Intellectual Property in the Age of the Internet

CMU Undergraduate Student Body Survey

Surveys, Sampling & Society

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Agenda

- Topic Introduction
- Research Question
- Survey Examples
- Sampling Schema
- Issues
- Results
- Discussion
- Next Steps
- Questions

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Topic Introduction

- 2 billion people worldwide with internet access

- Old standards of intellectual property protection are strained in the age of the internet

- Consequences of the internet on IP is among our most pertinent issues in cultural policy

Recent Attempts at Combating Piracy

- SOPA (October 2011) and PIPA (May 2011) bills proposed in Congress, received some support from representatives before being shut down by corporate and grassroots efforts

- High-profile FBI shutdown of popular hosting site Megavideo

- Public debate touched on the role of internet service providers (ISPs)

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Research Questions

- To what extent do students engage in piracy?

- How aware are students of the SOPA and PIPA bills?

- What are students' opinions on internet piracy and copyright enforcement policy?

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Survey Examples

- Background Questions
    - Q.1 Have you heard of the recently proposed SOPA/PIPA bills?
        - Yes or No
- Behavioral Questions
    - Q.6 Have you ever streamed pirated content?
        - Yes or No
- Scenario Questions
    - Q.15 You download this movie from dtella and watch it on your computer.
        - Do you consider this to be (check all that apply):
            - Acceptable
            - Illegal
            - Unethical

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Sampling Scheme

- Sampling frame - C-book
  - Undergraduate Andrew IDs from 29 random pages (1081 IDs, 24 typos)
- Total invitations sent out - 1057
- Total Respondents - 240

- First email blast: contacted 196 [16% response rate]

- Second email blast: contacted 861 [17% response rate]

- Courteous reminder: contacted 1057 [23% response rate]

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Issues

- *Mistyping Andrew IDs*
    - Fix: Utilized an e-mail client

- Low initial response rate
    - Fix: Follow-up emails

- Categorical variables with too many levels
    - Fix: Recode variables as separate binary variables

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Demographics

- Gender
  - 57% male; 42% female
  - 3 non-response to gender
    - Matches the population very closely
- Class Year
  - 29% Freshman, 23% Sophomore, 20% Junior, 27% Senior, 2.5% 5th Year
    - Too few sophomores and juniors-->weighting
- Ethnicity
  - 63% White/Caucasian; 4% African American; 6% Hispanic/Latino; 33% Asian/Pacific Islander; 1% Native American; 1% Other

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Post - Stratification

Strata	Nh	Wh	nh	fh	nh/n	weights
Freshman	1559	0.2549	66	0.0423	0.2773	0.9194
Sophomore	1560.8	0.2552	55	0.0352	0.231	1.104
Junior	1475	0.2412	47	0.0318	0.1974	1.221
Senior	1371	0.2242	64	0.0466	0.2689	0.8338
5th Year	148.7	0.0243	6	0.0403	0.0252	0.9646
Total	6114.5	1	238	--	1	5.044

Post-Stratification Results

Variable	yw	Var(yw)	ysrs	Var(ysrs)	DEFF
Streaming	0.6965	0.0073	0.7605	0.1821	0.0401
Downloading	0.7387	-0.0021	0.7563	0.1843	-0.0116
Policy Support	1.8372	0.0064	1.8109	0.7919	0.0081
Stream Frequency	3.0116	0.0510	3.0388	1.0373	0.0492
Download Frequency	2.7811	0.0247	2.7262	1.1038	0.0224

Research Questions

- How aware are students of the SOPA and PIPA bills?
    - 93% of the respondents have heard of the SOPA/PIPA bill
      95% CI: (.9258403, .9325693) using JK variance [all CI's below]

    - 82% opposed the SOPA/PIPA bill
      95% CI: (.81573, .8258523)

    - 68% stated copyright protection policy needs to change
      95% CI: (.6676826, .679865)

Research Questions (cont'd)

- To what extent do students engage in piracy?

  - 77% have streamed pirated content (76% unweighted)
    95% CI: (0.7376845, 0.7911469)

  - 75% have directly downloaded pirated content (76% unw.)
    95% CI: (0.7253695, 0.7816727)

  - 30% were unaware of engaging in act of piracy (same unw.)
    95% CI: (0.270077, 0.329923)

Research Questions (cont'd)

- What are students' opinions on internet piracy and copyright enforcement policy?

  - Downloading pirated content
    - 51% of respondents believe it is acceptable
    - 47% believe it is illegal
    - 34% believe it is unethical

  - Streaming pirated content
    - 71% believe it is acceptable
    - 27% believe it is illegal
    - 20% believe it is unethical

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Scenario Questions

3 Scenarios:
- Download a movie from dtella
- Stream the movie on youtube
- Save movie to a file on your computer and upload the file to a sharing website

Responses:
- 84.5% agreed both the streaming and youtube scenarios were acceptable
    - 60.0% agree with regards to legality
- 91.0% agreed both the downloading and dtella scenarios were acceptable
    - 75.9% agree with regards to legality

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Attitude Change & Open Response

- Would the student's attitude change if US policy was more strict?
  - Only 5% said attitude would change 'A lot'
  - 44% said attitude would not change at all
  - 35% said attitude would change somewhat
  - 16% were unsure

- Open response questions
  - Do you have any other comments?
    - 28% of respondents offered substantive answers
  - Have you had any experiences that affected your views?
    - 13% of respondents offered substantive answers

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Quotes: Part I

- "The problem is with services like netflix and hulu etc, they do not have a great selection, so I have to look elsewhere for the movies I want to watch."
- "I don't really condone pirating software, such as the Adobe Creative Suite. However, again, I'm poor, and Adobe products cost several hundred dollars. As a [*omitted*] major who needs these programs to do my work and get a job, I don't have a choice."
- "One of my friend's website was shut down because it was claimed that some music she posted there violated copyright law. It was her own, independant recorded and produced music. It took over a year for her to get her website back."

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Quotes: Part II

- "Copyright violators get more stringent punishment than other crimes such as rape and murder. I'm sick of this attitude."
- "I believe that the music and production industry makes too much money to begin with. Popular artists (ie Justin Bieber, Kanye West) make way more money than say an engineer or someone who is actually bettering the world- which is ridiculous. "
- "Honestly piracy is blown out of proportion by MPAA and RIAA. Their aggressive stances are what makes me hate them."
- "Am I a bad person? Maybe."
- "I wrote my thesis on this: [http:// *link omitted*]"
- "You will have a very biased sample size."
- "Not really."

Discussion

- Downloading versus streaming

- Streaming *in general* vs. streaming on Youtube
- Legal issues: knowledge of awareness

- Effect of legality on opinions is small, but most feel regulations need to change

- Solution: on-demand internet streaming media

Advice for future 303'ers

- Automated random sampling

    - Quick way of generating a random sample

- Pre-test your survey in person

    - Do so in a setting that will lead to high response rates

- Design the question and response formats in a way that facilitates analysis and makes weighting simple to implement

    - Visualize/test what your results look like in your analysis tool of choice (R, Excel, etc.)
    - Attempt to reduce the number of levels of categorical variables

JW, GN

Questions?

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