Unit 3

Popular Productivity Software: Desktop Publishing

Word processing can handle just about any document generation task, but some people need to produce documents with complicated layouts and documents that are ready to be printed professionally. For these people, the application of choice is *desktop publishing*. Instead of being tied to the typesetter and a commercial print shop, millions of users now create newsletters, brochures, user manuals, pamphlets, flyers, restaurant menus, periodicals, greeting cards, graduation certificates, and thousands of other printed and published items. Desktop publishing refers to the capability of producing *camera-ready documents* (ready to be printed professionally) from the confines of a desktop. The resulting documents are then reproduced by a variety of means, from duplicating machines to offset printing (a commercial printing process used for high-volume printing). The files/documents resulting from desktop publishing are compatible with hardware used in offset printing. Desktop publishing software can help you produce every conceivable type of printed matter, from business cards to catalogs, and is changing the way organizations and individuals meet their printing needs.

Desktop Publishing and Word Processing: What's the Difference?

Both desktop publishing and word processing software assist you in creating documents, but the end result and the way you get there can be quite different. In word processing, the emphasis is on *words*, the text that makes up the documents. In word processing, we fill the document with words, then add images, borders, shading, and so on around the running text. The text

runs from the beginning to the end of the letter, handbook, or whatever document is being created. In desktop publishing, the emphasis is on overall *document composition*. Various types of *objects* are pulled together and laid out on a page. An object can be a block of text, an image, a border, an area of shading, and so on. Desktop publishing's page layout capabilities, combined with its precision, have made desktop publishing the choice of professional designers of publication materials.

Creating and editing text within a desktop publishing program can be cumbersome, so most seasoned desktop publishers prepare their text using word processing software. Once the page layout is established, the text is *copied* (from the word processing document) and *pasted* (inserted) into the desktop publishing document at the appropriate location. Both desktop publishing and word processing allow you to save documents in a format compatible with the World Wide Web.

Desktop Publishing Concepts and Features

The quality of the desktop publishing-produced output depends on the quality of available input and output devices. The typical office will have hardware (scanners, printers, and so on) that is sufficient for most printing needs; however, professional graphics studios with very high-resolution hardware are needed for some jobs.

Creating a document with desktop publishing software involves going through the *document-composition process*. This process involves integrating graphics, photos, text, and other resources into a visually appealing *document layout*.

Presentation Software: Putting on the Show

During the past decade, PC-based *presentation software* has replaced overhead projectors and carousel projectors as the presentation tool of choice whether at the lectern or the pulpit. Presentation software lets you create highly stylized images for group presentations, self-running slide shows (for example, PC-based information displays at trade shows), reports, and any other situation that requires the presentation of organized, visual information. The software, such as Microsoft PowerPoint 2000, gives you a rich

assortment of tools to help you create a variety of charts, graphs, and images and to help you make the presentation.

A progressive sales manager would never consider reporting a sales increase in tabular format on computer printout paper. A successful year that otherwise would be hidden in rows and columns of sales figures will be vividly apparent in a colorful PowerPoint bar graph. Those in other areas of business also want to 'put their best foot forward'. To do so, they use PC-based presentation software, often with an LCD projector, capable of projecting images onto a screen for all to see.

(Larry & Nancy Long: pp. 60-62)

Part I. Comprehension Exercises

A. Put "T" for true and "F" for false statements. Justify your answers.

.... 1. Desktop publishing software enables users to produce camera-ready documents for reproduction.

.... 2. Word processing software is used to produce documents with complicated layouts.

.... 3. Users can create brochures, manuals, greeting cards, and thousands of other printed items using desktop publishing software.

.... 4. Desktop publishing has changed the way organizations and individuals meet their printing needs.

.... 5. Desktop publishing does not allow you to save documents in a format compatible with the World Wide Web.

B. Choose a, b, c, or d which best completes each item.

1. According to the text, ...
   a. desktop publishing software allows users to produce near-typeset-quality copy for newsletters, advertisement, and many other printing needs, all from the confines of a desktop
   b. desktop publishing software does not have the necessary capabilities of layout and document production
   c. word processing publishing capabilities has made word process-

   ing publishing the choice of professional designers of publication materials
   d. word processing software, together with desktop publishing, emphasises on words

2. In desktop publishing, ...
   a. various images and borders are added around the running text
   b. various types of objects are pulled together and laid out on a page
   c. creating and editing text is fast-moving and fluent
   d. text is created and edited, then page layout is established

3. Which of the following is NOT a desktop publishing feature?
   a. In desktop publishing, the emphasis is on overall document composition.
   b. Text in a desktop publishing file usually is entered first in spreadsheet software then moved.
   c. Generally, the text to be placed in desktop publishing document is prepared with a word processing program.
   d. The quality of the desktop publishing-produced output depends on the I/O devices used.

4. As we understand from the text, ...
   a. overhead projectors are still the best tools to present images
   b. presentation software doesn't allow users to create images for use during presentation
   c. some desktop publishing studios are equipped with very high-resolution hardware
   d. in desktop publishing, typical hardware satisfies all printing needs

5. Which of the following is a commercial example of presentation software?
   a. Microsoft Excel   b. Microsoft PowerPoint 2000
   c. Lotus 1-2-3   d. Print House

C. Answer the following questions orally.

1. What advantages does desktop publishing software have over word processing software?
2. Why is overhead projector replaced by presentation software?
3. What does the process of document composition involve?

4. What is a document layout?

5. How would you solve the problem of creating and editing text within a desktop publishing program?

Part II. Language Practice

A. Choose a, b, c, or d which best completes each item.

1. Desktop publishing documents are composed of rectangular frames. Frames hold text and images and can be resized and repositioned to meet .... needs.

   a. image
   b. desktop
   c. text
   d. layout

2. The components required for desktop publishing include a PC, ... software, a printer, clip art, multimedia resources, illustration software, and image scanner.

   a. text-frame
   b. document-composition
   c. picture-frame
   d. text-related

3. Microsoft PowerPoint 2000 helps you prepare and present slides for presentations. .... has a variety of slide templates from which you can choose.

   a. PowerPoint
   b. Slide dragger
   c. Power outline
   d. Slide viewer

4. A result of any Windows application, such as a block of text, all or part of a graphic image, or a sound clip is referred to as ....

   a. a note
   b. an outline
   c. an object
   d. a view

5. .... is used to prepare information for multimedia presentations in meeting, reports, and oral presentations.

   a. Presentation software
   b. Document composition
   c. Desktop publishing
   d. PowerPoint

B. Fill in the blanks with the appropriate form of the words given.

1. **Present**

   a. Text alone, no matter how well formatted, may fall short of what is needed for a quality ....

   b. The .... may use an image projector to project electronic slides onto a screen.

   c. PowerPoint's tri-pane view lets you view the slide, outline, and notes .... at the same time.

   d. PowerPoint 2000 helps you prepare and .... slides for presentation.

2. **Create**

   a. With presentation software you can .... a variety of charts from data imported from a spreadsheet or a database.

   b. A pattern used to facilitate the .... of a slide presentation is called a template.

   c. Graphics software is used for .... line drawings, art, and presentation graphics.

   d. A scalable typeface is an outline-based typeface from which fonts of any point size can be ....

3. **Scan**

   a. Optical recognition system's electronic .... read data and convert them to electrical signals, which are sent to the computer.

   b. A scanner .... hard copy and digitizes the text and/or images to a format that can be interpreted by a computer.

4. **Project**

   a. A proxima screen image .... projects electronic slides on to a screen for all to see.

   b. Transparency acetates and 35-mm slides were the presentation aids of choice for decades, but they now take a backseat to slide-.......... hardware and software.

   c. An LCD projector is capable of .... images on a screen.

5. **Result**

   a. The linkage editor links systems routines to the object module. The .... program, referred to as the load module, is directly executable by the computer.

   b. The .... of these mathematical operations were obtained from the university mainframe.

C. Fill in the blanks with the following words.

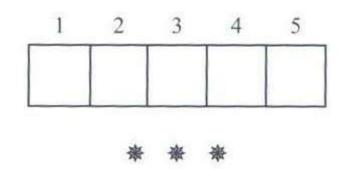|		
prepare	graphics	publishing
attractive	significant	components
satisfied		

The availability of desktop publishing systems should have a/an ………. impact on the way most business documents are prepared. Desktop ………. systems, a step up from word processing, can ………. high-quality output, combining different print typefaces with ………. and charts. Users can format these elements into ………. page layouts. Instead of manually cutting and pasting page ………., the systems enable users to make and remake pages with ease until they are ………. .

D. Put the following sentences in the right order to form a paragraph. Write the corresponding letters in the boxes provided.

a. At that time the concept was interwined with its realization in two pieces of computer equipment: Apple's Macintosh, with its then-unique desktop-metaphor screen, and Apple's Laser Writer printer.

b. This is an ideal microcomputer application–it's satisfying for those who do the work, and saves their companies time and money.

c. The term 'desktop publishing' dates from the mid-1980s.

d. Basically, it means using a microcomputer to prepare company reports, newsletters, pamphlets, advertising copy, and other printed material of professional quality.

e. Now, Everyone has heard of desktop publishing.

1	2	3	4	5

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Spreadsheet: The Magic Matrix

The spreadsheet, which is simply a grid for entering rows and columns of data, has been a common business tool for centuries. Before computers, the ledger (a book of spreadsheets) was the accountant's primary tool for keeping records of financial transactions. Instructors' grade books are also in spreadsheet format, with student names labeling the rows and quiz scores labeling the columns.

Spreadsheet software is an electronic alternative to thousands of traditionally manual tasks. We are no longer confined to using pencils, erasers, and hand calculators to deal with rows and columns of data. Think of anything that has rows and columns of data and you have identified an application for spreadsheet software: income (profit-and-loss) statements, personnel profiles, demographic data, home inventories, and budget summaries, just to mention a few.

Organization: Rows and Columns

Spreadsheets are organized in a *tabular structure* with *rows* and *columns*. The intersection of a particular row and column designates a **cell**. The rows are *numbered,* and the columns are *lettered.*

Data are entered and stored in a cell. During operations, data are referred to by their **cell address**, which identifies the location of a cell in the spreadsheet by its column and row, with the column designator first.

In the spreadsheet work area (the rows and columns), a movable highlighted area 'points' to the *current cell*. The current cell is highlighted with either a different background color or a dark border. This highlighted area, called the **pointer**, can be moved around the spreadsheet with the arrow keys or the mouse. The address and content of the current cell are displayed in the cell content portion of the spreadsheet above the work area. The content or value resulting from a formula of each cell is shown in the spreadsheet work area.

Ranges: Groups of Cells

Many spreadsheet operations ask you to designate a **range** of cells. These are *cell range* (a single cell); *column range* (all or part of a column of adjacent cells), *row range*; and *block range* (a rectangular group of cells). A particular range is indicated by the addresses of the endpoint cells separated by a colon, such as the row range C14:E14.
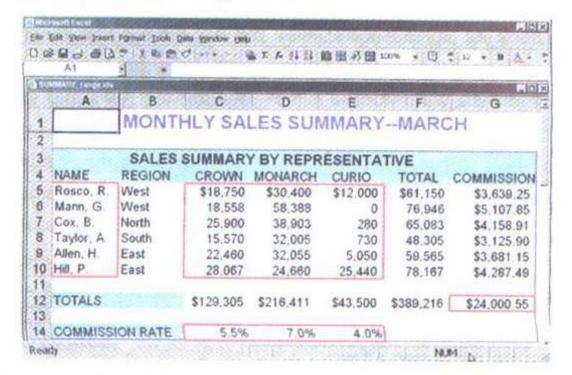

Figure 3-1. Spreadsheet Ranges. The highlighted cells in this spreadsheet illustrate the four types of ranges: cell (G12), column (A5:A10), row (C14:E14), and block (C5:E10).

Figure 3-2. Copying Formulas. The actual content of F5 is the formula in the cell contents box (=C5+D5+E5). The result of the formula (61150) appears in the spreadsheet at F5, formatted as currency ($61,150). In creating the spreadsheet template for the monthly sales summary, the national sales manager for BrassCo entered only three formulas (see cell contents summary below).

- The formula in F5 to sum the product sales for each salesperson was copied to the range F6:F10.
- The formula in G5: =$C$14*C5+$D$14*D5+$E$14*E5 to compute the commission for each salesperson was copied to the range G6:G10.
- The formula in C12: =SUM(C5:C10) to sum the sales for each product was copied to the range D12:G12.

Viewing a Spreadsheet

In Windows 9x/NT/2000, one or more applications run in **windows–** rectangular areas displayed on the screen. Depending on the size of a window, the entire document may not be visible. Spreadsheets can be large, sometimes thousands of rows and dozens of columns (for example, an employee database). When document content is more than can be displayed in a window, the window is outfitted with **vertical** and/or **horizontal scroll bars**. Each bar contains a **scroll box** and **scroll arrows**. Use the mouse or keyboard to move a box up/down or left/right on a scroll bar to display other parts of the application. This movement is known as **scrolling**. Scrolling through a spreadsheet is much like looking through a magnifying glass as you move it around a newspaper page.

(Larry & Nancy Long: pp. 66-69)

Comprehension Exercises

A. Choose a, b, c, or d which best completes each item.

1. Spreadsheet software ………. .
   a. has recently been introduced as a tool for entering rows and columns of data
   b. permits users to work with rows and columns of data
   c. is identical with the ledger
   d. is identical with the template

2. Which statement is NOT true?
   a. Spreadsheet software is an alternative to traditional manual tasks.

b. Spreadsheet software has replaced the use of pencils and erasers to draw rows and columns of data.

c. The term spreadsheet brings a tabular structure to mind.

d. The term spreadsheet was coined at the beginning of the personal computer boom.

3. According to the text, ...

a. the intersection of a particular row and column in a spreadsheet designates a cell

b. spreadsheet software works only with numbers but doesn't generate charts

c. data stored in a cell are not easily addressable

d. the column letter accounts for the content of the current cell

4. The passage contains information that would answer which of the following questions about spreadsheets?

a. What are the major types of cell entries?

b. What are the spreadsheet templates?

c. How are the spreadsheet templates modified?

d. How are the ranges classified?

5. The spreadsheet pointer highlights ....

a. the relative cell	b. the status cell
c. the current cell	d. the merge cell

6. Data in a spreadsheet are referred to by their cell ....

a. box	b. address
c. code	d. number

B. Write the answers to the following questions in the spaces provided.

1. Name the ranges in a spreadsheet.

....

....

2. What is called the current cell?

....

....

3. What is scrolling?

....

....

4. What does the author compare scrolling to?

....

....

5. How does the size of a window affect the visibility of a document?

....

....

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Section Three: Translation Activities

A. Translate the following passage into Persian.

Simulation by Spreadsheet

The story goes that Daniel Bricklin and Robert Frankston invented the spreadsheet program in response to Bricklin's frustrations with pencil-and-paper worksheets in business school. It's said that the authors were amazed by the success of their program (VisiCalc–a milestone in business use of the computer), and especially by the explanation for the success.

They invented a foolproof, superconvenient way of doing worksheet arithmetic and making changes when the numbers changed.

But their program was being bought and used mainly for another reason. Changing one or more numbers in the on-screen worksheet automatically changes all the related numbers in all the related worksheets in computer memory. This means that the spreadsheet program is a powerful tool for asking **what-if questions**.

For example, suppose a manufacturing company's management has been thinking about automating one of its factories. That will take capital. Raising capital costs money. How will that affect profit-and-loss statements over the next several years?

The step-by-step spreadsheet answer is: (1) add a new cell, labeled COST OF RAISING CAPITAL, to the block of cells labeled COSTS, and enter the sum it will cost to raise the needed capital; (2) the spreadsheet program automatically updates the company's TOTAL COSTS; (3) the spreadsheet program automatically updates the company's PROFIT.

Notice that the first of these three steps is the one that requires judgment. Management has to decide whether it's best for the company to raise capital by negotiating a bank loan, by selling company stock or bonds, or by some other means. The spreadsheet program does the arithmetic for each of these options. This gives management some of the information it needs for decision-making.

Another question is: Will the automation pay for itself, and if so when? To answer this, enter the expected lower labor costs in one of the cells labeled LABOR COSTS. Since the data in memory now include both the expense and the benefits of automation, the spreadsheet program is a **financial model** of the company's situation when and if it automates the factory. The program's instant update of the PROFIT cell is an instant simulation of the company's financial future if it chooses to automate.

B. Find the Persian equivalents of the following terms and expressions and write them in the spaces provided.

1. block range ....
2. budget summary ....
3. camera-ready document ....
4. cell range ....
5. column range ....
6. demographic data ....
7. desktop publishing ....
8. flyer ....
9. home inventory ....
10. income statement ....
11. layout ....
12. manual ....
13. matrix ....
14. paste ....
15. PC-based presentation software ....
16. periodical ....
17. personnel ....
18. row range ....
19. scroll arrow ....
20. scroll bar ....
21. scrolling ....
22. self-running slide show ....
23. simulation ....
24. tabular structure ....

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