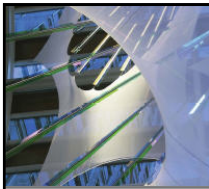




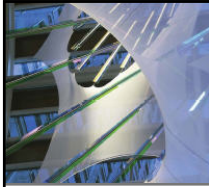
Tutorial 7

Working With Excel's Editing and Web Tools



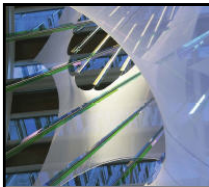
Review

- Worksheet Group – changes to one are applied to the entire group (think of all the time you can save!)
- Using 3D references to refer to cells on separate sheets
- Creating templates
- Creating links to different workbooks
- Using Lookup functions
- Workgroups (open everything at once)



Splitting the Worksheet into Panes

- You can split a worksheet horizontally and vertically into panes so that up to four separate areas of the worksheet can be viewed at the same time.
- To divide the workbook window into four separate panes, you can use the Split command on the Window menu.
- The split box at the top of the vertical scroll bar or at the right end of the horizontal scroll bar splits the window into 2 panes.



Worksheet split into two panes

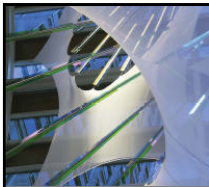
Balance Sheet worksheet split into two panes **Figure 7-1**

	B	C	D	E	F
12 Total current assets	422,672	272,774	223,634		
13 Property, plant and equipment					
14 Land	136,613	149,813	141,194		
15 Equipment and improvements:					
16 Furniture and equipment	116,467	117,434	115,400		
17 Leasehold improvements	22,947	20,506	21,431		
18 Less: Accumulated depreciation	(99,747)	(89,990)	(85,204)		
19 Net equipment and improvements	39,667	39,139	40,627		
20 Other assets	25,132	19,681	16,100		
21 Total assets	\$ 598,852	\$ 461,726	\$ 405,356		
26 Other current liabilities	36,491	42,709	25,658		
27 Total current liabilities	83,261	88,060	62,223		
28 Bonds Payable	71,102	44,330	32,692		
29 Total Liabilities	154,363	132,390	94,915		
30 Stockholders' equity:					
31 Common stock	361,611	299,315	295,435		
32 Retained earnings	106,010	49,702	41,105		
33 Total stockholders' equity	469,621	349,017	326,540		
34 Total liabilities and stockholders' equity	\$ 623,984	\$ 481,407	\$ 421,455		



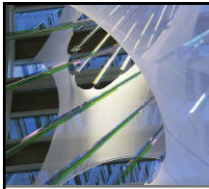
Audit formulas

- In a worksheet, it is very important that formulas are accurate.
- If they are not, you will be presenting inaccurate results.
- Excel provides several tools for analyzing the formulas in your worksheets, including the audit feature, which allows you to check the accuracy of your formulas.



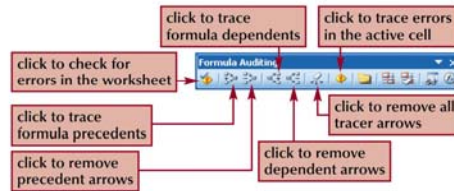
Use the Formula Auditing toolbar

- Cells that are used in a formula are called Precedent Cells.
- You can use the **Trace Precedents** button on the Formula Auditing will display an arrow indicating the cells involved in the formula.
- The **Trace Dependent** button provides information about the formulas the cell is used in.



The Formula Auditing toolbar

Figure 7-2 Formula Auditing toolbar

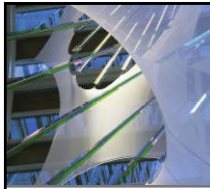


Trace Precedents example

Precedent tracer arrows Figure 7-3

The screenshot shows a Microsoft Excel spreadsheet titled "Digital Products Consolidated Balance Sheets". The formula bar displays the formula $=B12+B14+B19$ for cell B21. Red arrows point from cell B21 to cells B12, B14, and B19, indicating precedent cells. A red box labeled "precedent cell" points to cell B12, and another red box labeled "tracer arrow" points to the arrow connecting B21 to B19.

	2006	2005	2004
Assets			
Current assets:			
Cash and cash equivalents	\$ 209,174	\$ 96,089	\$ 64,814
Marketable securities	102,756	100,399	86,891
Accounts receivable	91,947	60,856	65,284
Prepaid expenses and other current assets	18,795	15,439	17,545
Total current assets	422,572	472,774	423,534
Property, plant and equipment:			
Land	+136,613	+149,813	+141,194
Equipment and improvements:			
Furniture and equipment	116,467	117,434	116,400
Leasehold improvements	22,947	20,505	21,431
Less: Accumulated depreciation	(89,747)	(88,000)	(86,204)
Net equipment and improvements	+39,667	+39,139	+40,627
Other assets	25,132	19,681	16,100
Total assets	\$ 598,952	\$ 461,726	\$ 406,355



Dependent Cell trace

Figure 7-4 Dependent tracer arrows

15	Equipment and improvements:				
16	Furniture and equipment	116,467	117,434	115,400	
17	Leasehold improvements	22,947	20,505	21,431	
18	Less: Accumulated depreciation	(92,747)	(80,500)	(86,234)	
19	Net equipment and improvements	46,667	57,439	50,597	
20	Other assets	25,132	19,981	16,100	
21	Total assets	\$ 71,800	\$ 77,420	\$ 66,697	

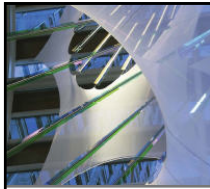
dependent tracer arrow

worksheet icon indicates that a dependent cell is located in a different worksheet



Trace and fix formula errors

- Worksheets often have large amounts of data in them and numerous formulas; it's quite possible to inadvertently make an error in worksheet formulas.
- Excel provides tools that will allow you to view formulas and to identify possible errors.
- You can use the Trace Error option on the Formula Auditing toolbar to produce an arrow that shows the possible source of the error.



Use Trace Error and Show Formula features

- If you view the formula in questions by following the tracer error, you can often identify the problem.
- You can then edit the formula and observe whether the error has been eliminated.
- You can also search the workbook for potential errors by clicking the Error Checking button on the Formula Auditing Toolbar.
- An additional option is to display all the formulas in a worksheet. (ctrl ~)
 - Seeing the formulas in the worksheet will often make it clear where errors have been made



Excel error values

Figure 7-7 Excel error values

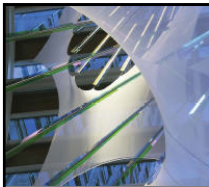
Error Values	Source of Error
#DIV/0!	The formula or function contains a number divided by zero.
#NAME?	Excel doesn't recognize text in the formula or function, such as when the name of an Excel function has been misspelled.
#N/A	A value is not available to a function or formula, which can occur when an invalid value is specified in the VLOOKUP function.
#NULL!	A formula or function requires that two cell ranges intersect, but they don't.
#NUM!	Invalid numbers are used in a formula or function, such as entering text in a function that requires a numeric value.
#REF!	A cell reference used in a formula or function is no longer valid, which can occur when cells used by the function have been deleted from the worksheet.
#VALUE!	The wrong type of argument has been used in a function or formula. This can occur when you supply a range of values to a function that requires a single value.



Illustration of a #REF! error

Figure 7-9 Tracing the #REF! error

30	Financing Activities			
31	Proceeds from common stock	90,563	80,069	23,307
32	Dividends paid	(11,722)	(11,290)	(10,879)
33	Net cash provided (used) in financing activities	78,831	68,782	#REF!
34				
35	Net change in cash and cash equivalents	89,657	(10,115)	#REF!
36				
37	Cash and Cash equivalents at beginning of year	#REF!	#REF!	129,305
38	Cash and Cash equivalents at end of year	#REF!	#REF!	#REF!



View error information

Help on the #REF! error Figure 7-8

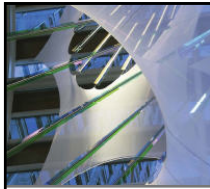
Correct a #REF! error

Occurs when a cell reference is not valid.

1. Click the cell that displays the error, click the button that appears , and then click **Trace Error** if it appears.
2. Review the possible causes and solutions.

Possible causes and solutions

- ▶ Deleting cells referred to by other formulas, or pasting moved cells over cells referred to by other formulas
- ▶ Using a link to a program that is not running
- ▶ Linking to a Dynamic Data Exchange (DDE) topic such as "system" that is not available
- ▶ Running a macro that enters a function that returns #REF!



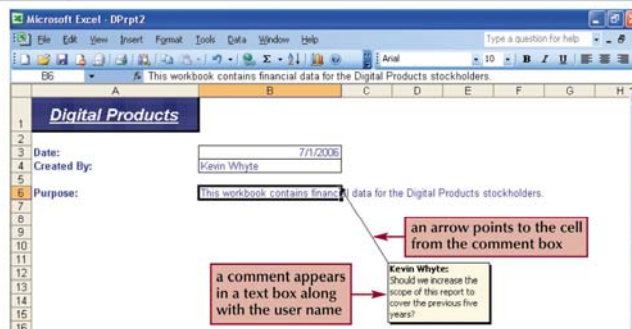
Insert and edit cell comments

- A comment is a text box that is attached to a specific cell and only displays when that cell is clicked.
- You can add comments to the worksheet or to a single cell.
- To add a comment, right-click the cell where you want the comment and then press the Insert Comment button on the shortcut menu.
- Or use the comment button on the Formula Auditing toolbar.
- As the worksheet is passed around amongst the members of a group, each person can add comments containing suggestions for change.



A worksheet with a comment displayed

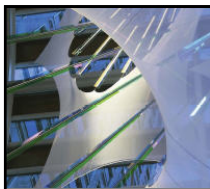
Figure 7-12 Inserting a comment into a cell





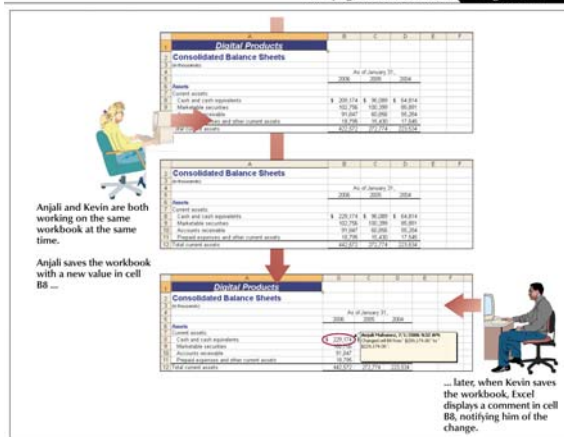
Track, highlight, and review changes to the workbook

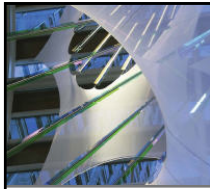
- Often, there will be multiple people working on a worksheet.
- If this is the case, the workbook must be made shareable by clicking the Share Workbook option on the Tools menu.
- Once a workbook becomes a shared workbook, it is important that changes made by the individual user do not conflict with changes made by other individuals.
- When multiple users are working on a workbook, they should provide comments indicating the changes they have made.
- The reviewing toolbar will allow you to track comments that have been inserted.



Sharing workbooks can introduce document errors

Modifying a shared workbook Figure 7-15





Resolving a conflict in a shared workbook

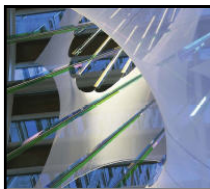
Figure 7-16 Resolving a conflict in a shared workbook

Anjali and Kevin are both working on the same workbook at the same time.

Anjali saves the workbook with a value of \$229,174 in cell B8 ...

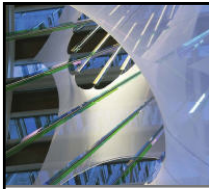
... later, when Kevin tries to save the workbook after entering a different value in cell B8, he is prompted by Excel to resolve the conflict.

Digital Products		Consolidated Balance Sheets	
As of January 31,		2008	2009
Assets			
Current assets			
Cash and cash equivalents	\$ 229,174	\$ 98,000	\$ 64,014
Marketable securities	62,706	50,200	60,800
Accounts receivable	51,047	60,000	50,204
Prepaid expenses and other current assets	6,796	6,628	17,462
Total current assets	450,723	214,828	192,480



Use the Track Changes feature

- You can track changes that have been made by selecting Track Changes on the Tools menu.
- You can choose to highlight changes that have been made or you can choose to list all the changes on a separate worksheet.
- Finally, you can choose to either accept or reject the changes that have been made by individual users.



The Highlight Changes dialog box.

Figure 7-18 Highlighting changes

changes in the document will be tracked

changes will be highlighted in the workbook

all changes made in the workbook will be viewed...

...except the changes made by the current user



View changes in the workbook

Changes in the workbook Figure 7-19

Microsoft Excel - DP.rpt4 [Shared]

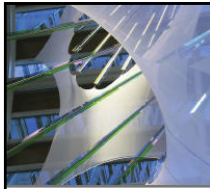
File Edit View Insert Format Tools Data Window Help

Format: Arial 14

	A	B	C	D
6	Revenues	770,157	861,126	8496,693
7	Cash and cash equivalents at beginning of year	96,089	64,814	129,305
8	Cash and cash equivalents at end of year	209,174	96,089	64,814
9	Net income	100,829	45,171	41,571
10	Net cash provided by operating activities	194,084	144,211	114,163
11	At Year End			
12	Marketable assets	225,465	176,720	127,807
13	Current assets	154,263	264,700	189,830
14	Total assets	469,621	349,017	326,540
15	Current liabilities	369,311	184,714	161,311
16	Long-term liabilities	225,465	176,720	127,807
17	Total liabilities	469,621	349,017	326,540
18	Stockholders' equity	369,311	184,714	161,311
19	Working capital	2,712	2,470	2,044
20	Full-time employees			
21	Common Stock Data			
22	Shares	49,640	46,760	45,344
23	Net income per share	82.03	80.97	80.92
24				
25				
26				

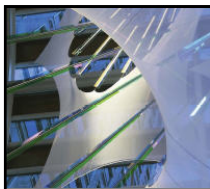
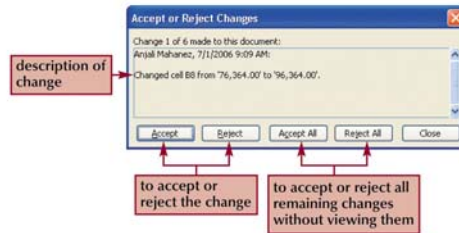
hovering the mouse pointer over a changed cell displays a comment box that describes the change

colored border indicates a changed cell



Accept or Reject Changes dialog box

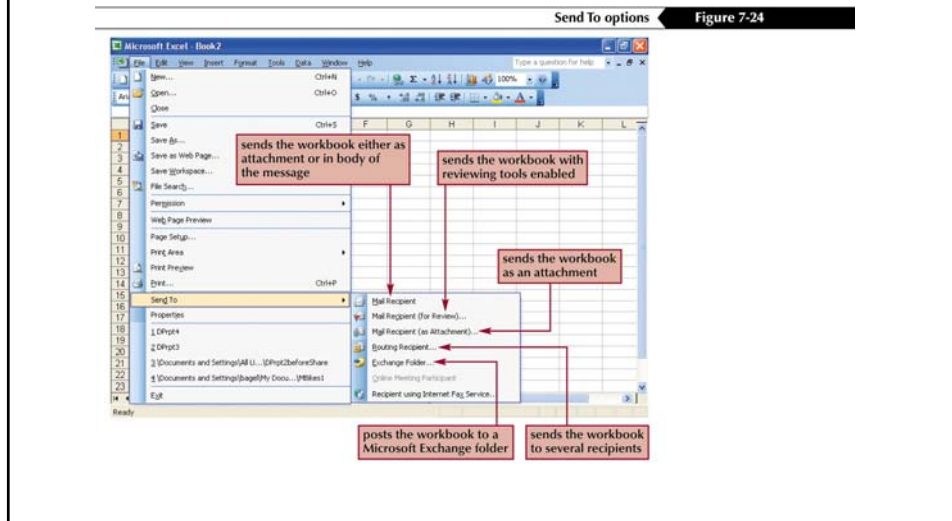
Accept or Reject Changes dialog box **Figure 7-22**



Mail and merge workbooks

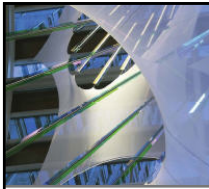
- On the File menu, you have an option to Send To a recipient(s), which would e-mail the file to reviewers.
- When you are working with multiple users of workbook(s), you may find that you have two versions of a workbook.
- One workbook could be the one you have already edited yourself and another is the same workbook but it has been edited by one of the users.
 - You may need to merge those two workbooks to reflect all the changes that have been made
 - To do this, click the Compare and Merge Workbooks option on the Tools menu
 - You can then Accept and Reject the changes

Send To options for e-mailing a worksheet



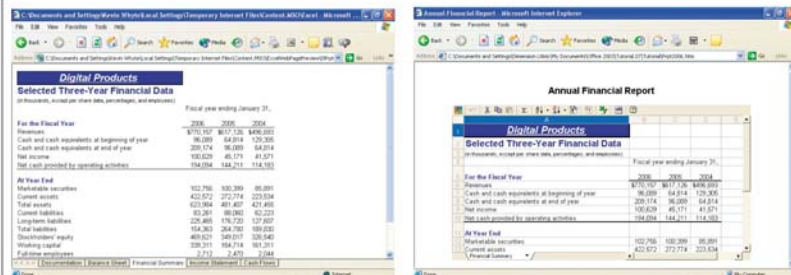
Save the workbook as a Web page

- You can easily turn a workbook into a Web page.
 - You can choose whether the page will be static or interactive
 - A static Web page means that the data cannot be modified
 - An interactive Web page means that the data can be modified within the Web page
- When you create a Web page, Excel creates an HTML version of the workbook that can be viewed in a Web browser.
- You can save the entire workbook as a Web page or you can save just one worksheet.
- All of these choices can be made by clicking the Save as Web Page option on the file menu.



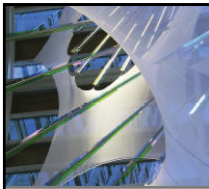
Interactive versus non-interactive Web page

Figure 7-26 Noninteractive and interactive Web pages



On a noninteractive Web page, users can view data, but can not edit or format it.

On an interactive Web page, the workbook is embedded in the page as a spreadsheet component that the user can edit and format.



The Save As dialog box

Figure 7-28 Saving a workbook as a Web page



click to create an interactive Web page, or leave deselected to create a noninteractive Web page

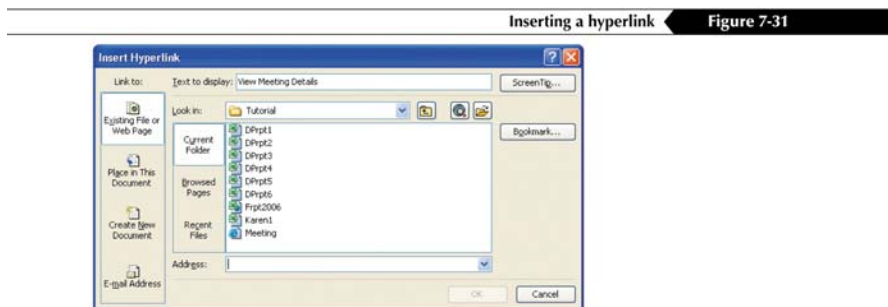


Create and edit hyperlinks

- Hyperlinks are clickable text that cause another page to be opened in the Web browser.
- You can easily add a hyperlink to a Web page by clicking the Hyperlink option on the Insert menu.
- You can also set up Excel's Web options so that various browsers are supported by the Web pages you create.
- If you have users who use different browsers, it is a good idea for you to consider setting this option so that it supports whatever browsers your viewers will use.



The Insert Hyperlink dialog box





A worksheet with a hyperlink

