

DOCUMENT RESUME

ED 408 999

IR 018 412

AUTHOR Griffin, Robert E.; And Others  
 TITLE The Electronic Presentation: A Status Report of International Use.  
 PUB DATE Jan 97  
 NOTE 10p.; In: VisionQuest: Journeys toward Visual Literacy. Selected Readings from the Annual Conference of the International Visual Literacy Association (28th, Cheyenne, Wyoming, October, 1996); see IR 018 353.  
 PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)  
 EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Business; Comparative Analysis; Computer Software; Corporations; Foreign Countries; Teaching Methods; Use Studies; \*Users (Information)  
 IDENTIFIERS \*Electronic Media; \*Presentation Mode; Sweden; United States

ABSTRACT

This paper describes how electronic presentations are currently used by business people. Business people in the United States and Sweden were surveyed to determine how they are using the medium. A questionnaire was mailed to 506 business people in the United States (201 returned) and to 80 business people in Sweden (76 returned). Results are discussed in terms of gender use of the medium; frequency of use; age of electronic presenters; size of companies using the medium; reasons for using electronic presentations; length of presentation; and media preference. More men than women were found to give business presentations and one to five presentations per month was the average response. The major users of electronic presentations in the United States were found to be in the 36-45 age group, while Swedish users were in the 25-35 age group. Electronic presentations were found in both countries to be most heavily used in medium-sized companies. The most popular electronic presentation is shown to an audience of less than 25 people, with a liquid crystal display and an overhead projector, using Microsoft PowerPoint software. The complete questionnaire results are appended. (AEF)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

**The Electronic Presentation:  
A Status Report Of International Use**  
Robert E. Griffin, Rune Pettersson, Ronald Johnson

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 408 999

**Abstract**

This paper is the second in a series of reports describing how electronic presentations are currently used by business people. The report surveys business people in the United States and Sweden to determine how they are using the medium. This research suggests the most popular electronic presentation is presented to an audience of less than 25 people, with a liquid crystal display and an overhead projector, using Microsoft PowerPoint software.

**Introduction**

This is the second in a series of reports undertaken by the authors to explain the complexities of the electronic presentation as it is used in business. As we stated in the earlier paper<sup>1</sup>, lack of information, false information and rumor surround the electronic presentation. This state of affairs is understandable since the medium is new and people who use the medium are inexperienced at employing it for presentations. There is confusion about what can be accomplished with this new medium.

For the purpose of this study the electronic presentation was described as a presentation which consisted of:

- a computer (often a laptop design),
- presentation graphic software (i.e. PowerPoint, Harvard Graphics or Freelance),
- a projection device such as an overhead projector and a liquid crystal projector, video projector with computer connections, a large screen monitor or a computer only.

There are, of course, other definitions for the electronic presentation, however, this definition fits the majority of the presentations used in business today.

**A Brief History Of Electronic Presentations**

Growth of the electronic presentation used for business presentations has been extraordinary. The first true, but crude, electronic presentations began with the simultaneous introduction of presentation graphics software and liquid crystal display panels used with overhead projectors. This development began in the mid 1980's. From

that point on growth has exceeded almost everybody's expectations.

Not since the growth of the overhead projector in the 1960's has a family of audio visual devices so completely captured the attention of people who make presentations. But there are differences in the growth patterns of the two mediums. When the overhead projector exploded on the scene its impact was felt strongly by educational institutions, primary and secondary schools and colleges. While educational institutions have shared in the growth of electronic presentations, the high costs involved are often too much of a burden for educational institutions. This medium has had it's biggest impact to date in business; business people are making electronic presentations.

**How The Study Was Conducted**

A questionnaire was mailed to 506 business people in the United States and to 80 business people in Sweden. In the United States the subjects were randomly selected from the mailing list of the Private Industry Council of Central Pennsylvania, a training and development consortium located in State College, Pennsylvania. This consortium provides guidance to businesses in the Central Pennsylvania region.

The Swedish data was sent to a random sample available to Dr. Pettersson in Sweden. All of the subjects contacted were somehow associated with the business community.

A total of 277 questionnaires were returned by the due date stated on the questionnaire. In the United States, 201 questionnaires were returned. In Sweden, 76 questionnaires were

returned.

The United States return rate was 40%. The Swedish return rate was 95%. A complete listing of the questions and outcomes of the study are shown in Appendix A at the end of this paper.

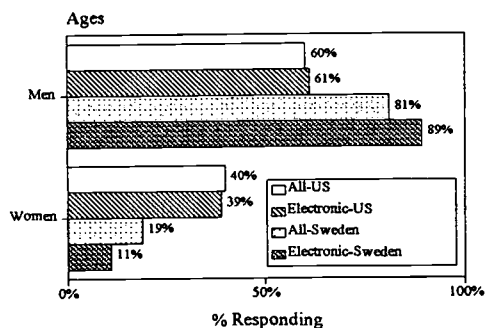
### Results Of The Study

Many observations can be made from this study. What is interesting is that most of the results derived from the United States audience parallel the results of the Swedish subjects. There are eight results which stand out from the data collected.

#### Result 1-Gender Use Of The Medium

It is apparent that, in general, more men than women give business presentations (both electronic and non electronic). When we look at electronic presentations only, men give more electronic presentations than women both in the United States and in Sweden. This data is shown in Figure 1.

**Figure 1  
GENDER OF PEOPLE GIVING  
ELECTRONIC PRESENTATIONS**



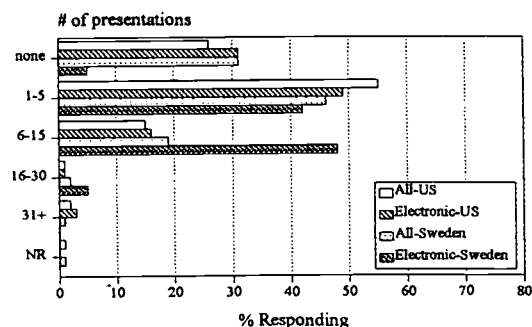
The reasons for the heavy use of electronic presentations by males and the lack of use by females may have something to do with computer use in general. The lack of computer use by females has been well documented. The newspaper USA Today recently discussed computer use among women. They substantiated the lack of female computer scientists in a feature story about computer anxieties.<sup>2</sup>

The data from this study supports the difference between men and women using electronic presentations. The difference between genders is most dramatic in the Swedish data. The difference is less significant in the United States.

#### Result 2-Frequency Of Use

One of the questions asked in the survey was "How many presentations do you normally give a month? The question did not ask the participants to differentiate between electronic and non electronic presentations. This data is shown in Figure 2.

**Figure 2  
AVERAGE NUMBER OF  
PRESENTATIONS GIVEN PER MONTH**

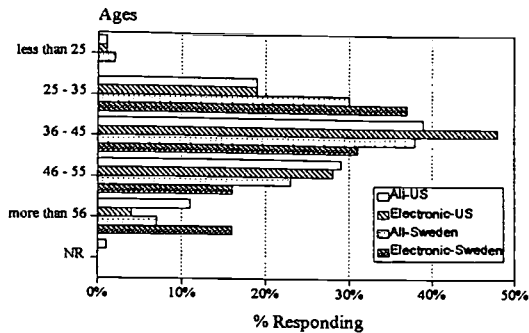


The most common response was 1 to 5 presentations per month in both the United States and Sweden, however, there is an interesting twist that appears in both sets of data. Presenters that give 6 or more presentations per month clearly prefer electronic presentations. If you focus on presenters who say they give 6 to 15 presentations per month, the percentage of people who rely on electronic presentations increases. It can be said from the data that if you must make a lot of business presentations, electronic presentations are the medium for you!

#### Result 3-Age Of Electronic Presenters

When we look at the data which combines electronic presentations and age, we see some interesting and difficult to explain results. This data is shown in Figure 3.

**Figure 3**  
**AGE OF PEOPLE GIVING**  
**ELECTRONIC PRESENTATIONS**



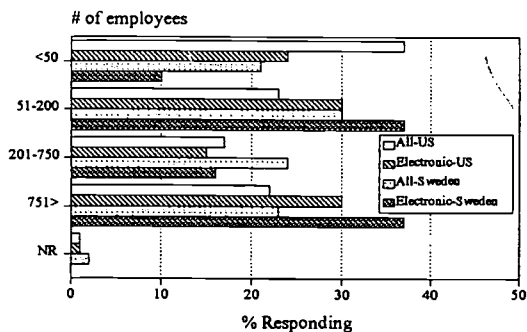
Major users of electronic presentations in the United States are the 36-45 age group while Swedish users are younger, in the 25-35 age group.

You should also focus attention to the Swedish data spike that appears with presenters over the age of 56. Older presenters in Sweden seem to rely heavily on electronic presentations. Why this spike appears can not be explained with the available data.

**Result 4-Size Of Companies Using The Medium**

Figure 4 correlates company size and the use of electronic presentations.

**Figure 4**  
**COMPANY SIZE**



Both the United States and Swedish data show that electronic presentations are most heavily used in medium sized companies (51-200 employees) and very large companies (over 751 employees). Why this phenomenon occurs is difficult to explain.

While the study did not produce data to explain this circumstance the author's speculate that electronic presentations are used by large companies because they can afford the price of the necessary presentation equipment. A simple laptop computer and a data/video projector can cost about \$8000.00 (U.S.). Larger companies have the budgets to provide the equipment and guidance to encourage presenters to use electronic presentations.

Why medium sized companies are heavy users of electronic presentations is more difficult to resolve. The fact that this result shows in both the United States and Swedish data indicates it is not a mistake. This result is probably explained because medium sized companies do not have the resources or time to create and produce the more conventional presentational aids, overhead transparencies and 2x2 slides, hence these companies are forced to rely on electronic presentations. Most medium sized companies have very little discretionary income and are therefore forced to make the best use of limited time and money.

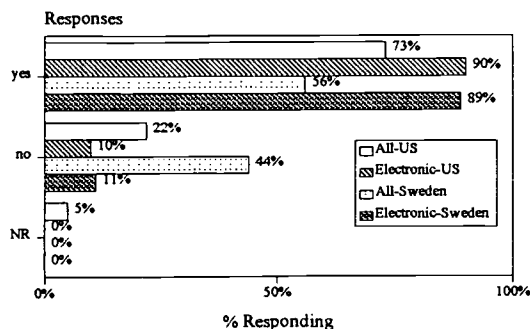
**Result 5-Why Use Electronic Presentations?**

One of the major questions the authors had hoped to answer with this data was why people use electronic presentations. What drove presenters to choose the electronic presentation medium rather than flip charts, 2x2 slides or overhead transparencies?

One general theme came from the open ended comments requested on the survey. Many people chose the medium because they viewed it as a new, modern, progressive medium. Presenters that used the medium often reported using it because they felt their audiences were impressed by the technical nature of the medium. None of these affective responses given by the subjects could be verified by other data in the survey.

One reason for relying on the medium, and probably any audio visual medium, was because the subjects used visuals as a part of their presentations. This data is shown in Figure 5.

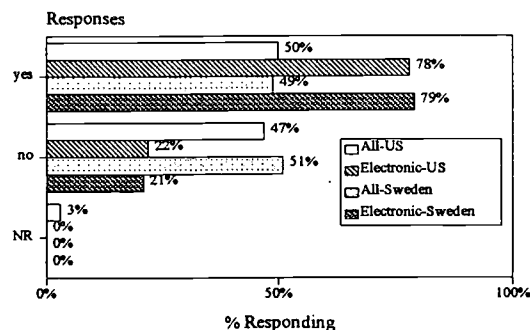
**Figure 5**  
**DO YOU NORMALLY USE VISUALS IN YOUR PRESENTATIONS?**



The data shown in Figure 5 states the obvious, presenters use an audio visual medium because they have visuals to show their audience. Swedish presenters appear to turn to the electronic presentation a bit more frequently than their United States counterparts when making this decision. Little else needs to be said about this data.

Figure 6 indicates the single most significant reason discovered by the authors for giving electronic presentations.

**Figure 6**  
**DO YOU HAVE ACCESS TO A LAPTOP COMPUTER?**



The data indicates if you own a laptop computer you are likely to make electronic presentations. The data does not provide exact reasons why laptop owners give electronic presentations. We can only guess why laptop users use electronic presentations.

It may be that laptop owners have learned the power that presentation graphics software

affords. Or laptop computer users may simply be familiar enough with computers to feel comfortable with the medium. It may also be that laptop computer users may make electronic presentations to help justify the expenditure for their laptop computers. Whatever the reason, owning or having access to a laptop computer increases the possibility that the owner or user will give electronic presentations.

**Result 6-How The Medium Is Used**

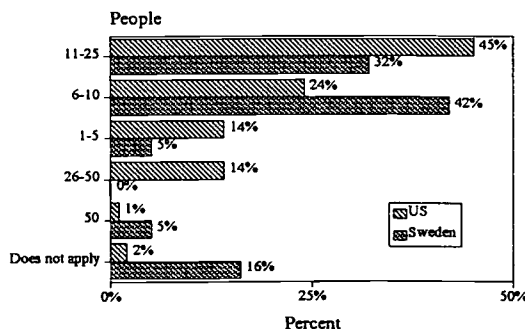
Result 6 encompasses the results of four of the questions in the survey (questions 6, 8, 9 and 10). The results differ slightly between the United States and Swedish audiences, but the differences are only slight. The *typical* electronic presentation is:

- presented to an audience of less than 25 people,
- uses a liquid crystal display and overhead projector,
- created using Microsoft PowerPoint software,
- and presented using a formal style of delivery.

The data supporting these points is shown in Appendix A.

Interestingly, these four profiles of the electronic presentation cited above are constant in both the United States and Sweden. The only subtle variation in the data between the United States and Swedish is shown in Figure 7.

**Figure 7**  
**TO WHAT SIZE AUDIENCE DO YOU NORMALLY PRESENT ELECTRONIC PRESENTATIONS?**



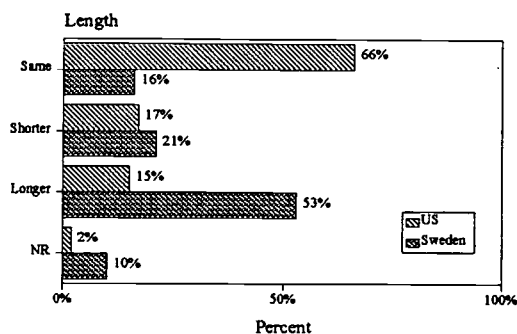


The typical audience for an electronic presentation in the United States is 11-25 people while the typical Swedish audience is 6-10 people. This is an insignificant difference, but the data marks an important distinction. What is important here is that electronic presentations are given to small audiences even though the electronic presentation is capable of presenting to auditorium sized audiences. This medium, which is powerful enough technologically to present to the masses, has currently found a home with smaller audiences. It is difficult to explain why this technology is considered useful for small audiences. Most likely time will move the technology to larger audiences.

### Result 7-Length Of Presentation

Another important assessment is the effect the medium has on the message. In seeking this data the authors were trying to determine if electronic presentations resulted in presentations that were longer, shorter or equal to similar presentations given with more conventional media. The results are shown in Figure 8.

**Figure 8**  
**IF AT TIMES YOU GIVE ELECTRONIC PRESENTATIONS & AT OTHER TIMES YOU USE ANOTHER MEDIUM, ARE YOUR PRESENTATIONS...**



Most electronic presenters in the United States reported that the electronic medium did not effect the length of their presentations. The number of electronic presenters in the United States who reported longer or shorter

presentations was insignificant.

However, Sweden presented a different picture. The majority of electronic presenters in Sweden reported their electronic presentations were longer than non-electronic presentations. What is interesting is that we also see a somewhat smaller group within the Swedish subjects that comment their electronic presentations are shorter. More investigation is needed in this area.

### Result 8-Media Preference

One of the very interesting findings of the study concerned what medium business presenters preferred. Subjects were asked to rank the four major business media (overhead transparencies, 2x2 slides, flip charts and electronic presentations) based on their perceived usefulness as a presentation medium. Because the focus of this study was on electronic presentations, the reader would assume that this medium was a solid favorite among all presenters. The findings are shown in Figure 9.

What is interesting about the data is that the overhead projector continues to be the medium of choice for most presenters. The only subjects that deviated from this norm were the Swedish users of electronic presentations. Even though many people reported a strong preference for the electronic presentation, it seems that the overhead projector is the medium that most people will use if they are unsure of the speaking situation. Reliance on the overhead projector is not difficult to understand. The simplicity of the overhead projector presentation is legendary. Armed with an overhead projector, projection screen and some overhead transparencies a presenter can give a first class presentation meeting the expectations of any audience. Further, every hotel or conference center can easily have this equipment ready for use at a moments notice. When you must give a difficult presentation you do not want to worry about how the visuals will be projected.

It is clear from the data that many presenters do not think that gathering the tools for an electronic presentation is easy. Many subjects in the study reported that they used electronic

**Figure 9**  
**MEDIA PREFERENCE RANKINGS**

| Rank | All Respondents-<br>U.S. | Electronic Presenters-<br>U.S. | All Respondents-<br>Sweden | Electronic Presenters-<br>Sweden |
|------|--------------------------|--------------------------------|----------------------------|----------------------------------|
| 1    | Overhead projector       | Overhead projector             | Overhead projector         | Electronic                       |
| 2    | Flip chart               | Electronic                     | 2x2 slides                 | Overhead projector               |
| 3    | Electronic               | Flip chart                     | Electronic                 | Flip chart                       |
| 4    | 2x2 slides               | 2x2 slides                     | Flip chart                 | 2x2 slide                        |

presentations when they were presenting at their home base, but would never use the medium "on the road". Several users of electronic presentations reported carrying all of the necessary equipment to make an electronic presentation if they were traveling. Even with these precautions, travelers commented they would never leave home without a backup set of overhead transparencies. The overhead projector will be king for some time to come.

### Implications

It is difficult to determine implications from this study because the project was conducted to determine what is, to establish a current state of affairs. We never intended to use the data to see into the future. However, as we investigated the data some glimpses of the future were obvious. The authors' collective insights propose the following implications:

#### Implication 1

As engineers envision the electronic display device of the future, we suggest they follow the model presented by the overhead projector: affordable, maintenance free, ubiquitous and simple to use. To entice the next generation of business users to the electronic medium, electronic display devices will have to be:

- self contained (suggesting that projectors will out sell LCD displays and overhead projector combinations),
- be bright enough to use with the room

lights on,

- simply be projection devices, not all-in-one audio visual tools (business people require very few features, even remote controls can confuse many users),
- have replaceable projection lamps or lamps that "burn down" rather than burn out or make use of dual-replaceable projection lamps,
- be either portable (so presenters can easily carry it) or available in all hotels and conference centers (inexpensive so they will buy many of them),
- permit "idiot proof" connections between the computer and the display device.

Technological advances should allow many electronic designers to meet these seemingly impossible goals.

#### Implication 2

Older presenters and women may need extra coaching to begin using electronic presentations for business presentations. To use the jargon of marketers, these groups appear to be "late adopters" in the electronic presentation revolution. Corporate management and trainers will be well served by working with this segment of the work force.

#### Implication 3

Presentation graphics software is now dominated by one manufacturer, Microsoft. Microsoft has grown to dominate presentation graphics technology with its PowerPoint

software so dramatically that very few users rely on any other software. (United States-52% use PowerPoint, Sweden-37% use PowerPoint, the other presentation graphics software accounts for the remainder). Because of the dominance that Microsoft exerts on the industry, if improvements are needed in presentation graphics technology, Microsoft will have to do it. Presenters will have to exert pressure on the company in order to have changes and additions to the software. Change will become difficult as PowerPoint achieves monopoly status.

### **Summary**

The electronic presentation is an important medium for business people to understand and know how to use.

As presenters, we are witnessing the birth of a new medium. Years from now we will find it hard to believe that we carried page sized pieces of plastic printed with colored inks with us to presentations, or that we had to darken a room to make a presentation. We may even find that our current form of the electronic presentation is antiquated. The electronic presentation is just beginning to dominate the presentations.

<sup>1</sup> Griffin, Robert E. "Electronic Presentations: How Are They Being Used In Presentations" **Eyes On The Future: Converging Images, Ideas and Instruction** Ed by Robert E. Griffin Et al. Blacksburg, VA: 1996. 409-417.

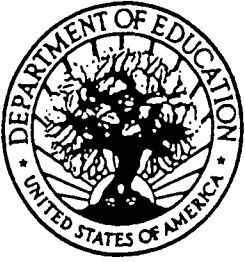
<sup>2</sup> "How girls get scared away from computers", **USA Today**, June 26, 1996, page D-1.



**Appendix A**  
**COMPLETE QUESTIONNAIRE RESULTS**

| QUESTION  | POSSIBLE RESPONSE | ALL RESPONDENTS-U.S.<br>(N=201) | ELECTRONIC PRESENTERS-U.S.<br>(N=54) | ALL RESPONDENTS-SWEDEN<br>(N=57) | ELECTRONIC PRESENTERS-SWEDEN<br>(N=19) |
|---|-------------------|---------------------------------|--------------------------------------|----------------------------------|--|
| 1. On average, how many presentations (electronic & non-electronic) do you normally give a month?                         | None              | 52                              | 23                                   | 18                               | 1                                      |
|   | 1-5               | 111                             | 36                                   | 26                               | 8                                      |
|   | 6-15              | 31                              | 12                                   | 11                               | 9                                      |
|   | 16-30             | 2                               | 1                                    | 1                                | 1                                      |
|   | 31+               | 4                               | 2                                    | 1                                | 0                                      |
|   | NR                | 1                               | 0                                    | 0                                | 0                                      |
| 2. Do you usually use visuals in your presentation?   | Yes               | 147                             | 44                                   | 37                               | 17                                     |
|   | No                | 44                              | 5                                    | 29                               | 2                                      |
|   | NR                | 10                              | 0                                    | 0                                | 0                                      |
| 3. Have you ever given an electronic presentation?  | Yes               | 54                              | -                                    | 19                               | 19                                     |
|   | No                | 139                             | -                                    | 37                               | 0                                      |
|   | NR                | 8                               | -                                    | 1                                | 0                                      |
| 4. Of the presentations you give each month, how many are given electronically?   | None              | 139                             | 0                                    | 1                                | 1                                      |
|   | 1                 | 0                               | 19                                   | 5                                | 5                                      |
|   | 2-5               | 0                               | 16                                   | 9                                | 9                                      |
|   | 6-10              | 0                               | 4                                    | 3                                | 3                                      |
|   | 10+               | 0                               | 4                                    | 1                                | 1                                      |
|   | NR                | 8                               | 1                                    | 0                                | 0                                      |
| 5. When you use an electronic presentation what are the reasons that you choose to use them?                              | open response     |                                 |                                      |                                  |  |
| 6. To what size audience do you normally present electronic presentations?  | 1-5 people        | -                               | 7                                    | -                                | 1                                      |
|   | 6-10              | -                               | 13                                   | -                                | 8                                      |
|   | 11-25             | -                               | 24                                   | -                                | 6                                      |
|   | 26-50             | -                               | 7                                    | -                                | 0                                      |
|   | 50+               | -                               | 1                                    | -                                | 1                                      |
|   | Does not apply    | -                               | 2                                    | -                                | 0                                      |
| 7. If you at times give electronic presentations & at other times use another medium, are the electronic presentations... | longer            | -                               | 8                                    | -                                | 3                                      |
|   | shorter           | -                               | 9                                    | -                                | 4                                      |
|   | about the same    | -                               | 36                                   | -                                | 10                                     |
|   | NR                | -                               | 1                                    | -                                | 2                                      |
| 8. For what kind of presentation would you use an electronic presentation?  | formal            | -                               | 34                                   | -                                | 12                                     |
|   | informal          | -                               | 5                                    | -                                | 1                                      |
|   | equally good      | -                               | 15                                   | -                                | 2                                      |
|   | NR                | -                               | 0                                    | -                                | 4                                      |

| QUESTION  | POSSIBLE RESPONSE      | ALL RESPONDENTS-U.S. (N=201) | ELECTRONIC PRESENTERS-U.S. (N=54) | ALL RESPONDENTS-SWEDEN (N=57) | ELECTRONIC PRESENTERS-SWEDEN (N=19) |
|---|------------------------|------------------------------|-----------------------------------|-------------------------------|-------------------------------------|
| 9. When you use electronic presentations, what software do you normally use to create & present you presentation? | PowerPoint             | -                            | 28                                | -                             | 7                                   |
|   | Harvard                | -                            | 6                                 | -                             | 0                                   |
|   | Graphics               | -                            | 5                                 | -                             | 4                                   |
|   | Freelance              | -                            | 3                                 | -                             | 3                                   |
|   | Persuasion             | -                            | 12                                | -                             | 4                                   |
|   | Other                  | -                            | 0                                 | -                             | 1                                   |
| 10. When you use electronic presentations, what type of display do you most commonly use?                         | video monitor          | -                            | 15                                | -                             | 2                                   |
|   | liquid crystal display | -                            | 29                                | -                             | 1                                   |
|   | video projector        | -                            | 4                                 | -                             | 12                                  |
|   | other                  | -                            | 3                                 | -                             | 0                                   |
|   | NR                     | -                            | 3                                 | -                             | 4                                   |
| 11. Do you own or have access to a laptop computer?   | yes                    | 101                          | 42                                | 28                            | 15                                  |
|   | no                     | 95                           | 12                                | 29                            | 4                                   |
|   | NR                     | 5                            | 0                                 | 0                             | 0                                   |
| 12. Rank the mediums in terms of their usefulness to you in business presentations.                               | see paper              |                              |                                   |                               |                                     |
| 13. What is the size of the company you work for?   | <50 employees          | 73                           | 13                                | 12                            | 2                                   |
|   | 50-200                 | 46                           | 16                                | 17                            | 7                                   |
|   | 201-750                | 34                           | 8                                 | 14                            | 3                                   |
|   | >751                   | 45                           | 16                                | 13                            | 7                                   |
|   | NR                     | 3                            | 1                                 | 1                             | 0                                   |
| 14. What business sector do you work in?  | Multiple responses     |                              |                                   |                               |                                     |
| 15. What is your gender?  | male                   | 120                          | 33                                | 46                            | 17                                  |
|   | female                 | 80                           | 21                                | 11                            | 2                                   |
|   | NR                     | 1                            | 0                                 | 0                             | 0                                   |
| 16. What is your age?   | <25                    | 3                            | 1                                 | 1                             | 0                                   |
|   | 25-35                  | 38                           | 10                                | 17                            | 7                                   |
|   | 36-45                  | 78                           | 26                                | 22                            | 6                                   |
|   | 46-55                  | 59                           | 15                                | 13                            | 3                                   |
|   | >56                    | 22                           | 2                                 | 3                             | 3                                   |
|   | NR                     | 1                            | 0                                 | 1                             | 0                                   |



U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement (OERI)  
Educational Resources Information Center (ERIC)



## NOTICE

### REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").