible usefulness of a book you are about to read, it is perhaps necessary for you to know something of the background of the author, and his qualifications for writing on such a subject.

I am a VisiCalc maven. I have been fascinated by the program since it first came out. At that time I was a dealer—one of the earliest "computer stores," a new kind of retailer. I opened my store in January 1979 in the downtown area of a northeastern town. My store never went through the transition that those few earlier ones did—from electronic specialist through hobbyist to an eventual business orientation. I started with a direct aim towards medium-to-small businesses.

I had come from a ten-year stint as a partner in a New York management/marketing consultancy, a small one. During those years I had participated in many business start-ups, which was a specialty of ours. While I had helped many companies obtain a computer and get started, I had had almost no "hands-on" experience. In seeking a new life that avoided the daily commute, I had treated myself as a client, and done a marketing study to establish business areas that had growth potential—and had found three possibles, one of which was the sale of the then-emerging small desktop computers at retail.

One of the first requirements of a successful consultant is to be a "fast study" of the particular industry requirements of a new client. After all, a balance sheet is a balance sheet—and stays that way regardless of the "widgets" concerned. Even though I knew virtually nothing about computers, I decided to go further. Having established that retail was to

be my new career, and that small computers were the commodity to sell, it was necessary to get that fast experience.

During the six months prior to opening, while I was searching for a site, and doing all the other nitty-gritty things necessary to starting a new business, I bought two computers, an Apple and a Radio Shack TRS 80 (in those days you waited six months for a delivery of the latter but I had the luck to persuade a store to let me jump the queue). I put in many hours as a new computerist—giving me a true insight into the problems that my future customers were to have (and probably some of my readers are having now!). The result of the backaches, headaches, and alienation of my family was a deep and abiding appreciation of the power of these wonder machines and an enthusiasm that persists—my house is full of computers.

During this learning period, I had the great good fortune to find a young man who really had got hands-on experience in computers, Phil Chin. One day in the fall of 1979 the UPS man brought a package we had not ordered, from a company we had never heard of — Personal Software. Since Phil was in those days a bit of a "game freak," the arrival of the UPS man every day was like a mini-Christmas for him. The hour following the event was always lost for the store. Phil would boot up whatever came, and it would get a fast and thorough workout. He was the first 120,000-point Space Invader winner I ever met!

The package that day contained a diskette and a manual for a program called VisiCalc. After five minutes—the store was quiet—Phil said, "Come over and take a look at this." Running on one of the Apples was a free-running demonstration/tutorial about the new program. It only took me about five minutes watching this to understand what we had been sent. That day it was I who ignored customers, as I explored the program—the other side of the diskette contained a free copy of the program. I left the Apple finally at about midnight. I knew then that I had a new and significant product in my store.

From that day on three of every four Apples that were sold went out with VisiCalc. I had the heady experience of having customers say, "Give me whatever I have to have to put that capability on my desk." I don't know if Apple has ever acknowledged the debt that they have to Software Arts, the authors, or Personal Software (now called VisiCorp), but I am sure that all over the country Apple dealers who spotted the potential, became proficient enough to demonstrate it properly, and showed it to

every customer who came in had the same marked increase in Apple sales.

For here was the answer to that nagging question that so many customers asked: "What can a small computer do for me?" In order to answer it, you usually had to administer an investigative interrogation in order to establish what the customer did for a living and so on. But with VisiCalc I could say, "Let me show you just one thing it can do for anyone, and you tell me if it can do anything for you..." And three times out of four the customer would watch an almost standard demonstration for a minute or two, and his face would clear and he would tell me about the particular application he had with which VisiCalc could help.

Having experienced myself—and watched my customers experience—the tremendous flexibility of this new application for micros, we guessed that a fraternal spirit would grow up around it. Even though for many months it was available only on the Apple, we knew that as each individual user explored the program, and developed his or her own applications, there would be a desire to share the experience—and with whom? Obviously there would be too few users at that time to have local face-to-face meetings—so VisiGroup was born.

I and another VisiCalc enthusiast, Bob Korngold, started VisiGroup in the Fall of 1980. VisiGroup has a significant membership, and since it concentrates primarily on formulae and applications, it cuts across the product orientation of Apple only, and is useful to anyone who uses VisiCalc on any machine. Members contribute to the monthly newsletter, called SpreadSheet, and the exchange of ideas and applications demonstrates over and over the great facility for creative use of a microcomputer that the program permits.

VisiCalc started something new. When Bob Frankston and Dan Bricklin wrote the program, and Dan Fylstra and the fledgling Personal Software published it, it is unlikely that they realized what they had started. At last count there were over forty VisiCalc lookalikes or actalikes, and virtually every computer has its version. In the same way that, I suspect, VisiCalc made Apple take off in a definitive way, the presence of these other programs has done the same for other machines.

So as the foregoing indicates, my qualifications are ideal. I was among the earliest in the computer retail business. I was certainly among the earliest to appreciate VisiCalc. I write about spreadsheet programs under several pen names in different computer magazines.

I would like to acknowledge several people and companies who contributed their advice and guidance in the writing of this book. Ronald Ogg (Xerox Retail Markets), Phil Chin (Integral Data Systems), John Webster (TeleProducts Corporation), Bob Korngold (co-founder of Inter-Calc), Elydia Siegel (Superscript Associates), my wife Mary Lou (who read it over and over and over!), and The Xerox Corporation, for whom I now work.

Introduction

In the early days of microcomputers—when the thought that anyone could own one of these magic boxes was not yet common—the term "personal computers" meant "home computers." They were for games or for "education," and the best home uses that the software companies could come up with were for recipe management, home budgeting, electronic address/telephone books, and other not-so-exciting uses.

Now "personal" has come to mean something else. The word now describes a computer that the owner/operator can use for his or her personal computing—a one-on-one relationship in any environment, both the home and business.

It is no longer considered demeaning for an executive to have a computer on his desk, and to be seen actually manipulating the keyboard. Managers and businessmen at all levels are using the machines, and it was VisiCalc that started this change of attitude. How? VisiCalc made the manipulation of data possible for everyone, without knowledge of bits and bytes, RAMs and ROMs, or a programming language. It made Apple's enigmatic beige box a truly usable—and useful—tool.

This book will enable business executives to use their Apple computers more effectively. The all-purposeness of VisiCalc will be amply demonstrated, and the horizons that may have been dimly seen when the program was bought will be expanded and clarified. The applications fully explained herein, while useful in themselves, will point the way to other uses, enabling the reader to develop additional, more individual, "personal" uses.

Is this book for you? If you are a manager—of people or of money—it is going to make you more effective. If you are a planner, you will be able

to do your job with greater accuracy and with a better chance of being right. If you run your own business, you will be able to introduce a level of data processing that used to be available only to people who could afford the products of Big Blue (IBM of course) in air-conditioned halls with acolytes in white coats to tend them.

Finally, the book is going to stimulate you, whoever you are. There is a feeling of power in making these micro machines obedient, and in knowing that they can be made to produce. There is no such thing as "computer error," as you have probably heard, only mistakes made by humans that the computer faithfully replicates. VisiCalc is so easy to use, so easy to understand, that the computer becomes a form of media—an instrument to produce accurate results at the operator's command.

It is hoped that this book will speed up the effectiveness and usefulness of the program to the new user on the Apple. All of the applications in this book are actively in use. Welcome to the wonderful world of VisiCalc on the Apple.

For those of you just getting started, you should turn to the Appendix, Getting Yourself (and Others) Up and Running on VisiCalc.

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Prerequisites for Reading This Book

The VisiCalc manual is perfectly adequate as a learning tool. In fact compared with the very first edition, which we saw in 1979, it is almost a model textbook! With most software programs, the first manual that appears is often sketchy, assumes too much, is sometimes poorly reproduced. Dan Fylstra, who is now Chairman of the Board of VisiCorp, and Bill King did a superb job of rewriting the original manual.

The advent of the Apple 3.3 (16 sector) version of VisiCalc in late 1981 brought with it the new book. To fully appreciate the information in the succeeding chapters, we have to assume a basic competence with this version of VisiCalc.

There may be some readers with the original VisiCalc version 1.35, which was essentially for the older 13 sector disk version of Apple. Whether you are using it on a 3.3 machine, using the DOS Basics diskette to boot it, or have still not converted your Apple to 16 sector, you are going to be severely hampered in reading this book. There are so many extra features in the revised version that we consider the first version to have too many limitations to be written about. While much of what we write will be useful to 1.35 owners, we are afraid that you will get an overwhelming urge to rush out and get the 202B0 version! If you registered your original purchase with VisiCorp (Personal Software as it was then), you are entitled to an update at a reasonable price. Contact VisiCorp and get one without delay.

The reader should have covered the four lessons that form the first part of the manual, which is tutorial in nature. There seemed no reason for us to repeat the fine job the authors did and try and teach it in any other way. We are not going to put in long sequences of keystrokes that lead you step-by-step through the various VisiCalc commands, as other authors on this subject seem to have found necessary.

In our experience in the micro business we have found no adequate substitute for this learning step: "You gotta read the manual." Good or bad, it is the first exposure to the program you are about to use. If the program is going to be useful to you at all, you have to understand what the authors had in mind. So if you are about to read this book and you haven't taken the first four lessons, we suggest you just skim through it now (get a feeling of the benefits to come!), and then get back to the keyboard and the manual, and go to school for awhile!

Here is some useful advice: Be daring! VisiCalc is an extremely "forgiving" program. It was written to protect the data at nearly all times; and unless you are careless enough to type "yes" when you meant "no," there is little you can do to ruin things. When the tutorials lead you step-by-step through an example, don't be afraid to change, modify, or experiment. You will always be able to get back to where you were when you wish to rejoin the teachers.

There are also two caveats. As with many manuals written by computerists, some parts of the power of VisiCalc are just mentioned and not expanded upon. Since we know which these are, we will try and cover them in more depth as we suggest their use. Also beware of getting carried away! It is evident by reading some of the books on the market that it is easy to get so enthralled by the power of VisiCalc in the early stages that learning stops. It is true that in the first half hour you will know enough to put VisiCalc to work doing useful and time-saving things. But some people stop right there! We get questions from members in VisiGroup that indicate the early enthusiasm can be a trap.

So even after you have done the first four chapters, the tutorial section, do not stop there! As time permits, go on and learn the other powerful capabilities. I am still finding new and useful uses for the various commands and procedures, as a result of getting to know them in more depth (and I still read the manual to be sure I did not miss anything!).

There are a few functions and keystroke sequences in VisiCalc that you will use *all* the time. These you should get down pat—learn them so well that they get into the keyboard without thinking.

First of course are the cursor control commands—moving round the model with the arrow keys and the direct "jump" command using the "greater than" (>) symbol. The thumb on the space bar to change direction and the index finger selecting the right direction with the arrow keys should become second nature. If you can get proficient enough to whiz that cursor around the screen, you will find the use of VisiCalc made much easier.

For one of the classes we hold in VisiCalc we have developed a "touch typing" exerciser model for the purpose of making this learning process easier. Take a look at Fig. 1.1. If this model is entered into VisiCalc, you can use it too. It is not a shattering development in the VisiCalc world, but we find our students develop a proficiency at moving around the screen much faster if they have a few sessions at it.

The second command in VisiCalc with which you should become completely familiar is the Replication sequence. As you will learn (or "should have learned" from the manual—remember, we are not going to

C 1 > A5 2 C 5 3 D >D5 7 6 4 E В 5 >B16 Н J 6 Ν M K 7 0 8 8 P 9 D 0 10 11 X >A18 >A1 12 C 13 Y 9 14 F 15 Z U 16 8 17 10 >D18 18 2 3 S 19 Т

Fig. 1.1 The Cursor Exerciser

All you do with this model (which of course you can develop for yourself) is try and zip around it finding the alphabet in order, or the numbers, or do them in reverse for a change. Use the jump command (> GOTO Al) to start at a new place — use this as an exerciser for the cursor control and you will find that zipping round a model becomes second nature...

teach VisiCalc here), the Replicate function is one of the most powerful and frequently used features of VisiCalc. Make it second nature.

By using the sequence that starts with /R you will be able to tell VisiCalc that you want the same calculation done in many different places, either using the value locations unchanged or using values secured from the same relative positions within the matrix. There is really no exercise for this except frequent use. Understanding what is going on is the main thing, and that comes with experience.

So if you haven't taken the first four tutorial lessons in the manual, take them now. We'll be waiting for you.