Additional Exercises

12.1 Digital Divide Exercise

The context

The United States government has as one of its missions to ensure equal opportunity to all of its citizens. Access to technology, however, is unevenly distributed among income and ethnic groups. To determine the nature and extent of the problem and to recommend policy, the government conducts studies. This information will help policymakers determine ways to solve the problem of the "digital divide." The inquiry is ongoing. You will see in the report that this document updates research from two years before.

This report is part II of a much longer report. (Note that the figures and table use a II as their first number. There are some intentional gaps in this part of the document. You do not need to worry about them.) Your style choices will apply to the entire report.

Goals of editing

To copyedit this statement, you will need to make decisions about spelling, capitalization, and abbreviations, as well as to edit for consistency, grammar, and punctuation. Use a style manual and dictionary as you make copyediting decisions. Make a style sheet at the end of the document indicating choices that involve editorial judgment and that might apply to related documents, even if the judgment is to leave the text as it stands. The style choices you make for this section will apply to the entire report.

When you analyze the table, consider the order of sections in comparison with the order of sections in the text. The information on editing tables in Chapter 12 will be useful.

Structural markup

Use structural (or descriptive) markup, not procedural. For each text element, label the element according to the codes in the table below.

T (Title)	Arial 14 pt bold, caps and lowercase, 24 pts above, 12 pts below
P1 (paragraph following a heading)	Times New Roman 12 pt, left justified; space after=6 pts.
P2 (paragraph)	Times New Roman 12 pt, left justified; paragraph indent $\frac{1}{4}$ "; space after=6 pts.
H1 (heading 1)	Arial 12-pt bold, caps and lower case; 12 pts above, 3 pts after; left-justified $$
H2 (heading 2)	Arial 11-pt bold ital, initial cap only; 9 pts above, 0 pts after
BL (bulleted list)	BodyText + left indent 1/4 inch, hanging indent 1/4 inch
Notes	Times New Roman 10-pt, hanging indent 1/4 inch

Illustrations

The table in particular could use some editorial attention. See Chapter 12 for suggestions on designing tables to be usable as well as accurate. Consider structure, signals, and visual design.

Style sheet: The Digital Divide
Terms
Numbers
Miscellaneous
Dictionary consulted
Style manual consulted

USE OF THE INTERNET BY INDIVIDUALS

As of August 2000, 116.5 million Americans were online--31.9 million more than only 20 months earlier. Internet users accounted for 44.4 % of the U.S. population (age 3 and older), up from 32.7% in December 1998. This pattern of increasing Internet use held true at all income and education levels, for all age groups, for both men and women, for the employed and the unemployed and across all race and ethnic groups.

Groups that have historically been digital "have nots"--individuals who come from low-income households, individuals with low levels of education, minority groups (particularly Blacks and Hispanics), and older peopleare participating in this dramatic increase in Internet usage but their use rates remain below the national average.

This report examines individual computer use. The person-based data and household-based data yields related, but not identical, rates of Internet use for factors that are common to the two data sets, such as income and race. Person-based data offer an understanding of ways in which *individuals* use the internet. They offer the ability to examine demographic characteristics, such as age and gender that are unique to individuals with no logical correspondence at the household level. These data offer insight into where individuals use the Internet—at home, outside the home, or in multiple places. And, where individuals are using the Internet from a location away from their home, these data provide insight into where they are getting that access. Finally, these data offer some information about the activities that individuals are undertaking while they are online.

Key insights offered by these data include:

- Individuals age 50 and older are among the least likely to be Internet users with Internet use rate of 29.6% in 2000. This age group; however, saw faster growth in Internet use than the country as a whole, with Internet use growing at a rate of 53% compared to 36% for the country as a whole. Age, however, is only part of the story. In August 2000 individuals age 50 and older were almost 3 times as likely to be Internet users if they were in the labor force.
- In August 2000, Internet use rates in the aggregate were virtually identical for men (44.6%) and women (44.2%). In December 1998, there was a gender gap in this measure--34.2% for men versus 31.4% for women.
- For some groups with Internet use rates below the national average, use at locations outside the home
 appear to be a factor in the growth of Internet use rates. Nationwide, a greater share of people used the

- Internet from their homes in August 2000 than in December 1998. Black Internet users were more likely than other Internet users, to rely exclusively on Internet access from outside their homes.
- Most people who used the Internet from outside their homes reported using it at work or at school.
 Unemployed individuals were more likely to use it from another person's computer; or from libraries.
- E-mail is still the Internet's most widespread application--79.9 percent of Internet users used email.
 Among other online activities, shopping and bill paying saw the fastest growth. Low income unemployed people were the most likely to report using the Internet to look for jobs.

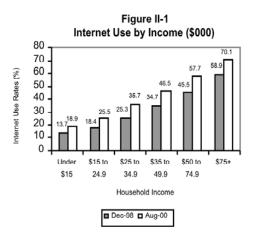
Person-based information is likely to become an even more important compliment to the household based measures in the future. We are already seeing the emergence of a world where Internet access is mobile, traveling with the individual rather than being a function of a physical place. For years, laptop computers have offered processing power and Internet access to individuals wherever they happened to be--at home, in the office, or in hotels across the globe. Mobile devices, such as personal digital assistants and mobile phones now offer Internet access anywhere via wire less connections.

INTERNET USE AMONG INDIVIDUALS

Almost 32 million people became Internet users during the 20 months between December 1998 - August 2000. Internet use increased across the age distribution. More people at all ages were using the Internet. This figure, however, also illustrates that although Internet use increased across the board, Internet use rates are not equal across all age groups. A person's age as well as factors such as household income, race/ethnicity, gender, educational attainment, and labor force participation matter in the Internet use equation. This section explores these factors.

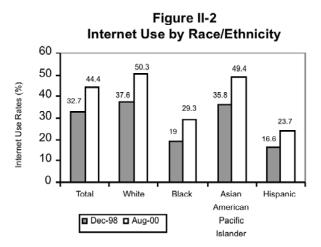
INCOME

While individuals in all income groups were more likely to be Internet users in 2000 than in 1998; Internet use rates were higher in higher income brackets. (Figure II-1.) Only 18.9% of individuals who lived in households with annual incomes of less than \$15,000 were Internet users in August 2000. In contrast, 70.1% of people who lived in households, where the annual income was greater than \$75,000, reported using the Internet. Middle income groups saw the largest point gains while the lowest income groups had the fastest expansion rates, albeit from low starting levels. (See Table II-1)



RACE AND ETHNICITY

Although Internet use is growing across the board, groups of different racial and ethnic backgrounds still use the Internet to differing degrees. (Figure II-2.) In August 2000, Whites (50.3%) continued to be the most likely to use the Internet, followed by Asian Americans and Pacific Islanders (49.4%), Blacks (29.3%), and Hispanics (23.7%). During the 20 month period between the two surveys, Whites gained 12.7 percentage points and Asian Americans and Pacific Islanders gained 13.6 percentage points in the share of their populations using the Internet. Over the same period, Blacks gained 10.3 percentage points, and Hispanics gained 7.1 percentage points. Blacks were 13.7 percentage points behind the national average in December 1998 and in August 2000 they were 15.1 percentage points behind the national average. Similarly, in December 1998, Hispanics were 16.1 percentage points behind the national average, and in August 2000 they were 20.7 percentage points behind.



Reviewing the data by race and Hispanic origin, the lack of close correspondence between the household-based measures of access to the Internet and the person-based measures of use is brought out. For example, although 56.8 percent of Asian American and Pacific Islander households had Internet access, only 49.4 percent of persons in that group were using the Internet. In contrast, the rates of personal use were higher for Whites and Blacks than their household connection rates. Among Whites, 46.1 percent of their households have on-line connections but 50.3% of Whites were Internet users at some location. The gap was even larger for Blacks, only 23.5% of their homes were online, but 29.3% of Blacks were Internet users. Only for Hispanics were the two percentages essentially the same at 23.6% and 23.7%, respectively.

Why do Whites have personal Internet usage rates similiar to the rates for Asian Americans and Pacific Islanders despite having rates of household connections 11 points lower? Why do Blacks have household rates of Internet access comparable to Hispanics but much higher personal use rates? Three factors come into play; the relative family size of households with Internet access, the share of persons with home access who actually use the Internet at home, and the share of persons who use the Internet only outside the home. The difference in household size for online households is larger for Whites and Blacks. Whites also have the highest share of people who live in homes with Internet access, who actually make use of that access, while Hispanics have the lowest share. Finally, Blacks have the highest share of people who access the Internet only outside the home (10.4%), followed by Whites at 8.6%. Only 7.5% of Hispanics and Asian Americans and Pacific Islanders use the Internet exclusively outside the home.

GENDER

Over the 20-months prior to August 2000, women raised their Internet use rates fast enough to close the gap with men. In December 1998, 34.2% of men and 31.4% of women were using the Internet. By August 2000, 44.6% of men and a statistically indistinguishable 44.2% of women were Internet users.

Underlying the closing aggregate gender gap are some gender differences by age. For both surveys, in the early years of life, boys and girls were equally likely to be Internet users. The small gap in favor of females of college age widened by 2000. During the years of prime labor force participation, while men were more likely than women to be Internet users in 1998, twenty months later the situation had reversed--in August 2000 women were more likely than men to be Internet users. For older adults in both surveys, men were more likely than women to be online.

In August 2000, males and females had very similar Internet use rates in all but one race/ethnic group--Asian Americans and Pacific Islanders. Among Asian American and Pacific Islanders, males had higher Internet use rates than females.

EDUCATIONAL ATTAINMENT

In both 1998 and 2000, Internet use rose with higher levels of education (figure II-4) Adults with no more than an elementary level of education had Internet use rates of less than 4%. People whose highest level of education was a bachelor's degree or higher had the highest Internet use (74.5%). The percentage point gain of this group (13 points between 1998 and 2000) was less than that of adults with only some college education (16 percentage points).

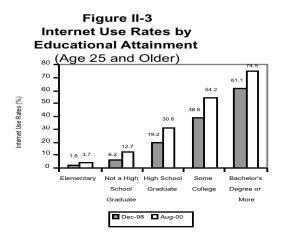


Table II-1 Internet Use By Individuals Age 3 and Older, 1998 and 2000										
	Internet	Total	Internet	Total	Dec.	Aug.	Percentage	Growth in Use		
	Users		Users		1998	2000	Point Difference	Rate		
Total Population	84,587	258,453	116,480	262,620	32.7	44.4	11.6	36		
Total Topulation	04,507	230,433	110,400	202,020	32.1	77.7	11.0			
Male	43,033	125,932	56,962	127,844	34.2	44.6	10.4	30		
Female	41,555	132,521	59,518	134,776	31.4	44.2	12.8	41		
TT 1 1.	60.450	104000	02.514	106 100	25.6	50.0	10.7			
White	69,470	184,980	93,714	186,439	37.6	50.3	12.7	34		
Black	6,111	32,123	9,624	32,850	19.0	29.3	10.3	54		
Asian	3,467	9,688	5,095	10,324	35.8	49.4	13.6	38		
Hispanic	4,887	29,452	7,325	30,918	16.6	23.7	7.1	43		
Employed*	56,790	133,516	77,507	136,756	42.5	56.7	14.2	33		
Not Employed*	1,647	5,726	2,698	5,961	28.8	45.3	16.5	58		
Not in the Labor	14,411	70,924	20,661	71,232	20.3	29.0	8.7	43		
Force	11,111	70,721	20,001	71,232	20.3	27.0	0.7			
Less than \$15,000	5,170	37,864	6,057	32,096	13.7	18.9	5.2	38		
\$15,000 - \$24,999	5,623	30,581	7,063	27,727	18.4	25.5	7.1	38		
\$25,000 - \$34,999	8,050	31,836	11,054	31,001	25.3	35.7	10.4	41		
\$35,000 - \$49,999	13,528	39,026	16,690	35,867	34.7	46.5	11.9	34		
\$50,000 - \$74,999	19,902	43,776	25,059	43,451	45.5	57.7	12.2	27		
\$75,000 and above	24,861	42,221	36,564	52,189	58.9	70.1	11.2	19		
			I	I	I	I	1			
Elementary †	206	12,529	452	12,253	1.6	3.7	2.1	131		
Not a High School Graduate †	1,022	16,510	2,030	16,002	6.2	12.7	6.5	105		
High School Graduate †	10,961	57,103	17,425	56,889	19.2	30.6	11.4	59		
Some College †	16,603	43,038	24,201	44,628	38.6	54.2	15.6	40		
Bachelors Degree or	26,571	43,509	34,083	45,755	61.1	74.5	13.4	22		
Higher †	-,	- ,	- ,	,,,,,,			- 1			
A a 2 to 9	2 690	24 292	2 671	22.062	11.0	15.2	4.2	20		
Age 3 to 8	2,680	24,282	3,671	23,962	11.0	15.3	4.3	39		
Age 9 to 17	15,396	35,821	19,579	36,673	43.0	53.4	10.4	24		
Age 18 to 24	11,356	25,662	15,039	26,458	44.3	56.8	12.6	28		
Age 25 to 49	41694	101836	56433	101946	40.9	55.4	14.4	35		
Age 50 +	13669	70852	21758	73580	19.3	29.6	10.3	53		

Source: U.S. Bureau of the Census, Current Population Survey, December 1998 and August 2000.

Notes: The sum of the components may not equal the total due to rounding. * Age 16 and older. † Age 25 and older.