

Cisco Video Project Report



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This research project is a collaboration of Cisco and the Center for the Digital Future at the USC Annenberg School for Communication. The goal is to track individuals' video behaviors and attitudes on a global scale through survey questionnaires. This first report looks at video use and attitudes in the United States, China, Germany, and Sweden. The research explores the following areas: level of access to media technology, the devices used for video, the amount of time spent watching video on the different devices, and why people watch video.

In this report we first provide findings for the four participating countries, including breakdowns by user and demographic groups. Then we draw comparisons across the countries for the basic questions. Lastly, we provide general methodological and demographic information.

General conclusions for the USA

Access to media technology

To what types of media technology do people have access? Among the respondents in the nationally representative sample of Internet users in the United States, 42% have a DVR, 57% have a home network, 58% have a video game console, 65% have a laptop computer, 87% have a desktop computer, 92% have a mobile phone, 93% have broadband access at home or work, and 95% have a DVD player. Males and females have similar levels of access to all these technologies. The biggest gender disparity occurs with home networks (62% of males versus 52% of females have a home network). Urban, suburban, and rural respondents have relatively similar levels of access. Again, the biggest disparity occurs with home networks (55% urban, 62% suburban, 51% rural). There are greater disparities comparing respondents of different levels of education. For example, 54% of those with a high school education or less have a laptop computer, versus 73% of those with a four-year college degree or more. There are also big differences in regard to age. For example, 80% of those aged 18-24 have a video game console, versus only 24% of those aged 55-65.

Devices used for video

Beyond the almost universal use of television for viewing video, to what extent are the PC, mobile phone, and other handheld devices adopted for video watching? PCs take the lead, followed by mobile phones and other handheld devices. Eighty-one percent use a PC, 23% use a mobile phone, and 8% use other handheld devices such as iPod, PSP (Play Station Portable), digital cameras, and camcorders. Use of these technologies varies by demographics and user characteristics. For example, very experienced Internet users (those on the net for ten years or more) are more likely to use a PC for video than are newer users (those online for three years or less) (84% versus 67%). Males are more likely to use their PC for video than are females (87% versus 75%). Urban respondents are more likely than those in rural areas to use a mobile phone for video (32% versus 13%). Those with a four-year college degree or more are more likely to use a PC for

video than are those with a high school education or less (87% versus 77%). Whereas 40% of those aged 25-34 use a mobile phone for video, only 4% of those aged 55-65 do so.

Time spent watching video on the Internet, mobile phone, other handheld devices, and television

How much time do Internet users spend watching online video? Among the three types of device, Internet-connected PCs command a big lead, followed by mobile phones and other handheld devices. This is no surprise given that PCs are the number one choice for viewing video. The respondents spent an average of 1.5 hours per day watching video on an Internet-connected PC. Newer users spent on average more time than very experienced users (1.7 versus 1.4 hours). Males spent more time than females (1.6 versus 1.3 hours). Urban users spent more time than suburban or rural users (1.8, 1.3, and 1.4 hours respectively). Those with less education spent more time than those with more (1.7 hours for those with a high school education or less, 1.6 hours for those with some college education or an associates degree, and 1.3 hours for those with a four-year college degree or more). Time spent varied inversely with age (1.7 hours for those aged 18-24, 1.6 hours for those aged 25-34, 1.5 hours for those aged 35-44, 1.3 hours for those aged 45-54, and 1.2 hours for those aged 55-65).

How much time do viewers spend watching video on a mobile phone? They spent an average of 36 minutes per day in this activity. This is much less than the amount of time spent watching video on Internet-connected PCs. Males spent on average more time than females (38 versus 33 minutes). Urban users spent more time than suburban or rural users (42, 32, and 34 minutes respectively). In terms of education, those with some college education or an associates degree spent the most time (41 minutes per day, versus 34 minutes for those with a high school education or less and 32 minutes for those with a four-year college degree or more). In regard to age, 25-34 year olds spent the most time (40 minutes per day, as opposed to 31 minutes for those aged 18-24, 35 minutes for those aged 35-44, 31 minutes for those aged 45-54, and 33 minutes for those aged 55-65).

What about those who view video on other handheld devices? They spent an average of 36 minutes per day on this activity, which is similar to the time spent with video on mobile phones. Males and females spent equal amounts of time on average. Time spent varied inversely with education (63 minutes for those with a high school education or less, 38 minutes for those with some college education or an associates degree, and 26 minutes for those with a four-year college degree or more). In regard to age, 18-24 year olds spent the most time (47 minutes per day, as opposed to 36 minutes for those aged 25-34, 44 minutes for those aged 35-44, 27 minutes for those aged 45-54, and 20 minutes for those aged 55-65).

User-generated content on web sites such as YouTube has become quite popular. Viewers spent an average of 1.4 hours per week watching user-generated video online. Newer users spent on average more time than very experienced users (1.7 versus 1.4 hours). Males spent more time than females (1.8 versus 1.1 hours). Urban users spent

more time than suburban or rural users (1.9, 1.4, and 1.1 hours respectively). Those with less education spent more time than those with more (1.6 hours for those with a high school education or less, 1.5 hours for those with some college education or an associates degree, and 1.3 hours for those with a four-year college degree or more). Time spent varied inversely with age (2.3 hours for those aged 18-24, 1.9 hours for those aged 25-34, 1.2 hours for those aged 35-44, 1.2 hours for those aged 45-54, and 0.8 hours for those aged 55-65).

Despite the rise and popularity of user-generated content, those who view video on the Internet spend more time viewing professionally produced content. The respondents who watched video on the Internet spent an average of 3.4 hours per week watching professionally produced video online, much higher than the average of 1.4 hours for amateur video. Newer users spent more time on average than very experienced users (3.5 versus 3.3 hours). Males spent more time than females (3.9 versus 2.9 hours). Urban users spent more time than suburban or rural users (4.0, 3.2, and 3.1 hours respectively). Those with high school education or less, and those with some college education or an associates degree, spent slightly more time than those with a four-year college degree or more (3.5, 3.5, and 3.3 hours respectively). Time spent varied inversely with age (4.5 hours for those aged 18-24, 3.9 hours for those aged 25-34, 3.3 hours for those aged 35-44, 2.8 hours for those aged 45-54, and 2.7 hours for those aged 55-65).

Even though many view video online and mobile phones and other handheld devices are very convenient, people still spend more time watching video on television than anywhere else. The 99% of respondents who have a television spent on average 3.8 hours a day watching. Very experienced Internet users spend less time on average than newer users (3.6 versus 4.4 hours per day). Females spend more time viewing than males (4.0 versus 3.6 hours per week). Those in rural areas watch more (4.3 hours per day) than urbanites (3.9 hours) and suburbanites (3.5 hours). Those with a high school education or less watch more video on television on average (4.8 hours per day) than those with some college or an associates degree (4.0 hours) and those with a four-year college degree or more (3.1 hours). And hours spent viewing television varied directly with age (with 18-24 years olds watching an average of 3.1 hours per day and 55-65 years olds watching an average of 4.7 hours).

This high level of television use no doubt contributes to the fact that most of the respondents said that they would be interested in watching video found on the Internet on their television set. More very experienced as opposed to newer users, more males than females, more urbanites and suburbanites as opposed to those in rural areas, more educated as opposed to those with less education, and fewer older as opposed to younger people said this.

Why do people watch video?

For what types of activities are video used? Entertainment and information seeking are the most popular activities, while pursuit of education and communications are less popular with Internet users. Ninety-two percent of respondents use video for

entertainment, 68% use video for information, 38% use it for education, and 31% for communications. Very experienced users are more likely to use video for all of these purposes, compared to newer users. For example, 94% of very experienced users use video for entertainment, compared to 70% of newer users. Males are also more likely than females to use video for all of these purposes. For example, 75% of males use video for information, compared to 62% of females. There is a tendency for urban and suburban respondents to use video for the different purposes more than those from rural areas. For example, 34% of urbanites, 35% of suburbanites, and 19% of those from rural areas use video for communications. There is a strong tendency for those with more education to use video for all of these purposes compared to people with less education. For example, 52% of those with a high school education or less, 65% of those with some college education or an associates degree, and 80% of those with a four-year college degree or more use video for information. Higher numbers of younger people also tend to use video for all the different purposes. For example, whereas 81% of those aged 18-24 use video for information, only 58% of those aged 55-65 do.

Respondents watched video online for a wide variety of reasons. The most popular reason was for fun and entertainment (81% of respondents). The second and third most popular reasons were for news and information (65%) and because friends sent them links or suggested that they check out some video (60%). Males and females do differ somewhat on why they watch. For example, 54% of males cited convenience as a reason for watching video online, whereas this was mentioned by only 40% of females. Responses also differed according to the urban/suburban/rural distinction. Whereas 38% of urbanites cited “to see what other people on the Internet are talking about,” only 22% of those who live in rural areas cited that reason. There were some differences by education. For example, 73% of those with a four-year college degree or more said they watched for news or information, whereas only 49% of those with a high school education or less said that. There were many disparities in the responses given by those in different age groups. For example, 57% of those aged 18-24 said they watched to alleviate boredom or because they had nothing better to do, whereas only 20% of those aged 45-54 gave that answer.

Why do people watch video on a mobile phone? The reasons cited for watching video on a mobile phone varied widely. Again, the most popular reason was for fun and for entertainment (57% of respondents). The second and third most popular reasons were that friends sent them links or suggested that they check out some video (41%) and for news and information (38%). Males and females do differ somewhat on why they watch. For example, 43% of males cited information and news as a reason for watching video on a mobile phone, whereas this was mentioned by only 30% of females. Responses also differed according to the urban/suburban/rural distinction. Whereas 41% of urbanites cited news and information, only 28% of those who live in rural areas cited that reason. There were some differences by education. For example, 43% of those with a four-year college degree or more said they watched for news or information, whereas only 25% of those with a high school education or less said that. There were many disparities in the responses given by those in different age groups. For example, whereas 46% of those aged 18-24 said they watched to alleviate boredom or because they had nothing better to do, only 17% of those aged 45-54 and no one over age 55 gave that answer.

The reasons cited for watching video on other handheld devices were also quite varied. Once again, the most popular reason was for fun and entertainment (75% of respondents). The second and third most popular reasons were convenience of watching video on a handheld device (43%) and “simply like watching video” (37%). Males and females differ somewhat on why they watch. For example, 43% of females said that friends sent them links or suggested that they check out some video, whereas this was mentioned by only 27% of males. Responses also differed according to the urban/suburban/rural distinction. Whereas 44% of urbanites said that friends sent them links or suggested that they check out some video, only 11% of those who live in rural areas cited that reason. There were differences by education. For example, whereas only 36% of those with a four-year college degree or more cited that they simply liked watching video as a reason, 56% of those with a high school education or less said that. There were also disparities in the responses given by those in different age groups. For example, whereas 71% of those aged 18-24 said they watched to alleviate boredom or because they had nothing better to do, only 8% of those aged 45-54 gave that answer.

General conclusions for China

Access to media technology

To what types of media technology do people have access? Among the respondents in the random sample of Internet users in seven major Chinese cities, 17% have a video game console, 24% have a DVR, 32% have a home network, 44% have a laptop computer, 85% have a DVD player, 87% have a desktop computer, 90% have broadband access at home or work, and 97% have a mobile phone. Males and females have similar levels of access to all these technologies. The biggest gender disparity occurs with home networks (34% of males versus 28% of females have a home network). There are greater disparities comparing respondents of different levels of education. For example, 23% of those with a high school education or less have a laptop computer, versus 60% of those with a four-year college degree or more. There are also big differences in regard to age. For example, only 33% of those aged 18-24 have a laptop computer, versus 55% of those aged 45-54.

Devices used for video

Beyond the almost universal use of television for viewing video, to what extent are the PC, mobile phone, and other handheld devices adopted for video watching? PCs take a commanding lead, followed by mobile phones and other handheld devices. Ninety-seven percent use a PC, 10% use a mobile phone, and 3% use other handheld devices. Use of these technologies varies by demographics and user characteristics. For example, very experienced Internet users (those on the net for ten years or more) are slightly more likely to use a mobile phone for video than are newer users (those online for three years or less) (13% versus 9%). Males are slightly more likely to use a mobile phone for video than are females (11% versus 9%). Those with some college education or an associates degree are

slightly more likely to use a mobile phone for video than are those with a high school education or less (12% versus 9%). Whereas 13% of those aged 18-24 use a mobile phone for video, only 5% of those aged 45-54 do so.

Time spent watching video on the Internet, mobile phone, other handheld devices, and television

How much time do Internet users spend on online video? Among the three types of device, Internet-connected PCs command a big lead, followed by mobile phones and other handheld devices. The respondents spent an average of 1.9 hours per day watching video on an Internet-connected PC. Newer users spent on average more time than very experienced users (2.1 versus 2.0 hours). Males and females spent the same amount of time on average (1.9 hours). Those with less education spent somewhat more time than those with the most (2.0 hours for those with a high school education or less, 2.1 hours for those with some college education or an associates degree, and 1.7 hours for those with a four-year college degree or more). Time spent varied somewhat directly with age (1.9 hours for those aged 18-24, 1.8 hours for those aged 25-34, 1.9 hours for those aged 35-44, 2.2 hours for those aged 45-54, and 2.3 hours for those aged 55-65).

How much time do viewers spend watching video on a mobile phone? They spent an average of 33 minutes per day in this activity, much less than the amount of time spent watching video on an Internet-connected PC. Males spent on average more time than females (35 versus 30 minutes). In terms of schooling, use varied directly with increased education (27 minutes for those with a high school education or less, 32 minutes for those with some college or an associates degree, and 39 minutes for those with a four-year college degree or more). In regard to age, 35-44 year olds spent the most time (39 minutes per day, as opposed to 31 minutes for those aged 18-24, 37 minutes for those aged 25-34, 30 minutes for those aged 45-54, and 13 minutes for those aged 55-65).

What about those who view video on other handheld devices? They spent an average of 60 minutes per day on this activity, also much less than the amount of time spent watching video on an Internet-connected PC. Too few respondents used other handheld devices for video to allow for demographic breakdowns.

User-generated content on web sites such as YouTube has become quite popular. The Internet viewers spent an average of 1.7 hours per week watching user-generated video online. Newer users spent on average less time than very experienced users (1.6 versus 1.7 hours). Males spent more time than females (2.0 versus 1.3 hours). Those with the least amount of education spent less time than those with more (1.5 hours for those with a high school education or less, 1.9 hours for those with some college education or an associates degree, and 1.8 hours for those with a four-year college degree or more). Time spent varied inversely with age (2.5 hours for those aged 18-24, 1.9 hours for those aged 25-34, 0.9 hours for those aged 35-44, 0.8 hours for those aged 45-54, and 0.4 hours for those aged 55-65).

Despite the rise and popularity of user-generated content, those who view video on the Internet spend more time viewing professionally produced content. The respondents who watched video on the Internet spent an average of 3.2 hours per week watching professionally produced video online, almost double the amount of time spent on amateur video content. Newer users spent less time on average than very experienced users (3.1 versus 3.7 hours). Males spent more time than females (3.4 versus 2.8 hours). Those with a high school education or less spent less time on average than those with some college education or an associates degree and those with a four-year college degree or more (2.9, 3.4, and 3.3 hours respectively). Time spent did not vary in a consistent pattern with age (3.3 hours for those aged 18-24, 3.4 hours for those aged 25-34, 2.5 hours for those aged 35-44, 3.0 hours for those aged 45-54, and 4.2 hours for those aged 55-65).

The 93% of respondents who have a television spent on average 1.8 hours a day watching video. Very experienced Internet users spend less time on average than newer users (1.7 versus 2.0 hours per day). Females spend slightly more time viewing than males (1.9 versus 1.8 hours per week). Television watching varies inversely with education. Those with a high school education or less watch more television on average (2.1 hours per day) than those with some college or an associates degree (1.9 hours) and those with a four-year college degree or more (1.6 hours). And hours spent viewing television varied directly with age (with 18-24 years olds watching an average of 1.7 hours per day and 55-65 years olds watching an average of 2.7 hours).

When asked if they would be interested in watching video found on the Internet on their television set, most seemed apathetic, or perhaps they did not understand the question. A majority of respondents (54%) said they neither agreed nor disagreed. Many more agreed (35%) than disagreed (11%). None of the demographic variables had a notable effect on responses.

Why do people watch video?

For what types of activities are video used? A large majority of Internet users watch video for entertainment, information, and communication, while less than one third use it for education. Sixty-eight percent of respondents use video for entertainment, 58% for information, 56% for communications, and 28% for education. Very experienced users are more likely to use video for all of these purposes, compared to newer users. For example, 35% of very experienced users use video for education, compared to 24% of newer users. Males are more likely than females to use video for entertainment (70% versus 65%), and females are more likely than males to use video for the other activities. For example, 26% of males use video for education, compared to 31% of females. There is a no strong trend related to the education variable, except that those with more education are more likely to use video for education. Nineteen percent of those with a high school education or less, 28% of those with some college education or an associates degree, and 34% of those with a four-year college degree or more use video for education. In terms of age, younger people tend to use video more for entertainment and communications, and older people more for information. Seventy-five percent of those aged 18-24 use video for entertainment, compared to just 47% of those aged 55-65.

Sixty-one percent of those aged 18-24 use video for communications, compared to just 35% of those aged 55-65. And 54% of those aged 18-24 use video for information, compared to 69% of those aged 45-54.

Respondents watched video online for a wide variety of reasons. The most popular reason was for information and news (77% of respondents). The second and third most popular reasons were the convenience of online video (68%) and for fun and entertainment (67%). Males and females do differ somewhat on why they watch. For example, 48% of males cited to see what others are talking about as a reason, whereas this was mentioned by only 41% of females. There were some differences by education. For example, only 40% of those with a four-year college degree or more said they watched to alleviate boredom or because they had nothing better to do, whereas 54% of those with a high school education or less said that. There were also disparities in the responses given by those in different age groups. For example, 74% of those aged 18-24 said they watched for fun and entertainment, whereas only 48% of those aged 55-65 gave that answer.

Why do people watch video on a mobile phone? The reasons cited for watching video on a mobile phone varied widely. Again, the most popular reason was for news and information (69% of respondents). The second and third most popular reasons were the convenience of online video (62%) and for fun and entertainment (61%). Males and females do differ somewhat on why they watch. For example, 39% of females cited to see what others are talking about as a reason for watching video on a mobile phone, whereas this was mentioned by only 26% of males. There were some differences by education. For example, whereas only 41% of those with a four-year college degree or more said they watched to alleviate boredom or because they had nothing better to do, 63% of those with a high school education or less said that. There were many disparities in the responses given by those in different age groups. For example, whereas 52% of those aged 18-24 said they watched simply because they liked watching video, only 18% of those aged 35-44 gave that answer.

The reasons cited for watching video on other handheld devices were also quite varied. The most popular reason was for fun and entertainment (79% of respondents). The second and third most popular reasons were convenience of watching video on a handheld device (73%) and to alleviate boredom or because they had nothing better to do (61%). Once again, too few respondents used other handheld devices for video to allow for demographic breakdowns.

General conclusions for Germany

Access to media technology

To what types of media technology do people have access? Among the respondents in the nationally representative sample of Internet users in Germany, 3% have a home network, 11% have a DVR, 29% have a video game console, 50% have a laptop computer, 72% have a desktop computer, 72% have broadband access at home or work, 81% have a

DVD player, and 93% have a mobile phone. Males tend to have higher levels of access to most of these technologies. The biggest gender disparity occurs with video game consoles (37% of males versus 19% of females have a game console). Urban, suburban, and rural respondents have relatively similar levels of access. The biggest disparity occurs with laptop computers (48% urban, 48% suburban, 58% rural). There are small disparities comparing respondents of different levels of education. For example, 41% of those with some college or an associates degree have a video game console, compared to 27% of those with a high school education or less and 25% of those with a four-year college degree or more. There are bigger differences in regard to age. For example, 48% of those aged 18-24 have a video game console, versus only 7% of those aged 55-65.

Devices used for video

Beyond the almost universal use of television for viewing video, to what extent are the PC, mobile phone, and other handheld devices adopted for video watching? PCs take the lead, followed by mobile phones and other handheld devices. Sixty-five percent use a PC, 8% use a mobile phone, and 3% use other handheld devices. Use of these technologies, especially the PC, varies by demographics and user characteristics. For example, very experienced Internet users (those on the net for ten years or more) are more likely to use a PC for video than are newer users (those online for three years or less) (68% versus 58%). Males are more likely to use their PC for video than are females (72% versus 57%). Rural and suburban respondents are more likely than those in urban areas to use a PC for video (68% and 67% versus 62%). Those with some college or an associates degree are more likely to use a PC for video than are those with a high school education or less and those a four-year college degree or more (75% versus 66% and 59%). Whereas 86% of those aged 25-34 use a PC for video, only 31% of those aged 55-65 do so. And while 11% of those aged 25-34 use a mobile phone for video, the same is true for only 3% of those aged 55-65.

Time spent watching video on the Internet, mobile phone, other handheld devices, and television

How much time do Internet users spend on online video? Among the three types of device, Internet-connected PCs command a big lead, followed by mobile phones and other handheld devices. The respondents spent an average of 1.5 hours per day watching video on an Internet-connected PC. Newer users spent on average slightly less time than very experienced users (1.4 versus 1.5 hours). Males spent somewhat less time than females (1.4 versus 1.6 hours). There was little difference among urban, suburban, and rural users (1.4, 1.5, and 1.5 hours respectively). There was no clear trend in regard to education (1.5 hours for those with a high school education or less, 1.7 hours for those with some college education or an associates degree, and 1.3 hours for those with a four-year college degree or more). Time spent varied inversely with age (1.9 hours for those aged 18-24, 1.7 hours for those aged 25-34, 1.1 hours for those aged 35-44, 0.9 hours for those aged 45-54, and 0.9 hours for those aged 55-65).

How much time do viewers spend watching video on a mobile phone? They spent an average of 27 minutes per day in this activity, much less than the amount of time spent watching video on an Internet-connected PC. Males spent on average the same amount of time as females (27 minutes). Urban and suburban users spent a little more time than rural users (27, 28, and 23 minutes respectively). In terms of education, those with a four-year college degree or more spent the most time (30 minutes per day, versus 27 minutes for those with a high school education or less and 24 minutes for those with some college education or an associates degree). In regard to age, 25-34 year olds spent the most time (29 minutes per day, as opposed to 26 minutes for those aged 18-24, 26 minutes for those aged 35-44, 25 minutes for those aged 45-54, and 25 minutes for those aged 55-65).

What about those who view video on other handheld devices? They spent an average of 35 minutes per day on this activity, also much less than the amount of time spent watching video on an Internet-connected PC. There were too few respondents who viewed video on other handheld devices to allow for meaningful demographic breakdowns.

User-generated content on web sites such as YouTube has become quite popular. The Internet viewers spent an average of 2.2 hours per week watching user-generated video online. Newer users spent on average less time than very experienced users (1.9 versus 2.5 hours). Males spent more time than females (2.7 versus 1.8 hours). Urban users spent less time than suburban or rural users (2.0, 2.4, and 2.4 hours respectively). Those with some college education or an associates degree spent more time (2.6 hours) than those with a high school education or less (2.3 hours) and those with a four-year college degree or more (1.9 hours). Time spent varied inversely with age (3.6 hours for those aged 18-24, 2.7 hours for those aged 25-34, 2.0 hours for those aged 35-44, 1.4 hours for those aged 45-54, and 0.5 hours for those aged 55-65).

Those who view video on the Internet spend less time viewing professionally produced content. The respondents who watched video on the Internet spent an average of 1.0 hours per week watching professionally produced video online. Newer users spent somewhat less time on average than very experienced users (0.9 versus 1.1 hours). Males spent slightly less time than females (1.0 versus 1.1 hours). Urban users spent slightly less time than suburban or rural users (1.0, 1.1, and 1.1 hours respectively). Those with some college education or an associates degree spent 1.3 hours, compared to 1.0 hours for both those with a high school education or less, and those with a four-year college degree or more. Time spent varied inversely with age (1.6 hours for those aged 18-24, 1.3 hours for those aged 25-34, 0.9 hours for those aged 35-44, 0.6 hours for those aged 45-54, and 0.4 hours for those aged 55-65).

Even though many view video online and mobile phones and other handheld devices are very convenient, people still spend more time watching video on television than anywhere else. The 97% of respondents who have a television spent on average 2.9 hours a day watching. Very experienced Internet users spend less time on average than newer users (2.7 versus 3.2 hours per day). Females spend slightly more time viewing than males (2.9 versus 2.8 hours per week). Those in rural areas watch a little less (2.7 hours

per day) than urbanites (2.9 hours) and suburbanites (2.9 hours). Those with a four-year college degree or more watch a little more television (3.0 hours) than those with a high school education or less (2.8 hours per day) and those with some college or an associates degree (2.8 hours). And hours spent viewing television varied directly with age (with 18-24 years olds watching an average of 2.2 hours per day and 55-65 years olds watching an average of 4.0 hours).

This high level of television use no doubt contributes to the fact that the vast majority (85%) of the respondents said that they would be interested in watching video found on the Internet on their television set. Older people and males expressed somewhat more interest than younger people and females. The other user and demographic variables had little effect on a respondent's answer.

Why do people watch video?

For what types of activities are video used? Forty-three percent of respondents use video for entertainment, 40% for information, 24% for communications, and 5% for education. Very experienced users, compared to newer users, are more likely to use video for all of these purposes except for information. For example, 45% of very experienced users use video for entertainment, compared to 35% of newer users. But 48% of new users use video for information, compared to 36% of very experienced users. There is some difference in male versus female use, but not in a consistent direction. In the biggest gender disparity, 33% of males use video for information, compared to 49% of females. There are differences in activities among urban, suburban, and rural users, but again not in any consistent direction. In the biggest disparity, 40% of urbanites, 42% of suburbanites, and 49% of those from rural areas use video for entertainment. Difference yet lack of any clear pattern again is seen in relation to the variable of education. Forty percent of those with a high school education or less, 32% of those with some college education or an associates degree, and 46% of those with a four-year college degree or more use video for information. Forty-four percent of those with a high school education or less, 47% of those with some college education or an associates degree, and 40% of those with a four-year college degree or more use video for entertainment. In regard to age, younger respondents engage in some activities more, while for others the older people are more involved. There is a strong tendency for those who are younger to use video for entertainment. For example, 67% of those aged 18-24 use video for entertainment, compared to 17 % of those aged 55-65. But for information, the opposite holds. For example, whereas only 28% of those aged 18-24 use video for information, 62% of those aged 55-65 do.

Respondents watched video online for a wide variety of reasons. The most popular reason was for fun and entertainment (66% of respondents). The second and third most popular reasons were to connect with others or vicariously interact with others or communities of interest (42%) and for news and information (28%). Males and females do differ somewhat on why they watch. For example, 72% of males cited fun and entertainment as a reason for watching video online, whereas this was mentioned by only 59% of females. Responses also differed according to the urban/suburban/rural distinction. Whereas 71%

of those in rural areas cited fun and entertainment, only 62% of those who live in urban areas cited that reason. There were some differences by education. For example, 75% of those with some college or an associates degree said they watched for fun and entertainment, whereas only 60% of those with four year college degree or more said that. There were many disparities in the responses given by those in different age groups. For example, 65% of those aged 18-24 said they watched to connect with others or vicariously interact with others or communities of interest, whereas only 20% of those aged 55-65 gave that answer.

Why do people watch video on a mobile phone? The reasons cited for watching video on a mobile phone varied widely. Again, the most popular reason was for fun and entertainment (74% of respondents). The second and third most popular reasons were for news and information (52%) and to know what others are thinking and feeling (43%). Males and females do differ somewhat on why they watch. For example, only 47% of males cited information and news as a reason for watching video on a mobile phone, whereas this was mentioned by 59% of females. Responses also differed according to the urban/suburban/rural distinction. Whereas only 44% of urbanites cited news and information, 72% of those who live in rural areas cited that reason. There were some differences by education. For example, 67% of those with a four-year college degree or more said they watched for news or information, whereas only 45% of those with a high school education or less said that. There were many disparities in the responses given by those in different age groups. For example, whereas 32% of those aged 18-24 said they watched to alleviate boredom or because they had nothing better to do, no one over age 34 gave that answer.

The reasons cited for watching video on other handheld devices were also quite varied. Once again, the most popular reason was for fun and entertainment (38% of respondents). Tied for second most popular reason were convenience of watching video on a handheld device (21%) and to alleviate boredom or because they had nothing better to do (21%). There were too few respondents who viewed video on other handheld devices to allow for meaningful demographic breakdowns.

General conclusions for Sweden

Access to media technology

To what types of media technology do people have access? Among the respondents in the nationally representative sample of Internet users in Sweden, 20% have a DVR, 46% have a video game console, 55% have a home network, 66% have a laptop computer, 83% have a desktop computer, 97% have broadband access at home or work, 98% have a DVD player, and 99% have a mobile phone. Males and females have similar levels of access to all these technologies. The biggest gender disparity occurs with DVRs (25% of males versus 15% of females). Urban, suburban, and rural respondents have relatively similar levels of access. The biggest disparity occurs with video game consoles (46% urban, 52% suburban, and 41% rural). There are small disparities comparing respondents

of different levels of education. The largest disparity again comes with video game consoles, with 51% of those with a high school education or less having one versus 40% of those with a four-year college degree or more (although this is most likely a function of age). There are bigger differences in regard to age. For example, 60% of those aged 18-24 have a video game console, versus only 15% of those aged 55-65.

Devices used for video

Beyond the almost universal use of television for viewing video, to what extent are the PC, mobile phone, and other handheld devices adopted for video watching? PCs take the lead, followed by mobile phones and other handheld devices. Seventy-one percent use a PC, 12% use a mobile phone, and 5% use other handheld devices. Use of these technologies varies by demographics and user characteristics. For example, very experienced Internet users (those on the net for ten years or more) are more likely to use a PC for video than are newer users (those online for three years or less) (75% versus 61%). Males are more likely to use their PC for video than are females (78% versus 65%). Urban respondents are slightly more likely than those in rural areas to use a mobile phone for video (12% versus 11%). Those with a four-year college degree or more are more likely to use a PC for video than are those with a high school education or less (75% versus 68%). Whereas 85% of those aged 18-24 use a PC for video, only 57% of those aged 55-65 do so.

Time spent watching video on the Internet, mobile phone, other handheld devices, and television

How much time do Internet users spend on online video? The respondents spent an average of 0.7 hours per day watching video on an Internet-connected PC. Males and females on average watch the same amount (0.7 hours). There is little discrepancy among urban versus suburban versus rural users (0.6, 0.7, and 0.7 hours respectively). Those with less education spent a little more time than those with the most (0.7 hours for those with a high school education or less, 0.7 hours for those with some college education or an associates degree, and 0.5 hours for those with a four-year college degree or more). Time spent varied inconsistently with age, except for the fact that the youngest viewed the most (1.1 hours for those aged 18-24, 0.5 hours for those aged 25-34, 0.7 hours for those aged 35-44, 0.6 hours for those aged 45-54, and 0.7 hours for those aged 55-65).

How much time do viewers spend watching video on a mobile phone? They spent an average of 38 minutes per day in this activity, almost equal to the amount of time spent watching video on an Internet-connected PC. Males spent on average much less time than females (31 versus 60 minutes). Urban users spent more time than suburban ones, who spent more time than rural users (51, 26, and 8 minutes respectively). In terms of education, those with some college education or an associates degree spent the most time (101 minutes per day, versus 18 minutes for those with a high school education or less and 34 minutes for those with a four-year college degree or more). In regard to age, 18-24 year olds spent by far the most time (193 minutes per day, as opposed to 15 minutes for those aged 18-24, and 11 minutes for those aged 35-44).

What about those who view video on other handheld devices? They spent an average of 42 minutes per day on this activity, equal to the amount of time spent watching video on an Internet-connected PC. There were too few respondents who viewed video on other handheld devices to allow for meaningful demographic breakdowns.

User-generated content on web sites such as YouTube has become quite popular in the United States, but less so in Sweden. Viewers spent an average of 0.5 hours per week watching user-generated video online. Males spent more time than females (0.6 versus 0.3 hours). There was little difference among urban, suburban, and rural respondents (0.5, 0.4, and 0.5 hours respectively). There was little different among those with different levels of education (0.5 hours for those with a high school education or less, 0.5 hours for those with some college education or an associates degree, and 0.4 hours for those with a four-year college degree or more). Use varied inversely with age, with the youngest people spending more time than all other groups (1.0 hours for those aged 18-24, 0.5 hours for those aged 25-34, 0.5 hours for those aged 35-44, 0.3 hours for those aged 45-54, and 0.3 hours for those aged 55-65).

Those who view video on the Internet spend more time viewing professionally produced content. The respondents who watched video on the Internet spent an average of 1.3 hours per week watching professionally produced video online. Males spent more time than females (1.6 versus 1.1 hours). There was little difference among urban, suburban, and rural users (1.3, 1.3, and 1.4 hours respectively). Those with a high school education or less, and those with some college education or an associates degree, spent slightly more time than those with a four-year college degree or more (1.4, 1.4, and 1.2 hours respectively). In terms of age, the very youngest spent more time than all other groups (3.2 hours for those aged 18-24, 1.1 hours for those aged 25-34, 1.3 hours for those aged 35-44, 1.1 hours for those aged 45-54, and 1.1 hours for those aged 55-65).

Even though many view video online and mobile phones and other handheld devices are very convenient, people still spend more time watching video on television than anywhere else. The 96% of respondents who have a television spent on average 2.1 hours a day watching. Females spend more time viewing than males (2.2 versus 2.0 hours per week). There was little difference among urban, suburban, and rural respondents (2.2, 2.1, and 2.1 hours). Those with a high school education or less watch more television on average (2.3 hours per day) than those with some college or an associates degree (2.2 hours) and those with a four-year college degree or more (1.8 hours). And hours spent viewing television varied directly with age (with 18-24 years olds watching an average of 1.8 hours per day and 55-65 years olds watching an average of 2.5 hours).

This high level of television use no doubt contributes to the fact that most of the respondents said that they would be interested in watching video found on the Internet on their television set. More very experienced as opposed to newer users, more males than females, more urbanites and suburbanites as opposed to those in rural areas, more educated as opposed to those with less education, and fewer older as opposed to younger people expressed interest.

Why do people watch video?

For what types of activities are video used? Ninety-seven percent of respondents use video for entertainment, 64% for information, 25% for education, and 22% for communications. Very experienced users, compared to newer users, are more likely to use video for all of these purposes except for entertainment where use is essentially equal. For example, 69% of very experienced users use video for information, compared to 44% of newer users. Males are also somewhat more likely than females to use video for all of these purposes, again except for entertainment where levels are essentially equal. For example, 71% of males use video for information, compared to 57% of females. The activities of urban, suburban, and rural respondents are quite similar. The biggest disparity in this regard comes from the 66% of urbanites, 60% of suburbanites, and 63% of those from rural areas who use video for information. There is a tendency for those with more education to use video for all of these purposes compared to people with less education. For example, 16% of those with a high school education or less, 28% of those with some college education or an associates degree, and 38% of those with a four-year college degree or more use video for education. There is a slight tendency for higher percentages of younger people to use video for all the different purposes. For example, whereas 35% of those aged 18-24 use video for communications, only 13% of those aged 55-65 do.

Respondents watched video online for a wide variety of reasons. The most popular reason was for fun and entertainment (70% of respondents). The second and third most popular reasons were for news and information (56%) and because friends sent them links or suggested that they check out some video (42%). Males and females do differ somewhat on why they watch. For example, 66% of males cited news and information as a reason for watching video online, whereas this was mentioned by only 47% of females. Responses also differed according to the urban/suburban/rural distinction. Whereas 46% of urbanites said because friends sent them links or suggested that they check out some video, only 35% of suburbanites and 37% of those living in rural areas cited that reason. There were some differences by education. For example, 62% of those with a four-year college degree or more said they watched for news or information, whereas only 50% of those with a high school education or less said that. There were many disparities in the responses given by those in different age groups. For example, 49% of those aged 18-24 said they watched to alleviate boredom or because they had nothing better to do, whereas only 5% of those aged 55-65 gave that answer.

Why do people watch video on a mobile phone? The reasons cited for watching video on a mobile phone varied widely. Again, the most popular reason was for fun and entertainment (56% of respondents). The second and third most popular reasons were that friends sent them links or suggested that they check out some video (37%) and for news and information (37%). Males and females do differ somewhat on why they watch. For example, 35% of males said they watched to alleviate boredom or because they had nothing better to do, whereas this was mentioned by only 6% of females. Responses also differed according to the urban/suburban/rural distinction. Whereas 39% of urbanites cited news and information, only 27% of suburbanites cited that reason. There were some

differences by education. For example, 44% of those with a high school education or less, 33% of those with some college or an associates degree, and 26% of those with a four-year college degree or more said they watched because a friend sent them links or suggested that they check out some video. There were many disparities in the responses given by those in different age groups. For example, whereas only 22% of those aged 18-24 said they watched for news and information, 59% of those aged 35-44 gave that answer.

The reasons cited for watching video on other handheld devices were also quite varied. Once again, the most popular reason was for fun and entertainment (78% of respondents). There was a three-way tie for second place: convenience of watching video on a handheld device, for news and information, and because a friend sent them links or suggested that they check out some video (all at 39%). There were too few respondents who viewed video on other handheld devices to allow for meaningful demographic breakdowns.

International comparison on the basic questions

This section deals with country-to-country comparisons of the basic survey questions. For correct interpretation one must keep in mind that these samples are representative of Internet users aged 18-65 and not people in general. Moreover, the Chinese sample is drawn from seven large cities, and not the country as a whole as was the case for the other three countries. We were interested in the Internet population in each country and not the population as a whole. And given the nature of Chinese society surveys outside of major urban areas are very difficult to conduct. Along these lines, note that the respondents in the Chinese sample have, on average, more education than those in the Swedish sample and, especially, the German sample. In the Chinese sample only 27% of respondents have a high school education or less, compared to 50% and 61% for the Swedish and German samples respectively. The Chinese sample is also much younger than those from the other countries. Almost 63% of the Chinese sample is between the ages of 18-34 (compared to 33%, 37%, and 49%, for the Swedish, U.S, and German samples respectively). The point is that for correct interpretation one must always know who exactly is answering the questions.

Access to media technology

The first question in the survey asked what types of media technology people have. In general, the respondents in the United States and Sweden have access to more media technology than those in Germany and urban China. For some technologies, for example television and mobile phones, there are high levels of access (close to universal adoption) in all four countries. But for others there are rather large disparities. For example, 58% of respondents in the United States have a video game console, whereas only 17% in urban China do. And 57% in the United States have access to a home network, whereas only 3% in Germany do.

Devices used for video

Beyond the almost universal use of television for viewing video, to what extent are the PC, mobile phone, and other handheld devices adopted for video watching? In all four countries large majorities use their PC to view video. The highest percentage is in urban China where almost 97% use their PC to view video. On the low end is Germany with 65%. Mobile phones are used to watch video at much lower rates. China, Germany, and Sweden have similar low rates (9.9%, 8.3%, and 11.9%), but in the United States more use their mobile phones for video watching (23.2%). Rates of viewership are also highest in the United States for other handheld devices (with 8.4% of respondents, the next highest being Sweden at 4.8%).

Time spent watching video on the Internet, mobile phone, other handheld devices, and television

Given the high rate of use of the PC for video watching, how much time do Internet users spend on online video on an Internet-connected PC? A significant amount of video watching occurs on all three of the continents we surveyed. The urban Chinese spend the most at 1.9 hours per day on average, and those in Sweden, at 0.7 hours on average, spend the least (with the United States and Germany at 1.5 hours).

Considerably less time is spent watching video on mobile phones or other handheld devices. Compared with the amount of time spent watching video on an Internet-connected PC, there was not a great degree of variance in use of a mobile phone for video viewing. The Swedish watched the most, at 38 minutes per day on average. The Germans watched the least, with 27 minutes. What about those who view video on other handheld devices? The Chinese led the way by a significant amount, with over 60 minutes a day, although we should keep in mind that not that many people in China use other handheld devices for watching video (just 24 respondents, or 2.4% of the urban Chinese sample). So this was a pretty select group. On the bottom end were the U.S. and Germany, with 36 and 35 minutes respectively.

The Americans reported spending the most time viewing professionally produced content online at 3.4 hours per week on average, and the Germans the least (at 1.0 hours). The Chinese were a close second at 3.2 hours on average, and the Swedes came in at 1.3 hours. On the other hand, the Germans, who watched the least professionally produced video, reported watching the most amateur video (2.2 hours a week on average). The Swedes watched the least (0.5 hours).

Among everyone except the urban Chinese, most video is still watched on television. The Chinese respondents watched the least (1.8 hours a day on average), and the Americans the most (3.8 hours).

While most respondents said that they would be interested in watching video found on the Internet on their television set, relatively large numbers in China, Sweden, and the United States neither agreed or disagreed, suggesting that maybe they are unaware of the

possibility. Germans were most interested, with 85% agreeing. The least interested were the Chinese, with only 35% in agreement.

Why do people watch video?

For what types of activities are video used? There is considerable variance among the countries with no clear patterns. Ninety-seven percent of Swedes use video for entertainment, whereas only 43% of Germans do. Fifty-six percent of the Chinese respondents use video for communications, whereas only 22% of Swedes do. In Germany only 5% use video for education, but in the United States 38% do. And 68% of Americans use video for information, versus only 40% in Germany. Overall the number one activity was entertainment, followed by information seeking. Collectively, the least popular of the four listed activities was education, although for Sweden and the U.S. communications actually ranked higher.

The reasons given for watching video online varied widely among the four countries. The only pattern seems to be that the urban Chinese and the Americans have higher levels of respondents for virtually all of the listed reasons. Some of the disparities are huge. For example, whereas 68% of the urban Chinese say that they watch video because of convenience, only 4% of Germans say that. The one area of solid agreement is fun and entertainment, with between 66-81% of respondents in all four countries citing this reason.

Why do people watch video on a mobile phone? The responses here were all over the map. The Chinese did tend to give more reasons than anyone else. Once again there was more agreement on the fun and entertainment reason than for any other (from a low of 56% in Sweden to a high of 74% in Germany). The biggest disparity again came in the realm of convenience, with 62% of urban Chinese stating that reason but only 7% of Germans.

Once again, the reasons cited for watching video on other handheld devices were quite different from country to country. And once again the Chinese gave more reasons than anyone else. There was less agreement on the fun and entertainment reason, with only 38% of Germans stating that. Nevertheless, it was still the number one reason overall for respondents in each of the four countries. The greatest disparity came with the information and news reason, with 57% of Chinese respondents giving this answer, compared to only 4% of Germans.

Methodology Summary

U.S.

- An online survey was completed by 1,011 respondents between October 27 and November 11, 2008.
- Respondents were between the ages of 18 and 65.
- A nationally representative Internet user panel was used. An examination of the profiles revealed that the sample characteristics were consistent with the online U.S. population, therefore weighting was not applied.
- Demographic information

Gender

Male: 516 (51%)

Female: 495 (49%)

Age

18-24: 122 (12%)

25-34: 252 (25%)

35-44: 244 (24%)

45-54: 222 (22%)

55-65: 171 (17%)

Education

High School or Less: 202 (20%)

Some College/Associates Degree: 395 (39%)

4-Year College Graduate and Higher: 414 (41%)

Geography

Urban: 259 (26%)

Suburban: 506 (51%)

Rural: 233 (23%)

China

- A telephone survey was completed by 1,004 respondents between November 14 and November 24, 2008. 91% of the interviews were conducted during weekends, so students as well as those who are employed are well covered in the sample.
- Respondents were Internet users between the ages of 18 and 65, and were recruited in the metropolitan areas of Beijing, Shanghai, Guangzhou, Chengdu, Changsha, Xi'an, and Shenyang.
- The survey data were weighted to age based on the age distribution in the Internet survey of the Chinese Academy of Social Sciences conducted in 2007.
- Demographic information

Gender

Male: 593 (59%)

Female: 411 (41%)

Age

18-24: 329 (33%)

25-34: 303 (30%)

35-44: 218 (22%)

45-54: 106 (10%)

55-65: 48 (5%)

Education

High School or Less: 269 (27%)

Some College/Associates Degree: 317 (32%)

4-Year College Graduate and Higher: 414 (41%)

Note: China only surveyed urban Internet users, so there is no information about the geographic distribution of the sample.

Germany

- An online survey was completed by 1,000 respondents between November 1 and November 28, 2008.
- Respondents were between the ages of 18 and 65.
- The random sample was representative of the German online population based on the quota for age, gender, education, city size, and regional distribution. Several representative German Internet studies in 2008 were referred to in the process of sampling.
- Demographic information

Gender

Male: 530 (53%)

Female: 470 (47%)

Age

18-24: 197 (20%)

25-34: 293 (29%)

35-44: 223 (22%)

45-54: 170 (17%)

55-65: 117 (12%)

Education

High School or Less: 590 (61%)

Some College/Associates Degree: 118 (12%)

4-Year College Graduate and Higher: 257 (27%)

Geography

Urban: 451 (46%)

Suburban: 310 (32%)

Rural: 216 (22%)

Sweden

- An online survey was completed by 1,004 respondents between November 13 and November 16, 2008.
- Respondents were between the ages of 18 and 65.
- The random sample was representative of the Swedish online population based on age, gender, and geographic distributions.
- Demographic information

Gender

Male: 508 (51%)

Female: 496 (49%)

Age

18-24: 99 (10%)

25-34: 229 (23%)

35-44: 260 (26%)

45-54: 223 (22%)

55-65: 193 (19%)

Education

High School or Less: 497 (50%)

Some College/Associates Degree: 219 (22%)

4-Year College Graduate and Higher: 279 (28%)

Geography

Urban: 563 (57%)

Suburban: 217 (22%)

Rural: 215 (21%)