

What can be outsourced? What are the tradeoffs of outsourcing?

- Tape digitization can be fully outsourced
- Outsourcing tape digitization is significantly more expensive than developing the capability in house
- Outsourcing could indirectly benefit our competitors by giving vendors the volume needed to test and improve processes, thereby lowering the cost to digitize in the marketplace

| Yes/Yes Outgo: ~2 months   |                  |
|--|------------------|
| Item   | Cost             |
| Cost Per Tape (assuming 60 min per tape)                             | \$20             |
| Fixed Overhead Costs (CapEx and Labor) per Hour of Content Digitized | \$2.62           |
| Facilities Costs per Hour of Content Digitized                       | \$0.21           |
| <b>Cost per Hour of Content Digitized</b>                            | <b>\$22.83</b>   |
| <b>Total Cost</b>  | <b>\$534,000</b> |

Source: Wendy Chang, Michael Baldwin Digitization Analysis

| Google In House ~12 months                               |                  |
|--|------------------|
| Item   | Cost             |
| Capital Depreciation Costs per Hour of Content Digitized | \$0.91           |
| Labor Costs per Hour of Content Digitized                | \$5.00           |
| Facilities Costs per Hour of Content Digitized           | \$0.62           |
| <b>Cost per Hour of Content Digitized</b>                | <b>\$6.54</b>    |
| <b>Total Cost</b>  | <b>\$137,340</b> |

Source: Michael Baldwin Digitization Analysis

Note: Given hardware sourcing challenges, 1 year assumed to be fastest content could be digitized in house



## Off-Site Operation at NARA: Basic Needs

---

- Pre-work
  - Finalize terms of NARA partnership
  - Receive direction from EMG on timeframe for completing
  - Obtain office space near NARA
  - Determine insurance needs
- People
  - Hire 2 temps and hire/allocate 1 manager
  - Decide whether manager needs to be part-time or full-time
  - Locate local servicing company (optional)
- Equipment
  - Purchase tape decks, prod machines, corp machines, NAS drives, and barcode scanners & printers
  - Obtain basic office furnishings
- Content
  - Prioritize content for digitization
  - Establish process for shipping hard drives to data centers
  - Return master copies to NARA

## Proposed Solution

---

- First Phase
  - Digitize 35,000 hours of NARA taped content, starting with 21,000 hours of U-matic content
  - Prioritize taped content based on popular topics (as identified by NARA and Google Search queries)
  - Provide digitization ops with more flexibility to purchase used equipment in order to test it; we still know relatively little about which models will be best suit our purposes
  - Obtain data on usage of digitized content by type
- Second Phase
  - Determine whether user demand for digitized content validates NARA film digitization
  - Determine whether NARA film should be digitized at the highest quality for preservation and distribution purposes, or whether quality can be sacrificed to save time and costs
  - Digitize 46,000 hours of NARA film
    - Digitizing this films using a vendor would cost over \$19,550,000 (46,000 hours x \$425/hour)
    - Determine whether the future GV content pipeline will contain enough film to warrant the significant investment needed to build this capability in-house
- Third Phase
  - Study partner pipeline, determine most prevalent formats, and create a solution for scaling the digitization operation
  - Digitize other partner content (see next slide)

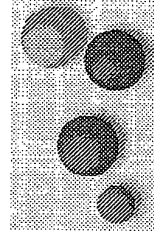
Beyond NARA: Pipeline Profile

|                                 | Total Hours of Content | Hours Video | Hours Film |
|---------------------------------|------------------------|-------------|------------|
| CBS Evening News                | 5,200                  | 4,000       | 1,200      |
| 60 Minutes                      | 2,100                  | 2,100       |            |
| Pathe Archive ***               | 2,500                  |             | 2,500      |
| Getty Film                      | 20,000                 |             | 20,000     |
| Anthology Film Archives         | 3,000                  |             | 3,000      |
| Greenpeace ***                  | 1,000                  | 1,000       |            |
| Amnesty Intl. ***               | 2,000                  | 1,000       | 1,000      |
| Democracy Now ***               | 2,000                  | 2,000       |            |
| ITVS                            | 1,000                  | 750         | 250        |
| Olympic Archive                 | 6,000                  | 3,000       | 3,000      |
| NBC Sports                      | 10,000                 | 5,000       | 5,000      |
| Moma                            | 2,000                  | 500         | 1,500      |
| American Museum Natural History | 2,000                  | 1,000       | 1,000      |
| Computer History Museum ***     | 1,200                  | 800         | 400        |

Source: Daniel Blackman



Next steps



Next Steps for any support to the team

---

- Get search data from google.com
  - Broad matches on “video” except obvious red herrings
  - What topics of video are users seeking?
- Get usage data from a functioning video.google.com (after end Q2)
  - Once search and browse really work, user behavior will be a meaningful guide to the value of different kinds of content
  - By genre, partner tier, content owner, country, language:
    - Which browse paths used most?
    - Which videos searched for most often?
    - Which videos played through more than 30 seconds?
    - Which (short) videos played to within 5% of end?

To: "Patrick Walker" <pjwalker@google.com>  
From: "Joanna Shields" <joannas@google.com>  
Cc:  
Bcc:  
Received Date: 2006-06-28 15:24:42 CST  
Subject: Fw: you tube

Sent from my BlackBerry Wireless Handheld

-----Original Message-----

From: David Eun  
To: Peter Chane; Jonathan Rosenberg; Susan Wojcicki; Jennifer Feikin; Joanna Shields; David Drummond  
CC: Elliot Schrage; Sheryl Sandberg  
Sent: Wed Jun 28 07:18:58 2006  
Subject: Re: you tube

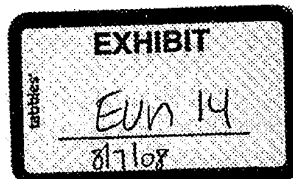
(Copying Elliot and Sheryl)

I think it's clear that all of us want to do what's best for Google =ideo. Nothing is out of the question to consider, including our =urrent copyright enforcement policy. It's also clear that no one knows =actly how the space will evolve, so it's much easier to look back and =oint out course corrections we should have made.

That said, here are a few things to consider as we continue to discuss =ur copyright enforcement issue:

1. NBC has explicitly stated to us that they recognize and appreciate =ur proactive copyright enforcement policy and want to do a large, =trategic deal with us, including but not limited to video. This is a =eflection of their view that we're a big company with resources that =gets it." Tim A. and I are planning a meeting with various senior execs =rom NBC to frame what this might look like.
2. In their minds they are being very pragmatic and co-opting YouTube as = promotional platform, creating the equivalent of our Partner pages =ith some one-time promotions. NBC has received assurances that YouTube =ill increase the level of scrutiny to identify illegal uploads going =orward, i.e., the direction is to increase the level of policing, not =crease and YouTube recognizes this.
3. We shouldn't lose sight of the fact that despite some fantastic =evelopments lately to improve our product and UI, YouTube has been a =eader in traffic generation because of its tools and functionality, not =ust its loose copyright enforcement. We're losing the traffic battle =o them and will continue to unless we continue to improve our product =xperience and acquire as much good content as possible (and not just =remium content).
4. Changing our policy has implications for other parts of our business: =) the Print suit: where our interpretation and enforcement of rights =ssociated with copyright is in question; b) outside the US: where the =MCA doesn't apply and content owners are even more vociferous about =rotecting their content; and c) to Advertising and Syndication: what we =hink is THE business opportunity for GV. This is not possible to build =ithout the support of premium content owners, the very parties who are =ost sensitive about copyright enforcement, many of whom "blame" us for =identifying sites with illegal content in our search product and want us =o refrain from monetizing sites that traffic in illegal uploads.
5. Things are still very early. The large media companies are very, =ery slow and relatively disorganized. But, just because they haven't =cted on this doesn't mean they won't.
6. Lastly, as Sergey pointed out at our last GPS, is changing a policy =o increase traffic knowing beforehand that we'll profit from illegal =ownloads how we want to conduct our business? Is this Googley?

My opinion is that we should continue to work aggressively on improving =eatures and functionality; double down



on efforts to get the most appealing content possible for our ads and syndication trials; and push like crazy to get content owners to clarify their positions on this issue. I think ultimately though we won't get perfect clarity from the content owners, so what we'll have to decide is whether the presumed benefits to traffic from a policy change outweigh the resulting risks and costs.

As for me, I'm open to changing our policy. I'm just not sure NOW is the time to do it. Without minimizing YouTube's achievements, I'd rather focus on increasing our own efforts to win now and in the longer term. I'm interested to hear what others think.

Apologies for the length of this email. As Mark Twain said, I would have written you a shorter response if I had more time.

Dave

On 6/28/06, Peter Chane <peterch@google.com> wrote:

I think you are right about the lesson although in our most recent discussion about our content acceptance policy the sentiment was against making a policy change for Google Video. I think that's a mistake but I think I'm in the minority.

I think Youtube is playing their hand brilliantly by using their traffic and the dmca to their advantage. The NBC deal validated them. I worry that they are setting themselves up to be much more than a site to watch stupid viral videos.

Youtube is not just a Google Video competitor; they want to aggregate media traffic to their site and capture these queries. And they are developing their own ad system to monetize videos which appear on many sites across the web. They are a search site with and Adwords/Adsense program getting started.

P.

On 6/27/06, Jonathan Rosenberg <[REDACTED]> wrote:

Seems to me like the dynamic here worked out the opposite of what we had been telling each other. We were cautioning ourselves to avoid the rewheeling users posting NBC material as this would alienate nbc from us. Meanwhile, we lost users because YouTube had the content illegally. Next, NBC worked with them more aggressively than us because they saw the viral nature and now they have a deal. Shouldn't the lesson here be to play faster and looser and be aggressive until either a court says "no" or a deal gets struck. I don't think there can be an in between...and we were on the wrong end.

jr

#### NBC Taps Popularity Of Online Video Site

By Sara Kehaulani Goo  
Washington Post Staff Writer  
Wednesday, June 28, 2006; D01

Online video company YouTube Inc. said yesterday that it will promote NBC's fall television lineup and sponsor a contest related to a popular network show, signaling a wave of marriages between old-



media firms and fledgling video Web sites.

The deal follows an announcement by Warner Bros. on Monday that it will sell downloads of 200 films and TV episodes through Guba, another online video site. The partnerships seek to solve two problems for the entertainment industry: Old-media companies need popular Internet channels to fight declining TV and movie-theater viewership, and Internet video start-ups need a revenue stream to capitalize on their exploding popularity.

Since the beginning of the year, amateur video clips posted to the Internet have become a huge phenomenon, making online video sites some of the most-visited places on the Internet. YouTube.com says it attracts 10 million unique visitors a month, up from 9 million in April, but it and many competitors are privately funded and are still searching for steady revenue.

For YouTube, which has \$11 million in venture capital funding and collects most of its revenue by selling banner ads, the NBC deal is "a key milestone in our company's history," said chief executive Chad Hurley. "It's a clear proof point that we're building a viable, long-term business, and it's showing there's common ground between traditional and new media."

YouTube attracted attention this year for spreading a popular online video that was illegally plucked from NBC's "Saturday Night Live" program. The clip depicted comedians rapping in a skit called "Lazy Sunday" and as it spread, it helped thousands of Internet users learn that they could share video as easily as forwarding an e-mail.

At the time, NBC executives demanded that YouTube remove the video from its site. But then, seeing its popularity, NBC posted the same video on its own Web site. "The fact that ["Lazy Sunday"] virally spread like wildfire, that clearly told us something -- that we could maybe replicate that and create promos that people could share. The mechanism was there," said John Miller, chief marketing officer for NBC Universal Television Group. Now, he said, "we want to fully embrace the viral activity that YouTube embraces."

Financial details of the YouTube-NBC deal were not disclosed. YouTube agreed to set up an NBC page on its Web site on which viewers can watch commercials and other features, such as interviews with actors, for six programs on NBC's fall lineup and other programs including "Saturday Night Live" and "The Tonight Show with Jay Leno." In exchange, NBC will promote YouTube on TV with a contest that encourages viewers to submit funny videos of their office environments to YouTube.com. NBC will air the winner's video in conjunction with the sitcom "The Office."

To make the deal happen, however, YouTube has had to rein in some of its freewheeling, Wild-West-like appeal. The site used to take a community policing approach under which it would consider removing only videos that users reported as inappropriate or as a possible copyright violation. Now, YouTube said it has set up online features that will allow NBC to patrol YouTube's entire Web site for possible infringement of NBC's copyrighted material and enable YouTube to quickly remove it.

"This really shows how proactive we're being" about protecting copyrighted material, Hurley said. The same tools will be available to other users, he said.

YouTube said the NBC deal is the first of several relationships with media companies that it expects to announce in the coming months. Media executives said such deals are low-cost opportunities to experiment with ways to tap Internet audiences for promotions and sales. For Warner Bros., the arrangement with Guba is an experiment in using an alternative outlet for selling movies and TV shows in addition to a more established online vehicle such as Apple Computer Inc.

<http://www.google.com/url?sa=D&q=http%3A%2F%2Ffinancial.washingtonpost.com%2Fcustom%2Fwpost%2Fhtml-qcn.asp%3Fdispnv%3Dbusiness%26mwpag%3Dqc=%26symb%3DAAPL%26nav%3Del>'s iTunes.

"We don't know what's going to work at this point," said Jim Wuthrich, senior vice president of digital distribution of Warner Bros. home entertainment group. "Obviously, there's consumer demand for this content. The question is, are those people willing to pay for a high-quality delivery of that content? We believe so, but we don't know what content they're more interested in."

Guba LLC said its deal with Warner Bros. essentially reconfigured its revenue model, so it is no longer all ad-supported, and Guba sees less of its future tied to video content generated from the public.

While video posted by users is compelling, it is not going to pay the rent, the company said.

"A kid falling off a skateboard, or a kid lip-syncing -- I don't know if it has legs or endurance," said Thomas Moirney, chief executive of Guba. "People are used to paying for films, which to us presents a very clear revenue opportunity. The challenge for YouTube is how to keep the community happy and also make money."

© 2006 The Washington Post Company

Ads by Google

Good News for Knees  
Glucosamine Chondroitin Sulfate Research backed product  
www.cosamin.com

[http://www.google.com/url?sa=D&q=http%3A%2F%2Fpagead2.googlesyndicat.com%2Fpagead%2Fclk%3Fsa%3D1%26ai%3DBxnteuxqIRNbmFYqQwQKAgal\\_pf\\_bGNmP=sgCibTpnAoAEAEYASCOg\\_oFMAA4AFCjy42cBYgBAaoBEGJ1c2luZXNzX2FydGJjbGwyaRZ3d=cud2FzaGluZ3RvbnBvc3QuY29tyAEB2gFXaHR0cDovL3d3dy53YXNoaW5ndG9ucG9zdC5jb2=vd3AIZHluL2NvbniRlbnQvYXJ0aWwNsZS8yMDA2LzA2LzI3L0FSMjAwNjA2MjcwMTc1MF9wZi5=dG1sgAIBmALSC8ACAQ%26num%3D1%26adurl%3Dhttp%3A%2F%2Fwww.nutramaxlabs.com%2Fknees-bending.htm%26client%3Dca-washingt=mpost-article-site\\_js](http://www.google.com/url?sa=D&q=http%3A%2F%2Fpagead2.googlesyndicat.com%2Fpagead%2Fclk%3Fsa%3D1%26ai%3DBxnteuxqIRNbmFYqQwQKAgal_pf_bGNmP=sgCibTpnAoAEAEYASCOg_oFMAA4AFCjy42cBYgBAaoBEGJ1c2luZXNzX2FydGJjbGwyaRZ3d=cud2FzaGluZ3RvbnBvc3QuY29tyAEB2gFXaHR0cDovL3d3dy53YXNoaW5ndG9ucG9zdC5jb2=vd3AIZHluL2NvbniRlbnQvYXJ0aWwNsZS8yMDA2LzA2LzI3L0FSMjAwNjA2MjcwMTc1MF9wZi5=dG1sgAIBmALSC8ACAQ%26num%3D1%26adurl%3Dhttp%3A%2F%2Fwww.nutramaxlabs.com%2Fknees-bending.htm%26client%3Dca-washingt=mpost-article-site_js)

--  
Peter Chan  
peterch@google.com  
Group Business Product Manager  
Google Video | <http://video.google.com> <<http://video.google.com>>

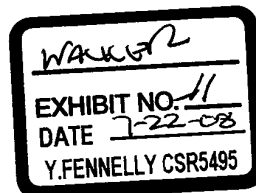
--  
David Eun  
NY: 212-589-8070  
MV: 650-253-1993

To: "Patrick Walker" <pjwalker@google.com>  
From: "Ethan Anderson" <eanderson@google.com>  
Cc:  
Bcc:  
Received Date: 2006-07-17 17:44:59 CST  
Subject: Reasons not to change the upload policy

---

Top 10 reasons why we shouldn't stop screening for copyright violations:

1. It crosses the threshold of Don't be Evil to facilitate distribution of other people's intellectual property, and possibly even allowing monetization of it by somebody who doesn't own the copyright
2. Just growing any traffic is a bad idea. This policy will drive us to build a giant index of pseudo porn, lady punches, and copyrighted material. We might get more traffic (perhaps, although it's just a parallel offering to YT), but it will have little social value and little way to make money
3. We should be able to win on features, a better UI, technology, advertising relationships - not just policy. It's a copout to resort to dist-rob-ution
4. YouTube has always had core features that we have only added in the last month or are about to this month: html uploader, comments/ratings/tags, user playlists, syndicated uploader, international sites. We haven't given it enough time to see the impact of reaching feature parity before resorting to lowering our policy standards. We also haven't turned on major traffic drivers like OneBox and a tab on Google.com
5. It will cause terrible press and PR for Google Video, especially in conjunction with Google Print. It will also be portrayed as an act of desperation since we didn't start with this policy but switched over to it when we were losing to YouTube
6. There is no reason to believe that all the YouTube users will now switch over to Google Video because we are doing the exact same thing as YouTube. We will only get new users if we can offer something different or better than YouTube, not if we follow them in everything we do
7. It makes it more difficult to do content deals when you have an index of pirated material
8. It make it more difficult to expand internationally because copyright laws vary from country to country and the DMCA is a US law
9. It will make it difficult to do OneBox if web search results are returning pirated videos
10. We allow downloads and YouTube doesn't. This would make it easier for users to capture and distribute pirated material



Ethan Anderson  
International Business Product Manager, Google  
<mailto:eanderson@google.com> eanderson@google.com  
(P) +1 650.253.2977

---

To: Alex Ellerson <ellerson@google.com>; Chris Maxcy <chris@youtube.com>; Kevin Yen <kyen@youtube.com>; Jordan Hoffner <jhoffner@google.com>; David Eun <deun@google.com>; Chad Hurley <churley@google.com>  
 From: Shashi Seth <shashis@google.com>  
 Cc:  
 Bcc:  
 Received Date: 2007-06-13 16:59:07 CST  
 Subject: Top 10k Queries

Hi:

Alex had requested that we provide a list of our top queries so that the BD team can dive into it and determine value of deals.

Here is a spreadsheet that gives you the top 10k queries from a given day. The results should surprise no one. Sex is on everyones mind, and that is pretty clear - even the Japanese are obsessed with it. However, consistent with my earlier findings, music videos (being searched mostly by artist names - when will our users learn to type in better queries, although Umbrella - Rihanna's latest song was searched by name) are being searched a lot, as are TV shows (Sopranos, Britains got talent, etc.), recent events (new French President Monsieur Sarkozy made it to No. 30), and celebrities (Ronaldinho, Paris Hilton, etc.) made it.

Going down the list of 10k, it seems that the queries do reflect the popularity of the artists, songs, celebrities, and lots of regional content starts showing up. I was amazed to find that Indian film stars, songs and movies were being searched for and the ranking definitely reflected their popularity (Aishwarya Rai being searched for more than Priyanka Chopra).

- Searches do reflect popularity pretty well
- Searches do reflect who is searching for content (although it may very well be that Indian content is being searched for by Indians living outside of India)
- Regionality plays out pretty well - people are searching for French, British, Japanese, Indian content
- Fresh content is being searched for consistently
- Music, TV Shows, Movies, Celebrities, Sports, etc. are definitely our top categories to attack

The Takeaways for me are:

- Build out the Category pages as fast as we can and provide an amazing browse experience for our users. We want our users to think of these category landing pages (ex: music.youtube.com) as destination sites
- Now that fingerprinting is live, we should attack the business model and start making serious money for our partners (and ourselves). Music is particularly easy to do.
- Make search better (provide tips to people. For example when user types query "Gwen Stefani", we give the following options to narrow searches "Official Music Videos", "Sweet Escape", "Concert Videos", "Interviews"....

Shashi Seth

What Primetime? There is no more Primetime! YouTube users decide when it is primetime - and that will change the dynamics of TV and Video advertising.

Attachments:

YT Top 10k Queries.csv



