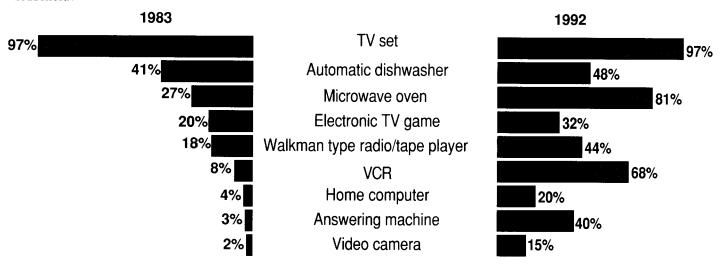
#### **DATA ESSAY:**

# TECHNOLOGY: Uses, Promises, Fears

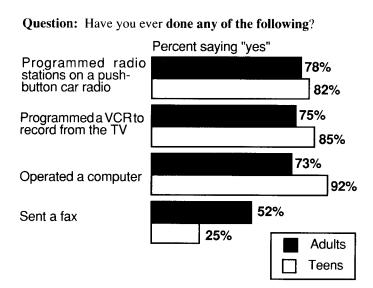
## HIGH CONSUMPTION OF CONSUMER ELECTRONICS

Question: ... Here is a list of some different products. Would you read down that list and call off those that you now have in your household?

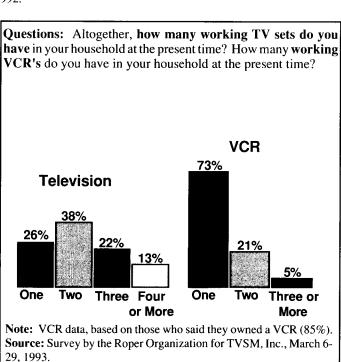


**Note:** In 1983, the question wording referred to the products you now own, not products you have in your household. The data for telephone answering machines comes from a July 1981 and 1992 Roper survey. The question wording was: "Here's a list of some utensils and appliances people have in their homes. Would you look down it and call off the ones, if any, that you have in your home right now?"

Source: Survey by the Roper Organization, latest that of February 8-22, 1992.

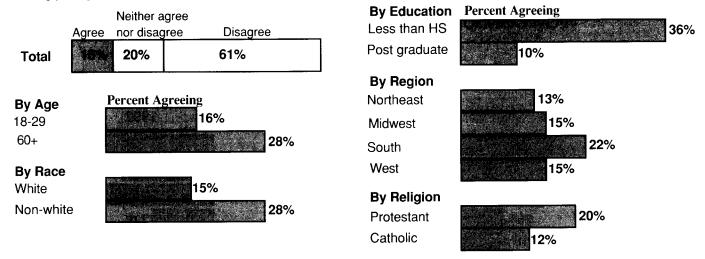


**Source:** Survey by Fleishman-Hillard for the Dell Computer Corporation, June 28-July 5, 1993.



## SCIENCE AND TECHNOLOGY -Mostly Thumbs Up

**Question:** How much do you agree or disagree with each of these statements--strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree... Overall, **modern science does more harm than good.** 

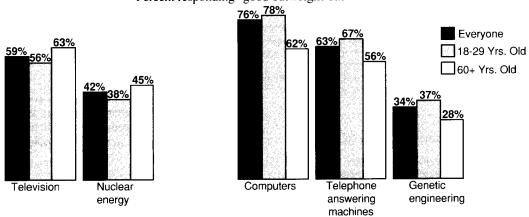


Source: Survey by National Opinion Research Center - General Social Survey (NORC-GSS), February 5-April 26, 1993.

Question: Many things in our society have both good and bad effects. For example, aviation is good because it provides fast transportation. It is bad because it has caused a number of deaths. Here is a list of some different things that have resulted in both good and bad effects. Would you... tell me whether, on balance, you think the good effects outweigh the bad, or whether the bad effects outweigh the good?

### **Small Differences by Age**

Percent responding "good outweighs bad"



Source: Survey by the Roper Organization, March 1992.

## **ELECTRICITY IS THE BIGGEST ADVANCE**

Question: What would you say was the most important invention in the past thousand years?

#### (Top 5 mentioned)

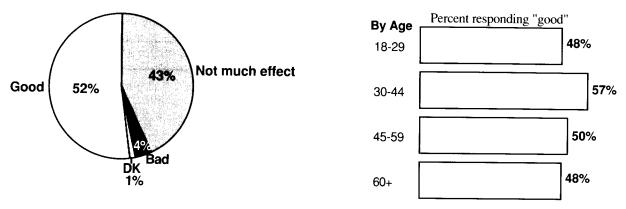
1947		1992	
Electric light/appliances	29%	Electricity	25%
Atom bomb	17%	Automobile	9%
Radio	12%	Computers	8%
The wheel	6%	Telephone	7%
Airplane	6%	Printing press	5%

Note: Question wording in 1947 was: "What do you think is the greatest invention that has ever been made?"

Source: 1947 survey by the Gallup Organization, January 17-22, 1947; and 1992 survey by Yankelovich Clancy Shulman for *Time*/CNN, July 22-23, 1992.

## IN THE WORK PLACE: Positive Impact

Question: Overall, have technological changes at work been good for you, bad for you, or not had much effect?



**Note:** Based on those who said they were currently employed (68%).

Source: Survey by the Gallup Organization for CNN/USA Today, May 10-12, 1993.

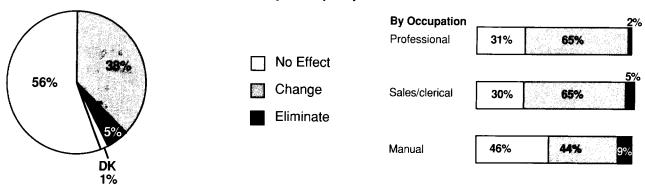
Question: How confident are you that you can adapt to any changes in the workplace that might be required of you due to rapidly changing technology... very confident, somewhat confident, not too confident, or not at all confident?



Note: Based on those who said they were currently employed (68%).

Source: Survey by the Gallup Organization for CNN/USA Today, May 10-12, 1993.

Question: Now I'd like you to look ahead five or ten years and think about how automation and technology might affect your present job. Which of the following statements best describes the possible impact of technology on your job?... Technology could eliminate my job completely in 5 or 10 years, technology could change the nature of my job, but not eliminate it, or technology would have no effect on my job, since what I do cannot be done or improved upon by machines?



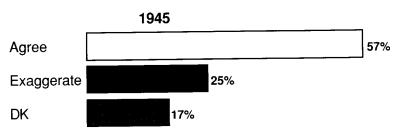
Note: Based on those who said they were currently employed (68%).

Source: Survey by the Gallup Organization for CNN/USA Today, May 10-12, 1993.

### **TECHNOLOGY** continued

## **NUCLEAR POWER: Important But Troubling**

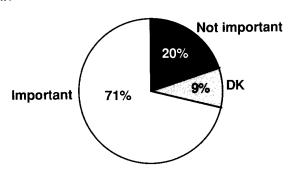
**Question:** Some people say that **splitting the atom** will prove **the greatest invention** in over a thousand years and will change many of our ways of living. Do you agree with them, or do you think they exaggerate its importance?



Source: Survey by the NORC, September 1945.

Question: ...How important a role do you think nuclear energy should play in meeting America's future energy needs? Should nuclear energy play a very important role, a somewhat important role, a not too important role, or not important a role at all?

Question: It has been 35 years since the first American nuclear power plant began generating electricity. Overall, do you think that America's 110 nuclear power plants have served this country well, or not?



Did not serve us well

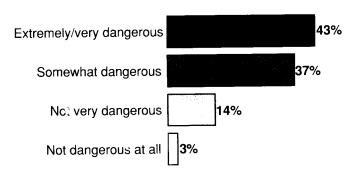
17%

DK

**Note:** Similar response categories have been collapsed. **Source:** Survey by Bruskin/Goldring Research for the US Council for Energy Awareness (USCEA), December 3-5, 1993.

**Source:** Survey by Bruskin/Goldring Research for the USCEA, October 30-November 1, 1992.

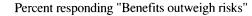
**Question:** In general, do you think that **nuclear power stations are**... extremely dangerous for the environment, very dangerous, somewhat dangerous, not very dangerous, or not dangerous at all for the environment?

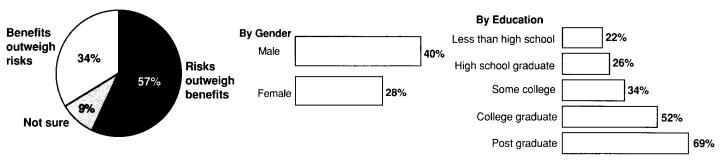


Source: Survey by the NORC-GSS, February 5-April 26, 1993.

## **BIO TECH: Doubts and Uncertainties**

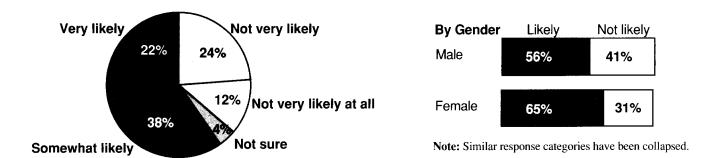
**Question:** In *Jurassic Park* the dinosaurs were supposedly produced by genetic engineering. Genetic engineering means the process of changing genes or DNA in a cell for medical, agricultural or other scientific research. On balance, do you believe that the potential benefits of genetic engineering outweigh the risks or that the risks outweigh the potential benefits?





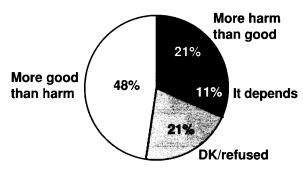
Source: Survey by Louis Harris and Associates, June 24-29, 1993.

Question: How likely do you think it is that animals, plants or bacteria which are produced by genetic engineering will pose a serious threat to human life or the environment--very likely, somewhat likely, not very likely, or not likely at all?



Source: Survey by Louis Harris and Associates, June 24-29, 1993.

**Question:** The next few questions are about a special technique called 'genetic screening,' which makes it possible to predict whether or not a person is likely to develop certain inherited diseases.... Some people say that genetic screening is a wonderful medical advance. Others think it may cause trouble. Based on what you know, do you think **genetic screening will do more good than harm, or more harm than good**?

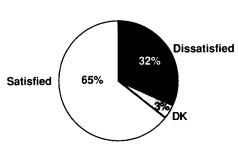


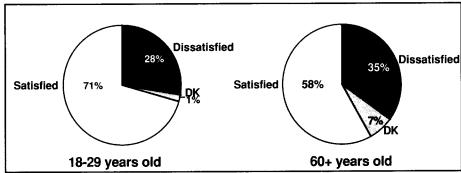
Source: Survey by the NORC-GSS, February-April, 1990.

#### **TECHNOLOGY** continued

## THE GLOBAL MARKETPLACE: Satisfied With U.S. Know-How

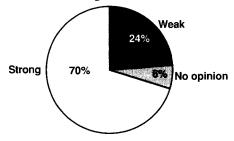
Question: Here are some questions about whether you are satisfied or dissatisfied with various things about America today. Are you satisfied or dissatisfied with... the level of scientific and technical know-how in this country today?





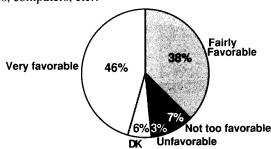
Source: Survey by the Gallup Organization for CNN/USA Today, January 6-9, 1992.

Question: Let's compare the United States to Japan, Great Britain, Germany and other major Western countries in the world on a number of factors. Would you say that the United States is very strong, strong, weak, or very weak compared to other countries in the following areas?...Our technical innovation?



**Note:** Similar response categories have been collapsed. **Source:** Survey by the Gallup Organization, April 25-28, 1991.

Question: I'm going to ask you about several industries in the United States. For each one, please tell me if your overall opinion of it is very favorable, fairly favorable, not too favorable, or unfavorable....The high technology industry, such as microchips, computers, etc.?



Source: Survey by the Roper Organization for the Semiconductor Industry Association, February 13-21, 1992.

## **KEEP GOING... MOSTLY**

Question: There are a number of things that have changed rather drastically over the past 20 years. Here is a list of some of them....for each one tell me whether you'd like to see continued advances and developments on it in the future, or whether you think we've gone as far as we should on it now, or whether we've already gone too far on it now?

Medical transplants (heart, kidney, etc.)

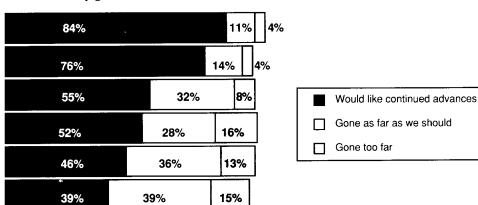
Automobiles powered by alternative fuels

Telephone technologies (cellular phones, video phones, pagers, etc.)

Exploration of space

Cable TV technology, programming and interactive home services

Automated and self-service shopping facilities (self-service food markets, gas stations, automated banking, etc.)



Source: Survey by the Roper Organization, August 7-14, 1993.