



Bryant University

HONORS THESIS

A Better Understanding of College Students' YouTube Behaviors

BY Michael Pickowicz

ADVISOR • Kenneth J. Sousa

Submitted in partial fulfillment of the requirements for graduation
with honors in the Bryant University Honors Program
April 2008

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ABSTRACT

The purpose of this research study is to get a closer look into the behavior of college students towards the video streaming website YouTube. The objective is to understand whether the benefits of publishing videos on the site are positive for business organizations. The study looks at many variables that would help companies better understand what exactly publishing a video on YouTube would do for them. These variables include gender, hours of television watched, hours of Internet used, hours spent reading and whether a video is made by a regular user or a professional company. It was found that males are more likely to use YouTube than females, despite using the Internet much less. It was also shown that there are both pros and cons for implementing user and corporate-developed videos.

INTRODUCTION

Since the creation of the Internet, the ease of sharing information with others has been an important benefit for users. It started with simple websites where companies published their business information in order to keep in contact with customers at all times. Soon enough, regular people started to create their own sites, expressing to the world their personal interest, opinions and undiscovered talent. In the most recent years, power has shifted from the corporations to the customers. One of the most popular sites in recent years, YouTube (YT), has provided the ability to let users publish their own videos on a server for no cost. YT has become a convenient place to discover new fads, strange humor and, if the owner allows it, television show clips.

While YouTube stresses on the importance of original content, media companies, such as CBS (Anonymous, 2006a) and the NBA (Anonymous, 2007a), have used the site to publish clips of their own content. Others, such as Viacom, have refused to publish clips of their shows and have constantly been requesting for YT to remove user-uploaded videos that contain their property (Cashmore, 2007). This, however, is not a new situation in the media industry. The battle between the Internet and media companies over copyright ownership has been an on going issue.

The rivalry between the media companies and the Internet began with the creation of Napster, a peer-to-peer (P2P) music sharing program. Here, customers who bought songs could download their music onto their computer, and send them with people all around the world, without any money received by the original creators (Chen, 2007). This resulted in multiple lawsuits which Napster lost.

As the years went on, online users have found alternative ways to share copyrighted material and companies have been trying tirelessly to remove it. The most recent debate has been on the topic of streaming media. Streaming media is when a computer hosts a file and separates it into small packets, which are sent, one after another, over the Internet. When the packets reach their destination (the requesting user), they are decompressed and reassembled into a form that can be played by the user's system (Anonymous, 2004). The most common example of this technology is YouTube.

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YouTube, which sees about 160.8 million unique users a month, seems to be too difficult to ignore by some companies (Lockwood, 2007). Companies that desire to reach a whole new audience have uploaded clips of their content on to YT (Anonymous, 2007a Anonymous, 2006a Anonymous, 2006b). Thanks to the ease and low cost of using the site, it has become an attractive and more personal way to reach fans and new users. These users have the ability to rate and comment on videos to voice their opinion, which companies could see as a beneficial way to test their content on the public before it officially releases.

Some companies, however, have taken it upon themselves to create their own streaming media site that only shows their content (Anonymous, 2008c). YT has been cooperative to these companies' desires by alerting them when a video contains their content. Here, the companies have the option to have their content removed from YT.

The question that this study poises is whether it is worth a company to enter into the world of YouTube. While the users of the Internet can be reached there, do they actually respond to videos they see on the site? Does YT ultimately lead to active television viewership? Even more, can companies use YT's unique features to do more than simply show clips of shows? Users have been transferred power on YT, so could companies use this to their advantage? Could companies allow users to view a show before it airs and utilize YT users as a focus group? With YT stressing user-generated content, would it be worth it to have users create advertisements for a company's product in order to define a pitch which the average viewer can relate to? By understanding college students' behavior, this study's goal is to discover the answers to these questions.

LITERATURE REVIEW

What is YouTube?

As Internet connections become faster, more possibilities open up to the users of the Internet. In the last few years, one of the most significant features added was the ability to stream videos online, with 44% of Internet users streaming online (Rose, 2001). According to Streaming Media Hosting, "Streaming works by first compressing a digital audio file and then breaking it into small packets, which are sent, one after another, over the Internet. When the

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packets reach their destination (the requesting user), they are decompressed and reassembled into a form that can be played by the user's system (Anonymous, 2004).” This feature provides users the ability to watch videos online at connection speeds which were not possible when the Internet was created. Since its creation, companies have been trying to use the Internet to their advantage, developing advertisements that incorporate the technology. While others have tried, no other video streaming company has been quite as successful as YouTube (Sweney, 2008).

YouTube is a website that allows users to create, upload and share their own videos with the rest of the Internet community using streaming technology (Anonymous, 2008a). One of the most attractive features of the site is the fact that anyone can upload their videos for no cost (Anonymous, 2008a). YT also has the ability for users to create their own account, where they can rate videos on a scale of 0-5 and comment on videos in a public forum. An account also allows users to create their own profile page where users can organize their own videos and list their favorite videos from other users (Anonymous, 2008b).

Since last year, YouTube has seen substantial amounts of visitors. According to the site, it has 55.1 million users who have set up a profile (Anonymous, 2008b). In total, including users that do not have a profile, the number of YT users totals about 160.8 million a month (Lockwood, 2007). If one were to place a “*” in the search box, videos on YouTube would total over 68 million (Anonymous, 2008b). Today, YouTube is one of the most popular video sites on the Internet, having more than half the US population visiting the site at one time (Sweney, 2008). Last year, YouTube was named Time Magazine’s “Invention of the Year” (Davis, 2007).

YouTube: The Good

While YouTube is constantly stressing its focus on the everyday user (Anonymous, 2008b), there are benefits that major business can receive from the site. Through YouTube’s Partner Program, the best users can get special recognition on YT. The partner’s user page has more features, including more graphics and the ability to post their own banner advertisements on all their video’s pages. Even better is that for every video view, YouTube provides a little money back as a “thank you” for the content (Anonymous, 2008b).

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So far, only a few major media companies have taken advantage of this program. Those include CBS, the NBA and the NHL (Anonymous, 2006a Anonymous, 2007a Anonymous, 2006b). The reason these companies are now creating their own YouTube page, as they claim, is to not only reach their existing fans, but also a new audience they could have never reached before. According to CBS, one of the few major networks supporting the program, the partnership has been a success so far (Anonymous, 2006a). Within one month, CBS received 29.2 million views from only 300 videos posted. The partnership was a true success because CBS's television shows saw a dramatic increase in viewership. These increases including a 5% increase for the "Late Show with David Letterman" and a 7% increase for "The Late Late Show with Craig Ferguson. This boost in ratings showed CBS first hand a benefit of publishing videos on YT.

There are many logical reasons for why a media company, such as CBS, would host their clips online. The reasons rely on the fact that YT itself is reaching out to more people each day. The increase in traffic is thanks to a number of factors. The first, and most recent, is the writer strike. While TV shows have been missing, there has been a desire for new content and people have discovered YT as the answer. Since the start of the strike, there has been an 18% increase of visitors of YT (Sweney, 2008). Additionally, companies are beginning to look towards the original content on YT for new shows to replace reruns. Today, CBS has signed "We Need Girlfriends", a show that was created for YouTube by an everyday user (Hudson, 2008).

YouTube has begun to form important ties alliances with Google and Apple. Google, in 2006, bought YT for \$1.65 billion (Davis, 2007). This is beneficial to YT and its users because videos will now be found on Google searches. The partnership has made Klaassen (2007) propose the question: Is YT going to be a serious marketing channel in the future? Another major partner is Apple, who has begun to position "YouTube Channels" in their most current devices, including the iPhone, the iPod Touch and AppleTV (Rothman, 2007).

Just recently, YT has begun to incorporate its own unique way of advertising. They are publishing advertisements transparently on videos as that video plays (Long, 2007). This way of advertising means that companies will be able to display a message on every single video

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available for the site. YT has even stated that their users do not even mind the advertisements, with 73% claiming they do not mind as long as the site remains cost free (Long, 2007). Forty-six percent claimed that that they would watch the advertisement if it interested them. While users do not necessarily mind the advertisements, many media agencies question if it is the right method to reach customers. Studies of online advertisements have been positive, however, as two thirds of those who watch online videos watch the advertisements, with 44% of those people actually taking action because of those advertisements (Cobb, 2006).

YouTube: The Bad

While YouTube has been successful in the recent months, there have been some difficult times related to copyright laws. The Digital Millennium Copyright Act has been causing issues for digital media. This Act states:

“The 1998 enactment of the Digital Millennium Copyright Act (DMCA) represents the most comprehensive reform of United States copyright law in a generation. The DMCA seeks to update U.S. copyright law for the digital age in preparation for ratification of the World Intellectual Property Organization (WIPO) treaties (Anonymous, 2007b).”

YT has been accused by many companies, including Viacom and journalist Robert Tur, for having their users publish content they do not own on YT (Cashmore, 2007 Davis, 2007). YT has been protected by the law, however, as YouTube would have to make a profit on the material (Davis, 2007). Currently, they do not. They have been attempting to eliminate the problem by incorporating the “Claim Your Content” program; where all an owner has to do is request YouTube to remove a video that has their material on it (Anonymous, 2007a). The issue with some companies is that YouTube allows the content to be uploaded before it can be removed (Sweeting, 2008). It is so slow, that a Saturday Night Live Skit, “Lazy Sunday”, was seen by 5 million viewers before it was taken down (Davis, 2007).

Internet Search Behavior

It is said that the search for text-based sites are almost searched the same way as videos are today (Smith, 2007). Since YouTube is a search-based video website, it is important to understand how Internet users search online. It has been proven that Google is the main destination for searching the Internet, as 43% of all searches are done there (Murphy, 2007).

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It is stated that there are two different kinds of searches; heuristic and analytical. Heuristic searching is “any low-deliberation search, which relies on navigation through hyperlinks, and relies on recognizing relevant information. (Ylikoski, 2005)” This type is equivalent to window shopping, as there is no real plan, the user have no prior planning on what they desire (Ylikoski, 2005). An analytic search is “a preplanned search, which relies on search engines. (Ylikoski, 2005)” The information in an analytic search is not found in one specific area, but all over the Internet (Ylikoski, 2005). In one study, it was found that 63.6% of people, when searching online, use the heuristic method, finding one site and moving on to the next using hyperlinks (Ylikoski, 2005). Another study, however, claims that more than half the users use search engines to get to where they want, while 1/5th of the users follow hyperlinks (Navarro-Prieto, 1999). Also, according to one study, when a user is searching for something specific, they normally travel to about 10.8 different websites to get their answer (Ylikoski, 2005).

Users on the Internet have many different goals they want to achieve when searching online. Sometimes, they simply want to explore and see what they find, while others seem to like finding facts (Navarro-Prieto, 1999). Depending on what the user is searching for and where, they will tend to use different strategies to navigate through search results. One way is the top-down method, which you begin with a general idea and then narrow down the choices as you view the results (Navarro-Prieto, 1999). The other way would be the bottom-up method, where the user has a specific idea what they want and look at every search result that is displayed (Navarro-Prieto, 1999). When users are searching more complex topics, they tend to spend more time evaluating the websites and less time on the search engine (Kumar, 2004).

When reviewing search behavior, it is also important to understand how much knowledge a person has before they start their search. According to one study, there was a negative correlation between search time and prior knowledge on the topic (Lehto, 2006). The example used in the study was travel information. Lehto determined those who had prior knowledge of locations and travel agencies spent less time searching than those with less knowledge. It was also found that the more Internet experience attained by the user, the more effective the search results would be.

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The Younger Generation

On the subject video searching, there is no denying the presence of the younger generation. According to YouTube, 10.1% of the users are under 18, while 20.5% of users are under 34 (Anonymous, 2008b). Even more is the fact that 70% of all people under 30 watch videos online (Sweney, 2008). The popularity of these online videos has begun to gain the attention of the business world. It is no secret that the young generation is an attractive market. Teens, while having less money, have much more disposable income than adults (La Ferle, 2000). In total, they are likely to spend over 10.6 billion dollars (Lee, 2005).

At the same time, however, the younger generation has become a difficult market to reach. This difficulty is due to the fact that teens show little response to traditional media; which is where all the marketing budgets still seem to be the most funded (Masker, 2004). According to a survey, teens spend the most time online, with about 16.7 hours a week, while TV and radio trail that amount. Television, however, is still receiving a majority of the marketing budget, totaling to over 2.5 billion dollars, while online is significantly trailing it with 60 million (Masker, 2004). According to a survey done by Lockwood (2007), out of the \$285.1 billion spent on advertising, 5.8% of it goes to online ads. These traditional ways of marketing do not work as well as they used to because teens are becoming more aware of blatant persuasion attempts (La Ferle, 2000). A new approach is needed to reach this audience.

Teens like to be empowering in their ability to make choices on their own (La Ferle, 2000, Livingstone, 2007). Appearance is also important to this generation. Brand loyalty is strong with teens, as they are less likely to take risks in fear of their appearance (La Ferle, 2000). Culture also plays an important aspect of a teen's purchasing decisions. In the 90's, Music Television (MTV) was one of the biggest influences towards social consumption because of its status as a social icon.

An important topic that many sources discussed was that teens seem to care deeply about the word of mouth of other teens (Brown, 2008 Eastin, 2005 Bush, 2004 Lee, 2005). Like stated before, appearance means everything to teens (La Ferle, 2000). More today, teens are listening to peers to determine what is "in." Also, when browsing online, teens do not

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necessarily go to purchase an item. They actually use online stores to get information, which could lead to a future purchase in a retail store (Lee, 2005).

While word of mouth has been important to teens for years, the Internet has almost completely changed the way it is perceived. The use of YouTube has given customers an increased influence. Not only can they tell personal contacts about their preferences, but now they can express their ideas all around the world (Anonymous, 2008b). Videos can be hosted by normal Internet users where their ideas will be seen and considered by everyone with a connection. People no longer have to search for an opinion on a product, as sites like YT and Amazon.com have sections where users rate products (Anonymous, 2008b Anonymous, 2008d). The Internet has changed how word of mouth influences the public.

Another important aspect of teen behavior today is for their desire to be engaged with what is being presented to them (Lee, 2005 Livingstone, 2007). They desire an environment where “they feel expert and empowered (Livingstone, 2007).” One study, by Lee (2005), states that by including teens in their advertising, teens have more leverage over traditional marketing companies.

While there is no winning formula to attracting teens with online video, few companies claim they have discovered a solution. Lockwood (2007) has observed videos on YT to learn that videos that display humorous content normally receive more views from users. The more humor a video exhibits, the better chance it will have of gaining positive reviews (Lockwood, 2007). To connect to these users, “You need to strive for something that is both promotional and entertaining (Bush, 2004).”

Even more interesting is that the power of celebrities seems to excite teens. In one study by Bush (2004), it is discovered that when advertisements feature a famous athlete, teens respond with a greater word of mouth for that product. While advertisements with celebrities may not influence a customer to switch brands, since teens are loyal to brands (La Ferle, 2000), the advertisements will normally strengthens a user’s brand loyalty (Bush, 2004). This theory is also seen through many different ads available on YT now. A Gap commercial featuring Audrey Hepburn has over 20,000 page views (Lockwood, 2007).

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User Generated Content

One of the biggest attributes of YouTube that the company strongly believes in is that their site is made for the average Internet user (Anonymous, 2008b). It has been said by Brown (2008) that "It will become more important to encourage satisfied customers to report their enthusiasm to others." Recently, companies have been considering the average user's influence and begun to give them the power to show others how they enjoy the company's product. The NBA has created a group on YouTube, called "Post Up the NBA", where users can publish videos of themselves in sporting events. Here, the NBA selects and publishes the top videos on their own "Partner" channel (Anonymous, 2007a).

On a more local level, many different public libraries have begun to use similar tactics in order to gain interest in the public. Library patrons submit videos about their favorite book and they publish it on YouTube (Stephens, 2007). Since then, the libraries that have implemented the idea have seen an increase in their location's traffic. The article does note, however, that the libraries did e-mail people to check out the videos in order to increase interest (Stephens 2007). One aspect companies need to consider, however, is that not all products can benefit from user generated media. It is essential for companies to analyze their product in order to see if it is the appropriate audience for the product (Shenkan, 2007).

RESEARCH METHODOLOGY

Hypotheses

While this study attempts to discover many facts about user behavior on the video streaming site YouTube, the ultimate goal of this study is figure out whether or not media companies should use YT as a medium. If so, what possible ways can companies utilize the YT interface to successfully reach college users. After reviewing literature on the subject of YT and young adult behaviors, five hypotheses have been created:

H1: The more time spent watching TV, the more likely users will use hyperlinks from other sites to get on YouTube.

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It is important to figure out how users are visiting YT in order for companies to get people to view their content. If users watch videos from hyperlinks to YT on other sites, then simply publishing videos on the server may not be enough. If users tend to watch a lot of TV, they may be enticed to visit their favorite TV show's website or perhaps a fan site. In order to have users understand what the show is about, they may simply link them to YouTube videos.

H2: Users that are on the Internet more times a week tend to enjoy watching user generated media.

According to the study by Masker (2004), the amount of hours spent on the Internet is increasing at a fast rate. The amount has even gone beyond television hours per week. This could imply that young adults are beginning to move away from TV to use the Internet more in order to receive content that is new and fresh. This would suggest that this group of users prefer to watch videos that were made by other Internet users. These videos are one-of-a-kind, and can not be found on television.

H3: The more hours spent on TV, the more likely the user is to enjoy Corporate made media on YouTube.

While the hours on the Internet have been increasing for young adults, the amount of television hours has remained high as well (Masker, 2004). This means that users have not abandoned TV as a medium. Teens are very loyal in terms of the products they use, which could imply that the same goes for television shows (La Ferle, 2000). While online, users will tend to look for videos that contain familiar images they enjoy on television. This fact means that the more television watched by a user, the more likely the users will enjoy watching clips of their favorite show on YouTube.

H4: The more hours spent on TV, the greater the chance they got interested in a show from a YouTube clip.

It is important to see whether good YT exposure leads to the most desired goal of a media company: increased viewership. Just like sampling a product, YT could create an interest spark that will take users away from the site to view that company's content else where. If

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users tend to spend a lot of time on television, there is a good chance that some of the programs they watch were due to the increased exposure through YT.

H5: Males and females use word of mouth from a friend evenly for both watching videos on YouTube and watching television.

When it comes to the younger generation, word-of-mouth plays a vital role in their lives (Brown, 2008 Eastin, 2005 Bush, 2004 Lee, 2005). Whether it is the clothes they wear or the music they listen too, being judged in a negative light is what they want to avoid. These judgments are why young adults listen to friends recommendations in order to be sure they are socially acceptable. This can also relate to YouTube and television, as friends can recommend videos or shows to others. The research does not mention a difference between males and females use of word of mouth, so there is likely to not be any difference in this study.

Research Methodology

In order to examine the hypotheses, it was important to discover the most accurate method to receive the data from subjects. It was decided that the best method would be to create a detailed survey that would review many different topics associated with YT behavior (Appendix – YouTube Survey). These topics include: How users get to YT, how they react to good and bad videos, how they react to user-created video compared a professional company's video and how the subjects are led to watch a show on television.

When the survey was created, an appropriate scale had to be made in order to receive a specific description on how often users on YouTube perform specific actions. The scale, shown in Table 1, is a seven-point scale which examines how often a user is to perform an action. The lower the number, the less likely they are to do the action often.

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Rating	Description
1	Never
2	Several times over a year
3	Several times over six months
4	Once a week
5	Several times a week
6	Once a day
7	Several times a day

Table 1 - Scale for Questions in “Part I”

The remaining scales in this survey are found in the *Marketing Scales Book* (Bruner, 2001). In Part II of the survey, it is hoped to be discovered how word of mouth is utilized on YouTube videos the subject likes and dislikes. The scale chosen was recommended in the book under the topic Word of Mouth Intentions (Negative) (Bruner, 2001). This was a seven point scale that ranges from “very likely” being “7” to “very unlikely” being “1”.

Part III of the survey deals with the topic of how a user feels about an advertisement. The *Marketing Scales Book* had a scale defined as Attitude Towards the Ad (Overall) which was used for this section (Bruner 2001). The scale suggested that a seven point scale be used that ranges from multiple topics, one being positive, the other being negative. An example would be have “good” on one side and “bad” or having “believable” and “unbelievable”.

Both videos that will be presented to subjects are commercials for Heinz Ketchup. The first video was created by Hienz. The star of the commercial, Matt Le Blanc, shows a man at a hot dog stand his unique method for administering ketchup to his hot dog. The second video was a commercial created by an everyday person, starring no one famous. The main character runs out of ketchup and decides to ask his neighbors for some. When he finally gets some ketchup, he discovers it is not made by Heinz. He throws the bottle in the dumpster and leaves bottles of Heinz Ketchup on the doorstep of all his neighbors’.

For Part IV, the survey attempts to find out how much certain methods influence a person to watch a television show. A scale in the *Marketing Scales Book*, called Opinion Seeking (Domain Specific), was chosen to be use. The scale is a seven point scale which ranges from “strongly agree” being “7” to “strongly disagree” being “1” (Bruner 2001). The subject is

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asked questions about what outlets they would use before making a decision to watch a television show.

Part V asks subjects simple descriptive about themselves. The topics included: age, gender, hours spent on TV per week, hours spend on the Internet per week and hours spent reading per week. Subjects answered the question by simply writing down their answer on a blank line.

Administering the Test

To appropriately get the results desired, it is necessary that the age of the test subjects are college age (between the ages of 18 and 22). Since the test location is currently located at Bryant University in Smithfield, RI, finding subjects should not be difficult. It is also desired that the ratio between male and female to be as close to equal as possible in order to notice differences in a gender's use of YouTube.

Another important aspect is where exactly to administer the survey. It is important for the subjects to be completely focused when taking the survey. One part of the survey requires subjects to look back at their past history in order to answer questions. It is important to ensure their attention is focused with no distractions to be found. In order to ensure that they pay attention and actually watch the videos, the best solution would be to have the test administered in a secluded location at a specific time.

The survey will also be distributed in two classes that are located in a computer lab. One other aspect that needs to be addressed is that since Part III of the survey involves viewing a video, each subject needs to have a set of earphones in order to hear the video. The professors in each of the classes sent mass emails to their respective classes informing them to bring a pair of headphones to class.

RESULTS

Descriptive on the Subjects

After successfully administering the survey using the methods stated above, there were certain statistics that could gain insight about the users. Table 2 indicated how many subjects

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participated in the survey (n-value), while Table 3 is a description of gender frequency for the subjects. Table 4 shows the age frequency of the subjects that participated.

of Subjects
62

Table 2 – Total Number of Subjects

Gender	Frequency	Percent
Female	29	46.8%
Male	33	53.2%
Total	62	100%

Table 3 – Gender Frequency

Age	Frequency	Percent
18	1	1.6%
19	8	12.9%
20	14	22.6%
21	21	33.9%
22	14	22.6%
24	1	1.6%
Missing	3	4.8%
Total	62	100%

Table 4 – Age Frequency

Means of Variables

To understand the subject's normal activities, the survey asked how many hours a week they tend to spend on the Internet, reading a book and watching TV. With this data, and the age frequency data above, means were produced in order to get a better understanding on the average teen and how they spend there time. Table 5 shows the results.

	N	Mean
Age	59	20.73
Hours of TV per Week	62	10.57
Hours of Internet per Week	62	33.35
Hours of Reading per Week	62	5.71

Table 5 – Mean Age, Hours of TV, Internet and Reading per Week

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ANOVA Tests

In order to analyze the hypotheses, it is necessary evaluate every aspect of the survey (independent variables) and compare it to the user's gender and their use of television, Internet, and reading (dependent variables). In order to do this, an analysis of variance (ANOVA) needed to be performed. An ANOVA is a test that compares the means of two or more groups (Salkind, 2007). The program that was used to perform that statistics was SPSS. Table 6 is an ANOVA between the subject's gender and hours of TV, Internet along with the Internet to TV Ratio. To calculate this ratio, the total hours on the Internet per week was divided by the total hours on the TV per week. This ratio was calculated because the Internet is slowly becoming a replacement for television. The ratio will explain how much college students are moving towards the Internet and away from television.

Question #	Independent Variable	Male Mean	Female Mean	Sig.	
9c	Hours of TV per Week	12.29	8.62	.129	NS
9d	Hours of Internet per Week	28.58	38.79	.045	*
-	Internet to TV Ratio	3.3985	6.9236	.022	*

*** p< .001 ** p< .01 * p< .05

Table 6 – Between-Gender and Hours of TV, Internet and Internet to TV Ratio

The next ANOVA performed was between gender and the data in the survey. Table 7 displays to the results of the ANOVA.

Question #	Independent Variable	Male Mean	Female Mean	Sig.	
1	Frequency of YouTube Visits	5.21	4.00	.003	**
2a	Use to Socialize	1.52	1.03	.014	*
2b	Use for Research	2.21	1.59	.012	*
2c	Watch User Made Video	4.67	3.52	.004	**
2d	Watch Company Made Video	3.39	1.97	.000	***
3a	Go by Friends Recommendation	4.18	3.55	.063	NS
3b	Get to YouTube by Hyperlink	4.00	2.52	.000	***
3c	Casually Browse	4.39	2.76	.000	***
3d	Specific Topic	3.85	2.90	.035	*
4e	Rate Favorite Video	2.52	1.62	.037	*
8a	Watch TV by Friends Recommendation	5.30	4.79	.158	NS

*** p< .001 ** p< .01 * p< .05

Table 7 - Between-YouTube Actions and Gender

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The difference between television hours and the survey data was another ANOVA that was calculated. The issue with this dependent variable was that the answers from the subjects were sporadic and wide spread. In order to organize the data, each result was given a code. This recoding effort would make the data easier to analyze based on the scope of the high and low values. Table 8 describes how the data was coded.

Code Usage	TV Hours per Week	Frequency
Low	0 to 8	26
Medium	9 to 12	16
High	13 to 35	20

Table 8 - Coding TV Hours per Week

The main goal of placing the subject's results into one of the three groups was to make the frequency as evenly distributed as possible. For this to be accomplished, a frequency analysis needed to be used to see how many people answered a specific answer. The code suggests, the higher the code, the more hours per week the subject watches TV. Table 9 shows the results of the ANOVA between TV hours and the survey data.

Question #	Independent Variable	Low Mean	Medium Mean	High Mean	Sig.	
1	Frequency of YouTube Visit	4.19	4.69	5.20	.120	NS
2d	Watch Company Made Video	2.19	2.56	3.55	.018	*
3b	Get to YouTube by Hyperlink	2.69	3.50	3.95	.033	*
6e	Effectiveness of a Corp. Video	4.46	3.19	3.65	.036	*
8b	Watch TV because of YouTube Clip	3.62	3.44	4.45	.219	NS

*** p< .001 ** p< .01 * p< .05

Table 9 - Between-YouTube Actions and TV Hours Watched per Week

Like the last ANOVA calculated, another code needed to be created for the dependent variable in order to receive more organized results. This variable is hours spent on the Internet per week. The amount of groups is similar to TV hours, but the definitions of the code usage are different. Table 10 displays the coding for Internet hours.

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Code Usage	Internet Hours per Week	Frequency
Low	0 to 19	17
Medium	20 to 30	23
High	31 to 150	22

Table 10 - Coding Internet Hours per Week

The reasoning behind the coding is exactly the same as the TV hours. Frequency was desired to be as even as possible in order to get balanced results. The higher the code, the more hours the subject spends on the Internet. Table 11 shows the results from the ANOVA between Internet hours and all significant data to this research.

Question #	Independent Variable	Low Mean	Medium Mean	High Mean	Sig.	
1	Frequency of YouTube Visit	4.82	5.00	4.14	.189	NS
7g	Honesty of User Video	3.88	3.70	4.82	.017	*
8b	Watch TV because of YouTube Clip	3.82	3.74	3.95	.934	NS

*** p< .001 ** p< .01 * p< .05

Table 11 - Between-YouTube Actions and Hours on the Internet per Week

The next ANOVA performed was between hours of reading per week and all the data in the survey. Similar to the last two ANOVAs, a code needed to be created in order to calculate appropriate results. Table 12 explains the coding used for reading hours.

Code Usage	Reading Hours per Week	Frequency
Low	0 to 3	22
Medium	4 to 7	22
High	8 to 20	18

Table 12 – Coding Reading Hours per Week

This code was organized in a similar fashion to the other two codes, with frequency being the main concern. The higher the code usage, the more hours the subject will read. For the ANOVA between reading hours and the survey data, nothing that was significant to this research was discovered.

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Regression Tests

Two regression tests were performed on SPSS in order to find significance between how much a subject enjoys user and corporate videos compared to independent variables that were hand selected. A regression is defined as “the equation that defines the points and the line that is closest to the actual scores (Salkind, 2007).” A regression was performed over an ANOVA simply because comparing means was not the best way to receive the most accurate data for these two tests. It is necessary to plot the individual points on a graph and find out how each independent variable effects the dependent variable.

In order to determine how much a user enjoyed each video, a composite score was calculated. Question 6a to 6i for “Video 1” were added together in order to get a total for the “Corporate Video Composite”. The same process was used for Questions 7a to 7i for “Video 2” to get the “User Video Composite”. The dependent variable for the first regression was the “User Video Composite”, while the “Corporate Video Composite” was used for the second regression. The selection of the independent variables was chosen based on relevance they had with the goal of this survey. There were a total of seven independent variables selected for the regression. Table 13 shows the regression between the seven variables and the “User Video Composite”. Table 14 shows the regression between the seven variables and the “Corporate Video Composite”. It is worth mentioning that the “Hours of Internet per Week” and “Hours of TV per Week” were used with the original results and not the code used in the ANOVAs.

Question #	Independent Variable	Beta	Sig.	* Value
1	Frequency of YouTube Visit	.123	.604	NS
2c	Watch User Made Video	-.271	.243	NS
2d	Watch Company Made Video	.126	.485	NS
8b	Watch TV because of YouTube Clip	.188	.212	NS
9a	Gender	-.009	.954	NS
9b	Hours of TV per Week	.097	.487	NS
9c	Hours of Internet per Week	.164	.240	NS

*** p< .001 ** p< .01 * p< .05

Table 13 - Regression between the User Video Composite Score and Selected Variables

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Question #	Independent Variable	Beta	Sig.	* Value
1	Frequency of YouTube Visit	.047	.841	NS
2c	Watch User Made Video	-.034	.880	NS
2d	Watch Company Made Video	-.068	.701	NS
8b	Watch TV because of YouTube Clip	.132	.372	NS
9a	Gender	.231	.122	NS
9b	Hours of TV per Week	-.302	.032	*
9c	Hours of Internet per Week	.084	.538	NS

*** p< .001 ** p< .01 * p< .05

Table 14 - Regression between the Corporate Video Composite Score and Selected Variables

Reviewing the Hypotheses

With all the data collected and measured, it is now important to compare the results to the hypotheses that were discussed before. For each hypothesis, it will be determined if it should be accepted or rejected.

H1: The more time spent watching TV, the more likely users will use hyperlinks from other sites to get on YouTube.

According to the ANOVA between TV hours and all the survey, there is a .033 significance that the more TV watched by a user, the more likely they are to get to YouTube through a hyperlink by another site, whether it is a fan site, message board or official site. This hypothesis is, therefore, accepted.

H2: Users that are on the Internet more times a week tend to enjoy watching user generated media.

When observing the analysis done by the regression of the seven variables by the “User Video Composite”, there is no significance to be found in any category. The category for this hypothesis, being Internet Hours, has a significance of .240. This means that H2 needs to be rejected.

H3: The more hours spent on TV, the more likely the user is to enjoy Corporate made media on YouTube.

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This hypothesis is tested in the regression of the seven variables by the “Corporate Video Composite”. According to the analysis, the amount of television watched was actually the only independent variable that was found significant, with a p value of .032. What disproves this hypothesis is that the beta is negative, making the correlation between TV hours and “Corporate Video Composite” negative as well. Because of this, H3 is rejected.

H4: The more hours spent on TV, the greater the chance they got interested in a show from a YouTube clip.

For this hypothesis, the ANOVA between TV hours and the survey data needs to be observed. The independent variable that is important for this hypothesis is Question 8b, “Watch TV because of YouTube Clip”. When looking at the analysis, there seems to be only a significance of .219 between the two. This means that this hypothesis is rejected.

H5: Males and females use word of mouth from a friend evenly for both watching videos on YouTube and watching television.

The last hypothesis is tested through the ANOVA between gender and the survey data. The important independent variable is question 3a, “Go by Friends Recommendation” and question 8a, “Watch TV by Friends Recommendation”. The significance in this test was .063 and .158 respectively, meaning that gender does not make a difference in going to YouTube or TV through a friends recommendation.

CONCLUSIONS

YouTube and Gender

When observing the analysis, one of the biggest observations to be seen revolves around the fact that males use YouTube more than females. Males tend to use the program at least several times a week, while females may visit the site once a week. This could suggest companies may want to focus their efforts on publishing videos on YouTube directed towards males. Males are also interesting because they tend to watch more TV than females. According to a study done by Michael Slater (1997), males responded more positive to advertisements that dealt with sporting events. This could imply that the four hours average distance in TV hours comes from watching sporting events. This could also suggest to

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companies to focus on sports when they publish content on YouTube. If they incorporate sports content into their clips and advertisements, they will target YouTube's core demographic.

When observing the female demographic, they seem to use the Internet significantly more than the males, despite going on YouTube much less. Females also watch less TV per week than males. This means that companies can not use the 38.79 hours females are on the Internet to convince them to watch TV. This low connection rate could be quite a concern for companies who desire to retain their female viewers. This fact could mean that companies are simply not satisfying female's needs. While males may be the core demographic on YouTube, targeting a group that is under satisfied on YouTube could potentially increase hours of television viewership.

User Made Videos: Pros and Cons

Implementing user made videos could be important to a company's strategy on YouTube. The analysis of this study discovered that the more hours a user spends on the Internet, the more likely they will find user made videos believable. With the amount of time spent on the Internet significantly larger than other mediums, this could mean a good portion of college students find user-developed videos believable. This could suggest another reason for companies to target users to have them promote their shows, movies or products.

There is an issue with user-developed videos. This research did not find any significance in who these users are who enjoy user-developed videos. A company would not have a clear understanding of what type of demographic to target. The analysis suggests that there is no key factor that can assist companies on who to target user advertisements. Therefore, incorporating user-developed videos with a company may be a difficult tactic to predict.

Corporate Made Video: Pros and Cons

According to Masker (2004), the amount of hours spent on the Internet by young adults in 2004 was 16.7 hours a week, while the TV hours per week were 13.6. The results suggest that college students use the Internet 33.35 hours a week and watch TV 10.57 hours a week. Over the span of four years, the Internet to TV ratio as significantly increased, meaning that young adults are less likely to encounter a television advertisement. In the analysis, it was found that

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the less television viewed, the more likely a person was to find a corporate-developed video effective. If the company's target audience tends to watch a lot of television, their audience will not find their advertisements and clips on YouTube effective. A different approach should be taken to reach these users. It could be beneficial to get these users, who are used to one-way communication, involved with the company through contests and promotions on YouTube. It is necessary to make the interaction seem less like television and more like a close, personal relationship.

If the Internet to TV ratio continues to increase at the same rate, commercials found online could become more effective. Strengthening the argument in publishing advertisements on YouTube, Danielle Long (2007) suggests that YouTube users do not mind advertisements and will actually watch the videos. If users are willing to watch ads on YouTube, and also find them effective because they watch less TV, this offers a supportive rationale for companies to publish advertisements at YouTube.

The analysis also reveals that the more hours of TV watched, the more likely the user will watch a corporate-developed video on YouTube. It also says that males, who tend to watch more TV, also like to go on YouTube through hyperlinks. This could imply that companies can incorporate their own website with videos from YouTube in order to demonstrate a product or provide a sample clip of a show to males. With a high rate of using hyperlinks in males (once a week), companies have a good chance of offering their site an outlet for their own YouTube video content.

The issue with watching a lot of TV hours is while college students will watch more corporate-developed videos, they will not enjoy them as much. This behavior is from a desire to want something new. While users who watch a lot of TV may enjoy watching their favorite program, the Internet is a different medium, and should be treated as such. With original, user-developed content a possibility, companies may want to hire users to create advertisements and entertainment for them, giving their content a new, fresh look. This could be in the form of a contest, similar to the one Heinz Ketchup hosted on YouTube (Anonymous, 2008b), or perhaps by looking towards user-developed programming to purchase a unique concept, similar to what CBS has done (Hudson, 2008).

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Word of Mouth

Also, as research has suggested, word of mouth remains a significant factor (Brown, 2008 Eastin, 2005 Bush, 2004 Lee, 2005). No matter what the user's gender is, this study explains that they will listen to their friends on what YouTube videos to watch. If companies can create a successful video on YouTube, there is a high probability it will be communicated through the word of mouth of college students. The same can be said for shows on TV, as this research study also proved that college students watch a show because of a friend's recommendation.

What is interesting is that college students use friends to suggest TV shows more than they do YouTube clips. This is due to the fact that YouTube offers many new ways to use word of mouth. These include the rating system, message boards and the featured videos section.

Getting YouTube Users to become TV Watchers

The most significant hypothesis that got rejected was that the amount of television hours did not positively correlate with having a YouTube clip interest a user to watch a show. YouTube usage did not increase the amount of hours spent on the television. This is interesting because CBS claimed that their programming saw significant increases because of the videos they posted on YouTube (Anonymous 2006a). This could imply that YouTube does not influence users to watch more television, but actually replaces old shows for new ones. YouTube could be a method to get users to stop watching a competing network's show for one of their own. Also, the more television hours did not mean that college students will use YouTube more. This means that it is not necessary for companies to suggest to college students on television to watch their YouTube clips. There is a good chance they will discover the clips on their own.

The Future of Companies on YouTube

The decision to publish clips on YouTube seems to be an attractive strategy. The user-base is large and college students are using the Internet at great rates. The study even shows that college students will visit YouTube at least once a week. This research also shows that there is no one strategy that should be used to publish media on YouTube. There is no denying the popularity of clips created by users, but clips that have been created by the company are also still effective. Even with gender, this study gives attractive reasons to pursue both

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demographics. Amy Shenkan (2007) suggests that companies should look at their “brand, industry and customer characteristics” to see if it “could benefit from user-generated media.” This suggestion seems to be the best solution for companies. To implement a plan on YouTube, companies need to observe their own material and determine what approach will have the most effectiveness on YouTube.

LIMITATIONS AND FUTURE RESEARCH

Limitations

A large limitation that this survey encountered was the sample size. Although accurate results were able to be produced, there is question whether 62 samples can account for the total population for college students. Another limitation was that almost all of the subjects were students of Bryant University. This sample could have been too selective to represent all college students. Also, hours one the Internet may have been effected by the fact that 100% of Bryant students have access to the Internet at all times.

The term “reading” is a word used in the survey that may not be fully measured, including school work, leisure reading or even reading on the Internet. When asked “How many hours a week do you spend reading?”, there could have been confusion and possible measurement error.

In order to make analyzing the data easier to understand, a code was created for hours of TV per week, hours of Internet per week and hours of reading per week. While this did make the analysis easier to understand, a code is not as effective as the raw data. The coding could have decreased the strength of the analysis.

Lastly, the two commercials chosen for Part III could have had effects on subjects that were not tested. These include personal bias to the brand of Heinz Ketchup or even a personal bias towards the actor Matt Le Blanc, who was the star of the corporate video.

Future Research

After discovering the results for this study, there is no denying that a more in-depth analysis into user-developed videos needs to be performed. It is important to understand who creates these videos, who enjoys watching them and how exactly they respond to watching them.

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There is potential in implementing users into a company's marketing plan, but more research is needed.

Because the age of the subjects were college age, their may be more significant and conclusive data to be discovered at another age group. With young children being born into the age of the Internet, it would be interesting to discover how exactly they use YouTube, as they may hold the key to the future of media and its use.

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Appendix – YouTube Survey

YouTube Survey

This survey is to be used to understand college students' behavior on the website YouTube. By understanding how college students use YouTube, it is hoped that companies can utilize the site in a manor that is beneficial to the interests of both the users and the companies.

Part I

Circle the number that best describes your answer.

1) How often do visit the website “YouTube”?	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day
2) When on YouTube, how often do you use the site to:	
a. Socialize with other users (use ratings and comments section).	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day
b. Research for academic purposes.	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day
c. Watch user generated entertainment.	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day

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3) When on YouTube, how often do you visit the site because of a:	
a. Friend's recommendation.	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day
b. Link from another site.	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day
c. Desire to casually browsing.	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day
d. Desire to search for specific topic	1 – Never 2 – Several times over a year 3 – Several times over six months 4 – Once a week 5 – Several times a week 6 – Once a day 7 – Several times a day

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Part II

Instructions: Before you start this part, please think about one of your favorite videos that you have viewed on YouTube recently. Now, try and remember a video you liked the least on YouTube. Consider these videos as you answer questions 1 and 2.

1) Relating to your **favorite** YouTube video, please circle the number that best describes how likely you reacted.

How likely would you:	Very Unlikely							Very Likely
a. Tell a friend about it face to face?	1	2	3	4	5	6	7	
b. Tell a friend about it electronically (IM, email, text)?	1	2	3	4	5	6	7	
c. Tell other internet users on places other than YouTube (message boards, Facebook, MySpace)?	1	2	3	4	5	6	7	
d. Provide a comment on the video's page?	1	2	3	4	5	6	7	
e. Provide a rating of 0-5 stars for the video?	1	2	3	4	5	6	7	

2) Relating to your **least** favorite YouTube video, please circle the number that best describes how likely you reacted.

How likely would you:	Very Unlikely							Very Likely
a. Tell a friend about it face to face?	1	2	3	4	5	6	7	
b. Tell a friend about it electronically (IM, email, text)?	1	2	3	4	5	6	7	
c. Tell other internet users on places other than YouTube (message boards, Facebook, MySpace)?	1	2	3	4	5	6	7	
d. Provide a comment on the video's page?	1	2	3	4	5	6	7	
e. Provide a rating of 0-5 stars for the video?	1	2	3	4	5	6	7	

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Part III

Instructions: This part of the survey is going to require you to watch some videos and review them based on a few categories.

Please go to this website: <http://cissurvey.bryant.edu/YouTube.htm>. **Do not click on the links yet!**

1) Now, click on the link for **“Video 1”**. Watch it as many times as you like. Check off where **Video #1** would fall under each category:

Bad _____ Good
Boring _____ Interesting
Not Persuasive _____ Persuasive
Unbelievable _____ Believable
Ineffective _____ Effective
Stale _____ Fresh
Dishonest _____ Honest
Unoriginal _____ Original
Poorly made _____ Well made

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2) Next, click on the link for "**Video #2**". Watch it as many times as you like. Check off where **Video #2** would fall under each category:

Bad _____ Good
Boring _____ Interesting
Not Persuasive _____ Persuasive
Unbelievable _____ Believable
Ineffective _____ Effective
Stale _____ Fresh
Dishonest _____ Honest
Unoriginal _____ Original
Poorly made _____ Well made

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Part IV

Circle the number which describes how much you agree with the following statements.

Over the past 6 months, I have watched a television show based on:

	Strongly Disagree						Strongly Agree				
1) A friend's recommendation.	1	2	3	4	5	6	7				
2) A clip I have viewed on YouTube.	1	2	3	4	5	6	7				
3) The comments on the show's clips by users on YouTube.	1	2	3	4	5	6	7				
4) The rating of the show's clips by users on YouTube.	1	2	3	4	5	6	7				
5) Other, non-Internet advertising.	1	2	3	4	5	6	7				
6) Random TV channel surfing.	1	2	3	4	5	6	7				

Part V

- 1) Age? _____
- 2) Gender? _____
- 3) How many hours a week do you watch TV? _____
- 4) How many hours a week do you use the Internet? _____
- 5) How many hours a week do you read? _____

Thank you for taking the time to fill out this survey!

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