

1

Introduction to Solve it! 3.0

Welcome to the challenge of *Solve it!*

Solve it! For Windows 3.0 is a new learning system which teaches management problem solving skills through the use of PC spreadsheet and database software. *Solve it!* is designed for use by university students in schools of business and management.

The management cases in this *Solve it!* package will help you learn how to solve management problems using contemporary spreadsheet and database software on micro computers. The cases are all derived from actual business applications.

When you successfully complete these cases, you will have mastered the basics of the software and learned how to apply it in realistic settings.

Learn Through Discovery

Solve it! uses real world case studies to present students with problems and challenges. The cases range from small businesses on Main Street, to banks and brokerage firms of Wall Street, to government agencies. It's up to you to discover the answer.

For each case there is a corresponding data file on the diskette. You will be asked to enter data, formulas, data fields, and programs in response to problems posed in the cases.

In general, we have sought to reduce the amount of elementary data entry to a bare minimum and to emphasize conceptual tasks. The cases do not require advanced financial analysis or accounting skills. Explanations are provided for all formulas and analytic tasks.

Industry Standard

Solve it! is widely used in Fortune 1000 training programs. It is designed to bring students and working professionals up to a common intermediate level of proficiency in Microsoft Windows, Excel, and Access. From this level, industry training programs and seminars are advised for more advanced training.

Many universities and businesses use one of several powerful alternatives to Excel and Access. *Solve it!* works well with Access workalikes such as Foxbase+, and Paradox, and spreadsheet alternatives like Lotus 1-2-3 and Quattro Pro.

You may also use the data files included with *Solve it!* on Macintosh computers using software such as Microsoft Excel, and Foxbase+/Mac. You can use the *Solve it!* data diskette with any Macintosh software that can read .XLS, .DBF, and/or ASCII files. Ask your instructor for more information.

You may wish to keep both the book and the completed, graded exercises to show potential employers precisely what skills you have learned. You should also place this information on your resume.

Classic Business Problems

Solve it! uses cases which illustrate classic business problems typically encountered in the real world.

Problems like net present value analysis, payroll accounting, inventory management, break-even analysis, accounts receivable aging reports, pro forma financial statements, quality assurance, production planning, marketing database management, sales management systems, and personnel tracking.

When you complete the cases in *Solve it!* you will be well prepared to work effectively in a contemporary business environment.

Web Exercises and Case

Solve it! now contains a new chapter of exercises and case studies which explore the use of the World Wide Web in business problem solving. While the Web is still evolving, it has already proved itself a valuable research tool for business. On the Web you can discover industry trends, statistics, growth patterns, markets, and resources. In short, all the ingredients needed to make a well-informed business plan. The Web cases in Chapter 6 will show you how to use the Web to build a business plan, plus help you explore other features of the Web.

Documentation Included

Solve it! contains all the documentation you will need on how to use spreadsheet software like Excel and database software like Access. The documentation is provided in the form of hands-on tutorials which show you how to use the software skills required by each of the cases.

The cases and documentation were written using Microsoft Excel and Access for Windows. You will find the data files in *Solve it!* are compatible with all versions of the software. In general, the documentation instructions work equally well for clone software with only minor changes.

Students may wish to consult the original documentation for the software being used, or any one of several large reference manuals. These are generally available in your PC Lab, corporate or college library.

Solve it! assumes the student has a basic familiarity with Windows 98 and Windows 2000. If this is not the case, you should read through an introductory text on Windows or the Windows Users Guide.

The Skills Matrix

In order to select and develop cases, we created a Skills Matrix to identify both the PC software and management skills we sought to teach.

The Skills Matrix for spreadsheet software is shown on the following page (see Figure 1-1). A similar matrix is used for database problems.

The management skills are to organize, plan, coordinate, decide, and control. The PC software skills are basic (set-up and editing), intermediate (data analysis and organization), and advanced (database management, programming and interfaces).

Each *Solve it!* package contains a mix of skill levels and skill areas. About one third of the problems involve basic PC skills and elementary management skills of organization and planning. The remaining cases develop intermediate and advanced PC skills along with more advanced management skills.

As you proceed from beginning to more advanced cases, the problems become less structured and more analytic. More advanced cases require a written summary.

Each *Solve it!* case identifies in the beginning the specific skills involved in the case. In addition, the approximate completion times for persons at different skill levels are also included. These expected times are based on our experience in university classrooms and industry settings.

Figure 1-1

PC Skills	Organize	Plan	Coordinate	Decide	Control
I. Basic Skills Spreadsheet design Formulas Reporting	Cases 1-4				
II. Intermediate Skills Logical functions Graphics Statistical functions		Cases 5-7			
III. Advanced Skills				Cases 8-10	

How to Use Solve it!

There are ten spreadsheet, ten database, and three World Wide Web cases in each *Solve it!* package. The cases are graduated in difficulty, both in terms of software skills and management skills. The cases are short enough to be answered in one computer session lasting no more than 2-3 hours for a novice.

Each case has an estimated completion time. Students are strongly advised not to skip early problems. If you skip early problems you will not learn the software skills required in later cases. This will, in turn, lengthen the time required to answer later cases by several hours.

Each case is followed by a Tutorial Documentation section which carefully describes the software skills needed to solve the case. The software skills are demonstrated using sample spreadsheets and database files.

You should first read the case to understand the nature of the problem. Then you should study the Tutorial carefully to be sure you understand how the software works. Last, you should begin work on the case itself.

How to Cope With Ambiguity in Cases

Because *Solve it!* cases derive from real world events and circumstances, they often contain ambiguities--just like the real world. In advanced cases you will typically find more than

one way to solve a problem, and you will find that certain assumptions and value judgments must be made in order to arrive at any solution.

You should first identify clearly the nature of the ambiguity. Then consider the alternative solutions. Choose the solution you prefer and clearly state the assumptions and value judgments you are making. Be prepared to defend these assumptions, as well as to learn from others who made different assumptions.

System Requirements

Solve it! assumes that you have some knowledge of IBM or IBM compatible computers, including the operating system. *Solve it!* provides specific instructions on how to start up the software in special **Getting Started** sections of Chapters 2 and 4.

Solve it! assumes you are using an IBM or IBM compatible PC computer with at least 32 megabytes of RAM and sufficient hard disk capacity to run the application software. You will also require a printer with graphics capabilities.

General Instructions

1. Make a copy of the *Solve it!* data diskette. Store the original diskette in a safe place. This is always a wise procedure to prevent damage to the original diskette. The original can also be used to restore the shipping data sets should you accidentally change or alter them.

Label the copy diskette "*Solve it! Copy*" and use this diskette for all your work.

2. Read the appropriate case study in the case book quickly to identify the specific data file used in the case. This will also provide an overview of the basic issues of the case.

3. If you are working with a computer which has a hard disk, place the *Solve it!* data diskette in drive A and copy all the relevant files to the same directory in which your software program is loaded. Configure your software to read this directory when it searches for files.

You are now ready to begin. Chapter 2 introduces you to spreadsheet software in general, and specifically guides you through the basics of Microsoft Excel. This is followed by ten spreadsheet business cases in Chapter 3. Chapter 4 introduces you to database concepts, and Microsoft Access. This is followed by Chapter 5 which contains ten database business cases. Chapter 6 describes the World Wide Web and provides several exercises and cases for you to solve.