

CSE 403

Customers and Users (AARRR: A Pirate's Approach)

AARRR!



Announcements

- 12/03 release?
 - Send TA and instructor information via email -- release notes, status report
- Final on 12/07
- 12/08 release:
 - Release notes, write up due on 12/08 at 11:59p
 - Okay if presentation deck isn't in until 12/09 at 11:59p
- Presentations on 12/10, 8:30a-10:20a in ARCH 160
- See Wednesday's lecture slides for details

Customers vs. Users/Visitors

- Users and visitors are people who use your product
- Customers pay you money
- In a world where things are “free,” we sometimes forget the difference
- What is the cost of free?
- Free --> ad supported? The customer is the advertiser
- If it's free, then you are the “product” not the customer

Why customers matter to software engineering

- If you aren't getting paid, you probably won't survive
- Being a successful software engineer requires you to have some understanding of the customer
- Sales, marketing, and customer relationships are increasingly part of a software product
- Sales, marketing, customer relationships are increasingly becoming engineering disciplines
- If you don't have customers, the greatest software might be (sadly) irrelevant

Customers and Users (for consumer applications)

AARRR!*

(A pirate's approach to customers)

- **Acquisition:** users come to site from various channels
- **Activation:** users enjoy first visit :“happy” experience
- **Retention:** users come back
- **Referral:** users like product enough to refer others
- **Revenue:** users conduct some monetization behaviour

AARRR!

*Coined by Dave McClure



Pirates? What?

- Approach started off as “non-traditional”/renegade
- The Internet was a new medium -- old rules don’t apply?
- Old school marketing, PR, broadcast, passive: Still alive but impacted
- ...but pirate’s approach now coming into the mainstream
- Merging with mainstream...but nonetheless, still uncharted territory

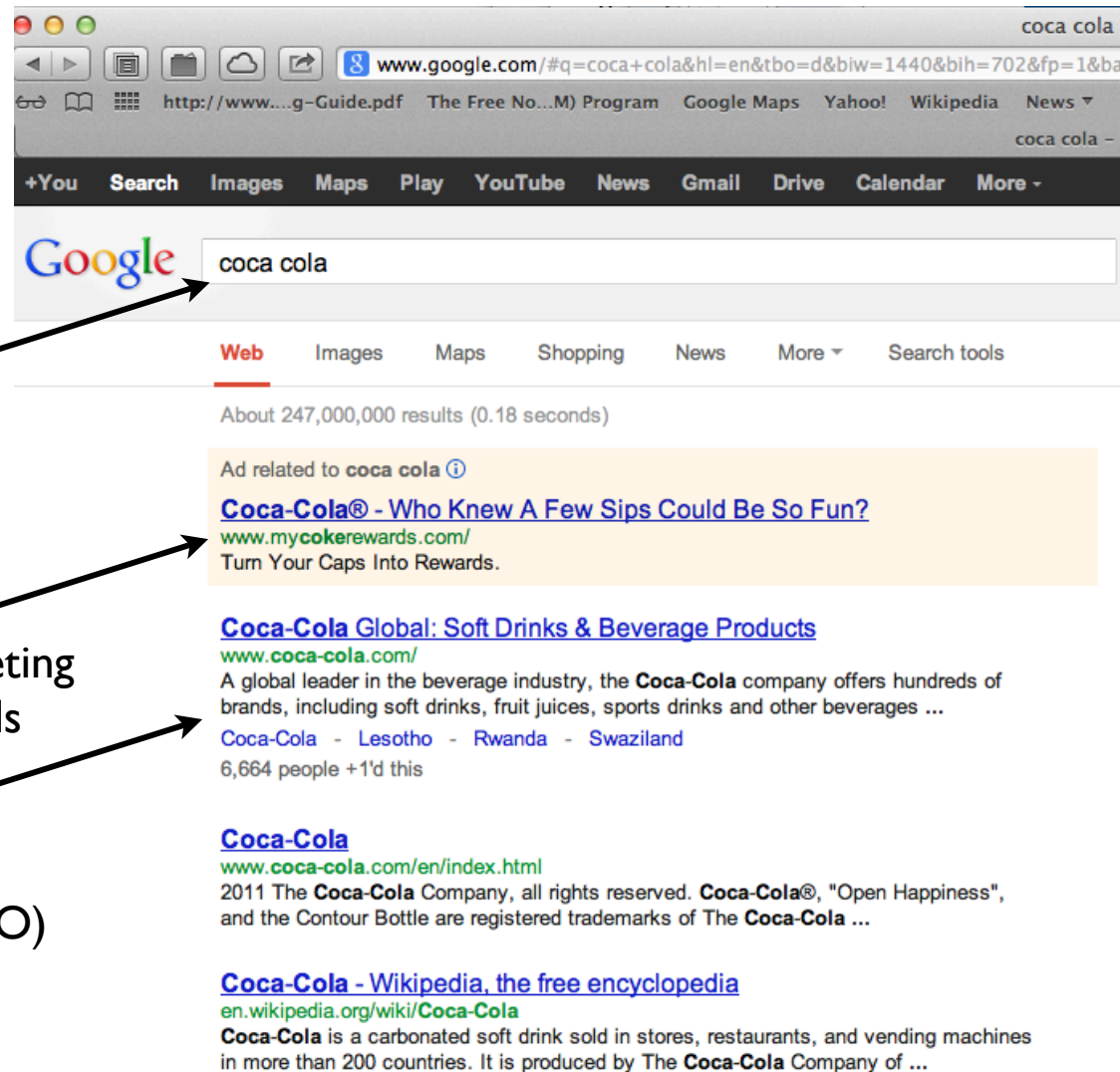


Acquisition

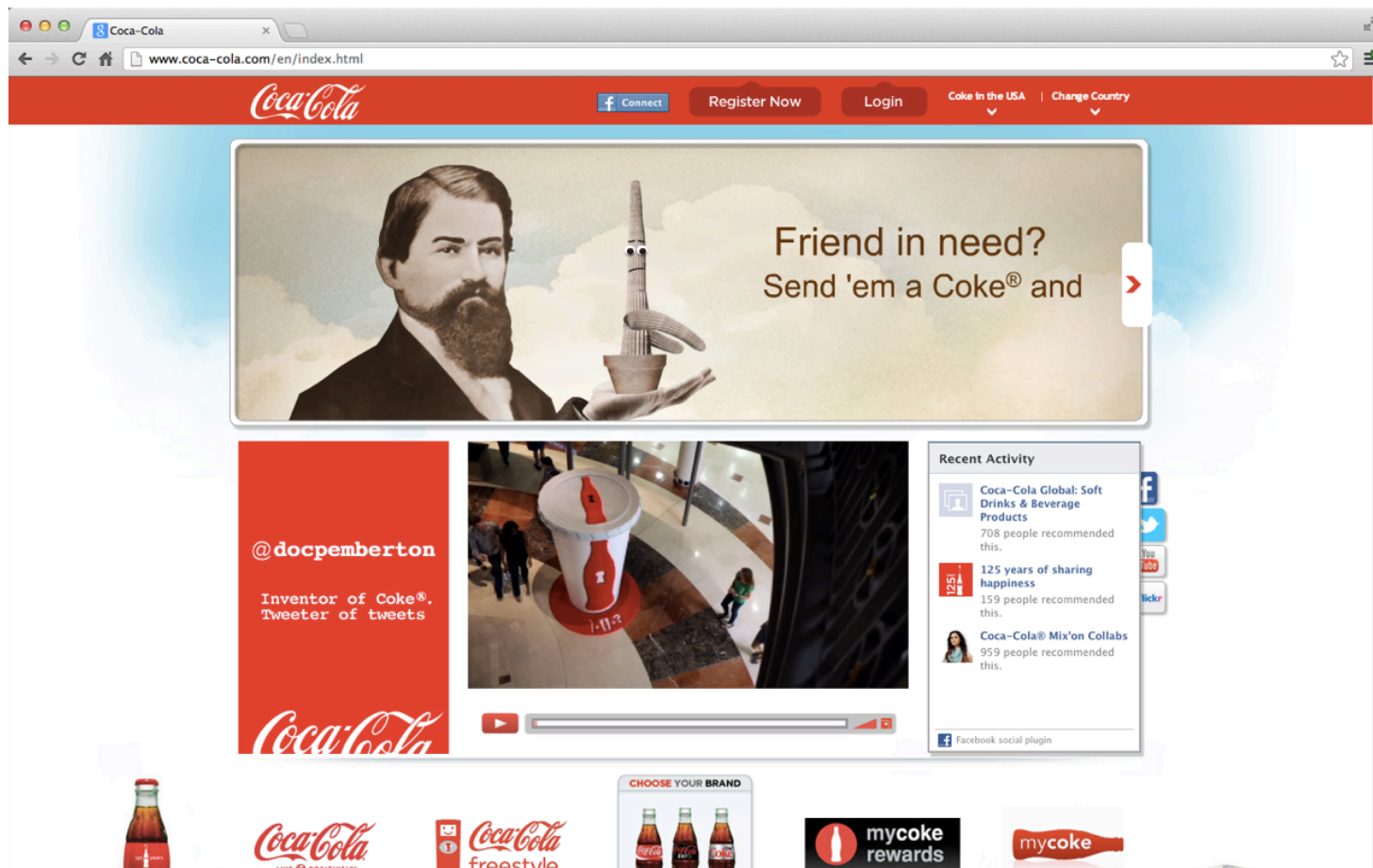
Acquisition

- Getting new users to your site
- Branding and messaging
- Pirate (Scrappy): SEO, SEM (e.g. Google adwords), social media (Facebook marketing), affiliate marketing, email
- Non-pirate: traditional marketing, PR, advertising,...

SEO and SEM



Landing page



Search Engine Optimization (SEO)

- “Free” traffic from search engines, delivered through the “organic” search results (as opposed to the paid search results)
- **Get the search engines to crawl and index your pages and deliver high (organic) “SERPs”**
- Write good content, good html, good urls
- Keyword planning
- Page Rank: Build links to your site to get authority and higher SERPs
- Internal link strategies(?)
- Synergistic tools (analytics, adsense, adwords, webmaster, plus)
- “White hat” vs. “Black hat” tactics

Search Engine Marketing (SEM)

- Advertisers buy keywords “from” the search engines -- words searchers use at search engines
- They write advertising *creatives* (words, graphics, videos) to be displayed as a search result
- Advertisers pay when the ad is clicked on
- Also used for “display” advertising, using keywords as a heuristic (less effective)

Online (display) advertising

The screenshot shows the homepage of 'The Stranger - Seattle's Only Newspaper' at www.thestranger.com. The browser's address bar and tabs are visible at the top. The website features a navigation menu with links like HOME, FEATURES, NEWS, SAVAGE, SUGGESTS, FOOD, MUSIC, FILM, ART, THEATER, BOOKS, BLOGS, PROMO, PERSONALS, TICKETS, and PERKS. Below the menu, there are several content sections: a large cartoon illustration of a person with a green hat and a pipe, titled 'The Straight Dope'; a 'BLOGS' section with links to 'SLOG' and 'LINEOUT'; a 'LISTINGS' section with a 'SUGGESTS' box; and a 'FEATURES' section with three articles. On the right side, there are two large advertisements: one for 'DINE AROUND SEATTLE' and another for 'SEATTLE'S TOP STRAINS DELIVERED'. An arrow points from the text 'Online advertising (maybe bought through Adwords)' to the 'DINE AROUND SEATTLE' advertisement.

www.thestranger.com

The Stranger - Seattle's Only Newspaper

Search

Sign Up | Log In

HOME FEATURES NEWS SAVAGE SUGGESTS FOOD MUSIC FILM ART THEATER BOOKS BLOGS PROMO PERSONALS TICKETS PERKS

STRANGER TICKETS | HUMPI TICKETS

GREEN GUIDE | COCKTAIL COMPASS | CLASSIFIEDS

WARREN MILLER'S **FLOW STATE** SEATTLE MCCAW HALL AT SEATTLE CENTER NOV. 16 + 17

TICKETS ON SALE NOW!

The Straight Dope
Ignore the Speculation and Silly Rumors—Here Are the Most Important Things You Need to Know About Washington's Vote to Legalize Marijuana
by DOMINIC HOLDEN
36 comments »

FEATURES »

NEWS »

NEWS »

BLOGS

SLOG
NEWS & ARTS

LINEOUT
MUSIC & THE CITY AT NIGHT

LISTINGS

SUGGESTS
CRITICS' BEST BETS
MUSIC ARTS & FOOD

SEATTLE'S TOP STRAINS DELIVERED
NEW STRAINS WEEKLY!
(CLICK FOR DETAILS!)

DINE AROUND SEATTLE
3 COURSES FOR JUST \$30
SUNDAY THROUGH THURSDAY
NOVEMBER 4-29, 2012
AT SEATTLE'S TOP LOCAL RESTAURANTS

PRESENTED BY
good seattle good business network

Movie Times
Music Listings
Visual Art Listings
Performance Listings
Books Listings

A Controversy Over Censorship—or Harassment?—at Cornish
by JEN GRAVES
70 comments »

You have gay marriage questions? We have gay marriage answers!
by ELI SANDERS
7 comments »

Hey, Seattle Times... How'd That Political Advertising Experiment Work Out for You?
by GOLDY

Online advertising
(maybe bought through
Adwords)

Digression: online advertising

- A content provider has advertising *inventory* to sell
- An advertiser buys that inventory to place an *advertisement*
- A *creative* is the content created for the advertiser to be filled in the inventory (the “ad”)
- A content provider can sell inventory directly to advertisers but usually does so through an ad network/broker
- Google brokers inventory between content providers and advertisers through AdSense (and other networks)

Advertising inventory

The Stranger – Seattle's Only Newspaper

www.thestranger.com

The Stranger – Seattle's Only Newspaper

Search

Sign Up | Log In

HOME FEATURES NEWS SAVAGE SUGGESTS FOOD MUSIC FILM ART THEATER BOOKS BLOGS PROMO PERSONALS TICKETS PERKS

STRANGER TICKETS | HUMPI TICKETS

GREEN GUIDE | COCKTAIL COMPASS | CLASSIFIEDS

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FEATURES »

NEWS »

NEWS »

BLOGS

SLOG
NEWS & ARTS

LINEOUT
MUSIC & THE CITY AT NIGHT

A&P
ART & PERFORMANCE QUARTERLY

LISTINGS

SUGGESTS
CRITICS' BEST BETS MUSIC ARTS & FOOD

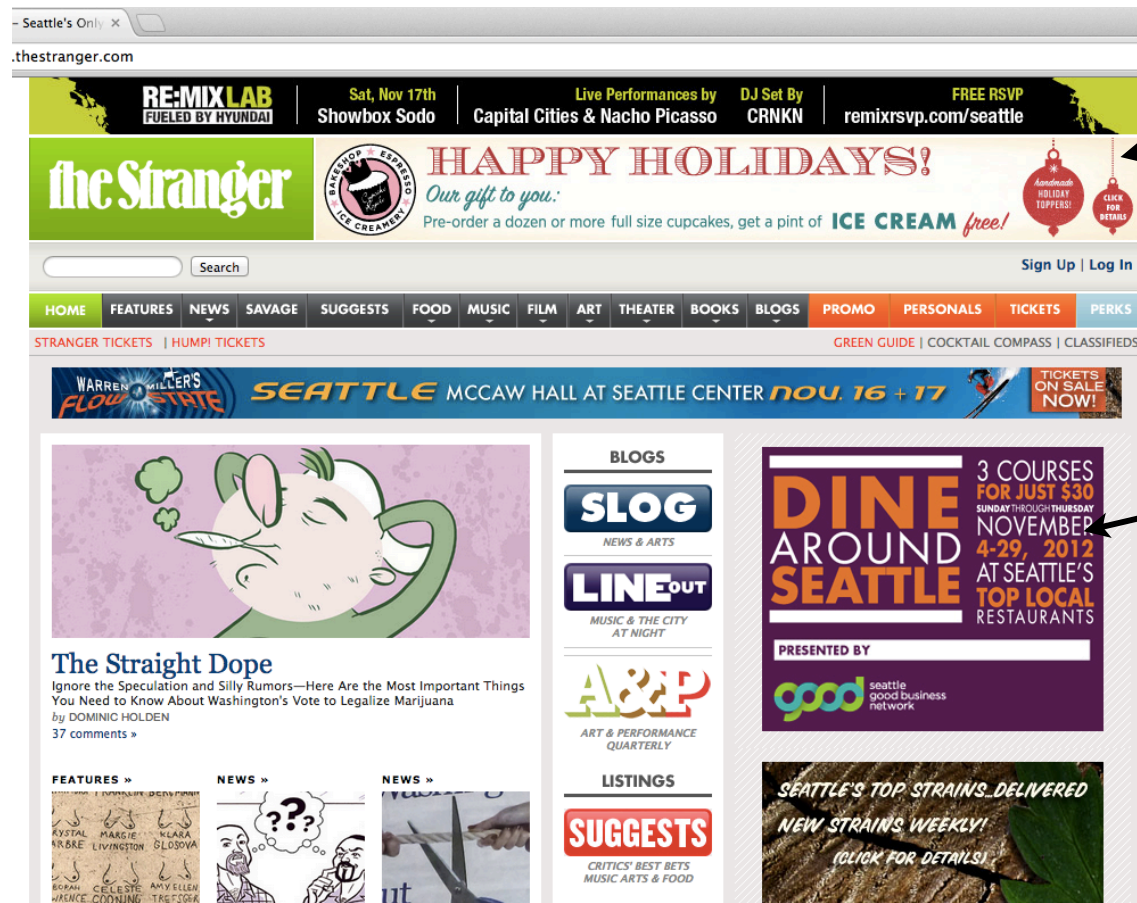
[Movie Times](#)
[Music Listings](#)
[Visual Art Listings](#)
[Performance Listings](#)
[Books Listings](#)

SEATTLE'S TOP STRAINS DELIVERED
NEW STRAINS WEEKLY!
(CLICK FOR DETAILS)

Ad
inventory

Your ad "here"

Ad examples



Banner ad

300X250

If CPC based, advertiser pays only if you click. If CPM, advertiser pays just because you saw it.

Ad examples

The screenshot displays a web browser window with a music blog interface. At the top, there is a red banner ad for the new Windows Phone, powered by Verizon 4G LTE, with a 'Learn More' button. Below the banner, the page features a navigation bar with links like 'all djs', 'favorite djs', 'me', 'find djs', 'invite friends', 'blog', and 'sessions'. The main content area shows a profile for 'jeff' with statistics (43,559 listeners, 5,004 props, 1,625 blips) and a list of posts. To the right of the posts, there are several text ads, including one for 'Gynecologic Cancer' and another for 'Seattle Cancer Treatment'. At the bottom right, there is a large skyscraper ad for LinkedIn Premium, featuring a woman's face and the text 'Get the competitive edge with a Job Seeker Premium Account.' Arrows point from the labels 'Banner ad', 'Text ads', and 'Skyscraper ad' to their respective examples on the page.

Banner ad

Text ads

Skyscraper ad

Online advertising mechanics

- Form factors
 - Text ads vs. Display ads (images, videos)
 - Sizes and shapes (banners, skyscrapers, 300X250)
- When you pay (advertisers)/get paid (content providers)
 - Cost per click (CPC)
 - Cost per thousand of impressions (CPM) -- “M” == 1 thousand
 - Cost per action (CPA) -- not so common
- How ads are priced -- fixed vs. auction
- Click through rate -- # times ad is clicked / # times ad is displayed

Online advertising basics

- Unlike previous media, online advertising is highly measurable
- Demographic, psychographic, intent-based, temporal targeting possible
- Analytical tools available to reason about ad effectiveness
- Ad buyers (advertisers): Ad planning, creation, analytics, optimization
- Ad inventory sellers (content providers): Create inventory, find advertisers, analytics
- Ad brokers: Match up advertisers and ad inventory in the most effective way possible (effective for advertisers, content providers, and self)
- Rapidly changing! Facebook will probably be a large (the largest) advertising broker on the web/in the world(!?)

How expensive is advertising?

- Widely varying depending on the value, quality of the inventory, quality of the audience, specificity of the audience
- Cheap ads -- .40 CPM
- Targeted search ads -- 100 CPM
- Targeted nonprofit display ad -- \$3-5/click
- Depends on the value of what you are converting for -- “mesothelioma lawyer new york” are expensive
- Prime time TV ads: ~20CPM: 30 second commercial reaching 10MM views costs \$200,000 (e.g. Two and a Half Men, CSI)
- Question: If a Superbowl ad costs \$2 million and reaches 100 million people, what's the CPM? Is this a good deal?

Acquisition

Example Marketing Channels

disclaimer: estimates of vol, cost/user, time & effort are subjective – actual costs are dependent on your specific business

Channel	Volume	Cost/user	Time to implement	Mktg Effort	Prod Effort
Viral / Referral	depends on CTA; size of accessible social networks / # users	low/zero	Low for FB social networks; med/hi for normal sites	low	low/med
Email	depends on CTA, size of your house lists, email signups	low/med	Low	low/med	low/med (med = create templates)
Blogs / Bloggers	Depends on # blogs in your segment, competitive scenario	low/med	Low (if just you blogging); med (if you're setting up big CMS / evangelizing to other bloggers)	low/med	low/zero (med = CMS, prof design)
SEO	depends on your keywords	Low/zero	Medium (depends on your search geeks)	low/zero	med/hi
SEM	depends on your keywords	Depends	Low/med (depends on your marketing)	Low/med	low/med (landing pages = med)
Contest	small unless big prize \$ (don't, keep it under \$5K)	low/med	low/med (depends on contest, site, campaign)	Med	low/zero (med = prof contest site)
Widget	Depends on CTA; size of accessible sites, level of adoption + bloggers	low/med	Low/med	med	med/hi (depends on complexity)
domains	depends on keywords, domain costs	depends	low	low	Low (redirects/co-brand?)
PR	depends on your business & audience & news	Med/hi	medium (develop story, build contacts)	med	low/zero
Biz Dev / Partner	depends on partner, size of customer base, conversion	med-high	med/hi (capture metrics, generate reports)	Med/hi	med/hi (reports, co-branding)
Affiliate / Lead Gen	depends on economics	Med/hi	med/hi (need to build affiliate program, capture metrics, generated reports)	med/hi	med/hi (depends on reqd tracking & reporting)
Direct / radio	depends on geography	Med/hi	medium	Med/hi	low/zero
Telemkte	depends on target demographics	med-high	med-high	High	low/zero if no system; Med/hi if integrated SFA
TV	Potentially large (if you spend)	High	Med-high	High	Med/hi (production cost)

Acquisition

Example

disclaimer: estimates of vol, cost/user, time

Channel	Volume
Viral / Referral	depends on CTA; size of accessible social networks / # users
Email	depends on CTA, size of your house lists, email signups
Blogs / Bloggers	Depends on # blogs in your segment, competitive scenario
SEO	depends on your keywords
SEM	depends on your keywords
Contest	small unless big prize \$ (don't, keep it under \$5K)
Widget	Depends on CTA; size of accessible sites, level of adoption + bloggers
domains	depends on keywords, domain costs
PR	depends on your business & audience & news
Biz Dev / Partner	depends on partner, size of customer base, conversion
Affiliate / Lead Gen	depends on economics
Direct / radio	depends on geography
Telemeter	depends on target demographics
TV	Potentially large (if you spend)

Channel	Volume	Cost/user
Viral / Referral	depends on CTA; size of accessible social networks / # users	low/zero
Email	depends on CTA, size of your house lists, email signups	low/med
Blogs / Bloggers	Depends on # blogs in your segment, competitive scenario	low/med
SEO	depends on your keywords	Low/zero
SEM	depends on your keywords	Depends
Contest	small unless big prize \$ (don't, keep it under \$5K)	low/med
Widget	Depends on CTA; size of accessible sites, level of adoption + bloggers	low/med
domains	depends on keywords, domain costs	depends
PR	depends on your business & audience & news	Med/hi
Biz Dev / Partner	depends on partner, size of customer base, conversion	med-high
Affiliate / Lead	depends on economics	Med/hi
TV	Potentially large (if you spend)	High

Activation

Activation

- Once users are on your site (Acquisition), what do you want them to do?
- Get first time users to do something
- Create an awesome first time experience
- Click on a link, register, give an email address, make a donation, leave a comment, buy something
- Create channel specific landing pages
- Be clear about who you are, what you do, what's in it for the visitor

Ad -> Landing Page -> Conversion

auto insurance seattle - Google Search

Search query

Welcome to GEICO!

geico.com/internetsales/iSnapPreQuote.xhtml?execution=e1s1&pg=iSnapCustomer

Welcome to GEICO: Online Rate Quote

GEICO.

CUSTOMER VEHICLES DRIVERS DISCOUNTS QUOTE

Customer Information

We need to ask you for some personal information to provide you with an accurate quote. This information is kept **private** and **secure**, and will not be sold.

First name

Last name

Address Apt

ZIP Code

Date of birth MM/DD/YYYY

Are you unmarried, with one vehicle, and the only driver to be insured? ☒ Yes ☐ No

Continue

1-800-861-8380

Call an agent anytime

Associated with the Military? Call us at **1-800-720-2198**

What if I am in the process of moving?

What if my address is FPO?

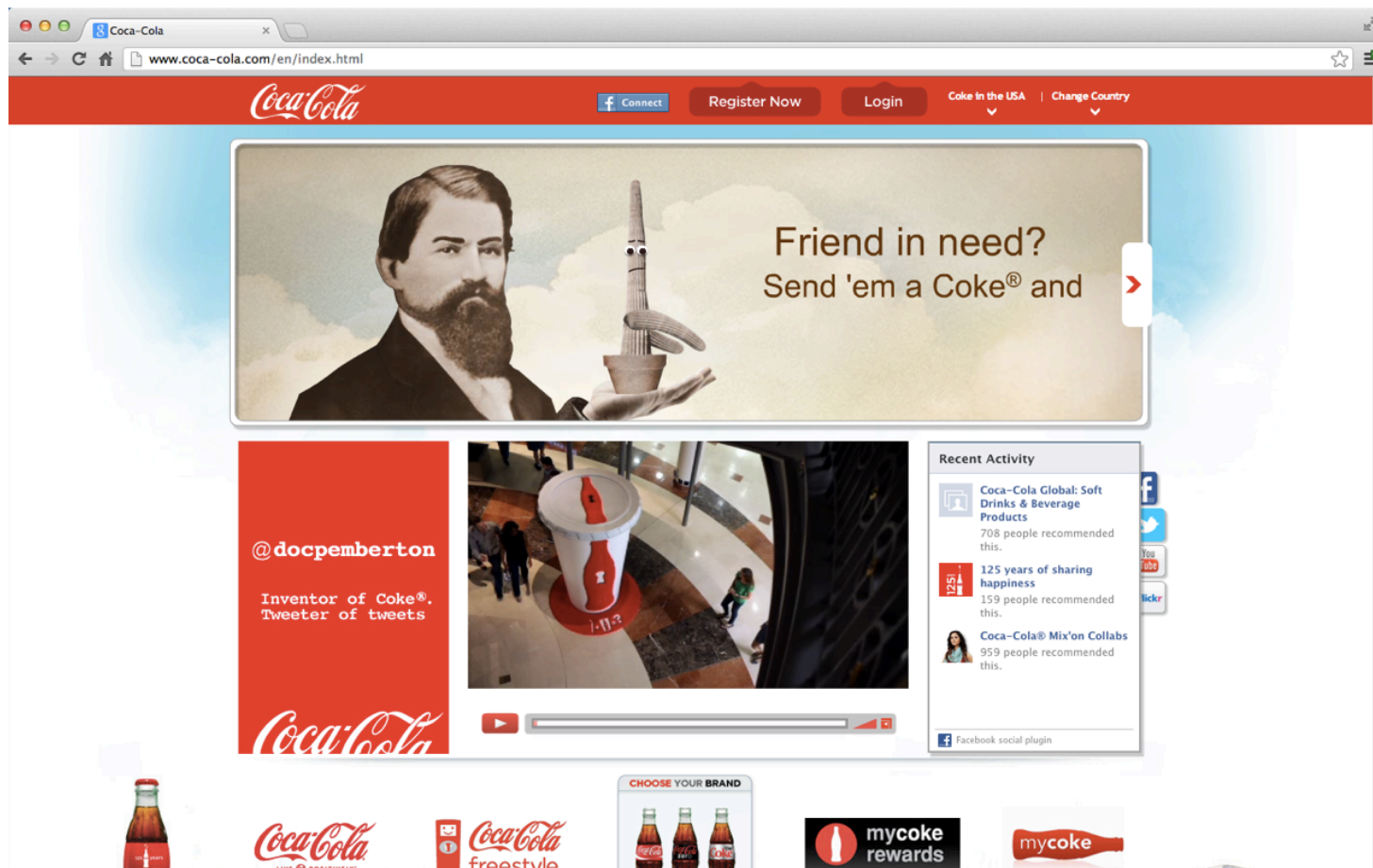
Am I eligible for a multi-policy discount for homeowners?

Is it worth it?

(“Funnel Analysis”)

- Ad costs 10 CPM
- Click through rate is 1%
- Conversion to insurance policy is .1% of clicks
- Value of a policy is \$500 (guestimate)
- 1,000,000 page views costs \$10,000
- 1,000,000 page views == 10,000 clicks == 10 policies == $\$10,000 / 10 \text{ policies} = \$1000/\text{policy}$
- If cost is \$1000 for a policy worth \$500, it's probably not worth it

Is it worth it? What are you converting for?



Is it worth it? What are you converting for?

The screenshot shows the Hawaiian Airlines website with a focus on flight deals to Maui. The browser address bar displays www.hawaiianairlines.com/hawaii-travel-deals/cheap-flights-maui. The website header includes navigation links: EXPLORE, BOOK TRAVEL, MANAGE, and a search bar. The Hawaiian Airlines logo is prominently displayed on the left. A sidebar on the left contains a 'Find Flights' section with dropdown menus for 'Roundtrip', '1 Traveler', 'Departing From', 'Going To', 'Departing Date', and 'Returning Date'. Below these is a 'FIND FLIGHTS' button and a link to 'VIEW ROUTES & SCHEDULES'. The main content area is titled 'Cheap Flights To Maui' and features a detailed article about finding travel deals. The article discusses the importance of timing, flexibility, and advance booking. To the right of the article is a list of links for other destinations: Cheap Flights to Hawaii, Cheap Flights to Honolulu, Cheap Flights to Maui, Cheap Flights to Kauai, Cheap Flights to Hilo, and Cheap Flights to Kona. Below the list is a small image of Makena Beach, Maui. The footer of the website includes a section for 'Are You a Fan of Hawaiian?' with social media links and a 'Get Our Low Fares Emails' sign-up form.

Maui Travel Deals: Cheap Flights

www.hawaiianairlines.com/hawaii-travel-deals/cheap-flights-maui

HELP | CONTACT US | OPTIONAL FEES | HAWAIIANMILES | QUICK LINKS

EXPLORE BOOK TRAVEL MANAGE SEARCH SITE

HawaiianMILES SIGN IN JOIN NOW

SIGN IN Become a member

Find Flights

Roundtrip

1 Traveler

Departing From

Going To

Departing Date

Returning Date

Refundable Fares Only

FIND FLIGHTS

VIEW ROUTES & SCHEDULES

Cheap Flights To Maui

Adopting the mantra "timing, timing, timing" may score cheap flights to Maui and put you on the road to Hana for less than expected. The biggest variables to be found in price of airline tickets have everything to do with timing, so plan in advance and prepare to be flexible.

As hard to believe that paradise has an "off-season", there may be a time of the year when a vacation destination's tourism rates go down. Finding a Maui travel deal during one of these off-peak periods is the first, and perhaps most crucial component to getting a bargain on airfare. When choosing when to depart for your trip, be flexible with the exact departure date, and instead give yourself a week window in which you will be leaving. The difference between prices of flights on a Saturday versus a Wednesday may be substantial enough to make a difference in finding the perfect budget flight. When scheduling your vacation time at work, provide your employer the tentative departure dates, offering to secure a more definite time as soon as the fare is booked.

Once you've decided when to leave, book the flight way in advance. Additionally, look for those flights which leave "after sunset or before sunrise". In other words, schlepping to the airport to catch a midnight "red-eye" can equal great savings and give you a bigger budget to work with during your vacation.

Finding travel deals to Maui can be done by exercising patience, being flexible with your timing and changing the combination of these variables, while checking back for price fluctuations. This effort and frugality in pre-planning can get you to Hawaii's second largest island in style and comfort while still adhering to your budget.

- Cheap Flights to Hawaii
- Cheap Flights to Honolulu
- Cheap Flights to Maui
- Cheap Flights to Kauai
- Cheap Flights to Hilo
- Cheap Flights to Kona

Makena Beach, Maui

Are You a Fan of Hawaiian?

Get Our Low Fares Emails

enter email address SIGN UP

Is it worth it? What are you converting for?

Mesothelioma Lawyers helpi x

www.yourmesotheliomalawfirm.com/new-york-mesothelioma/?mm_campaign=e5c361253c0016184a3210dba5076624&utm_term=mesothelioma%20lawyer%20new%20york&utm_source=Go...

SHRADER & ASSOCIATES
NATIONAL TRIAL ATTORNEYS

866-343-7738

New York Mesothelioma Claims

Home Lawsuit Eligibility Meet the Team Past Success Contact us

New York Mesothelioma Claims

Who will pay for their greed when your family is hurting?
Let us fight for what you and your family deserve.

Get help now

AMERICAN ASSOCIATION OF JUSTICE

AV Preeminent™
5.0 out of 5

Super Lawyers
2011

The help you need

Two of our mesothelioma attorney partners have been elected to the Million Dollar Advocates Forum, one of the most prestigious groups of trial lawyers in the United States.

A Family's Guide to Dealing with Mesothelioma

Chat live
with a qualified representative
24 hours a day

Home page is a landing page: What do you want a visitor to do, feel, think?

The screenshot shows the Virgin America website home page. At the top, there's a navigation bar with links: HOME, BOOK TRAVEL, MANAGE TRAVEL, ELEVATE, FLYING WITH US, DEALS, SHOP, FAQs, FEES. The Virgin America logo is on the right. Below the navigation bar is a search bar with a dropdown menu showing 'Book Flights', 'Check-in', 'Change', 'Cancel', and 'Flight Status'. The main content area features a large promotional banner for 'WIN A NEW YEAR'S WEEKEND IN LAS VEGAS' with a photo of The Killers and Red Hot Chili Peppers. To the right of the banner is a sidebar with sections: 'elevate!' (Sign In, Join), 'STAY CONNECTED' (Twitter, Facebook, FLYER FEED, YouTube), 'FARES TO FLY BY' (San Francisco, Los Angeles), 'WHERE WE FLY', and 'WIFI ONBOARD'. Below the banner are several smaller promotional boxes: 'TRAVEL ADVISORY', 'SWEET DEALS', 'GET GALACTIC STATUS', 'DOUBLE YOUR REWARDS', 'elevate! INC.', and 'NEED MORE POINTS?'. At the bottom, there's a 'Get Deals, Offers, and more.' section with a sign-up form for special fares and promotional offers.

Web Alert: [SFO Travel Advisory](#)

HOME | BOOK TRAVEL | MANAGE TRAVEL | ELEVATE | FLYING WITH US | DEALS | SHOP | FAQs | FEES

Virgin America

Book Flights | Check-in | Change | Cancel | Flight Status

Round Trip | One Way | Multi-City

Where are you flying from? Flying From

Where are you flying to? Flying To

WIN A NEW YEAR'S WEEKEND IN LAS VEGAS.

Enter for the chance to ring in the new year at The Cosmopolitan of Las Vegas with exclusive performances by The Killers or Red Hot Chili Peppers.

See Official Rules

Enter Now

THE COSMOPOLITAN[™] OF LAS VEGAS

elevate!

SIGN IN JOIN

Our Frequent Flyer Program

What's Elevate? Earn Points

STAY CONNECTED See all

FLYER FEED YouTube

FARES TO FLY BY See all

*Restrictions apply.

From San Francisco

Las Vegas	From \$99
Portland	From \$99
D.C. (Dulles)	From \$164

From Los Angeles

San Francisco	From \$77
Portland	From \$109
Philadelphia	From \$149

WHERE WE FLY

WIFI ONBOARD

NEWS & UPDATES More

Virgin America & Gilt City Offer Charter Flight

New Elevate Partner: Hawaiian Airlines

Air China Interline Agreement

Fee Changes

TRAVEL ADVISORY Learn More

SWEET DEALS Hotels, cars, cruises and vacation packages. Check It Out

GET GALACTIC STATUS. Learn More

DOUBLE YOUR REWARDS. Earn up to 25,000 bonus reward points. Apply Now

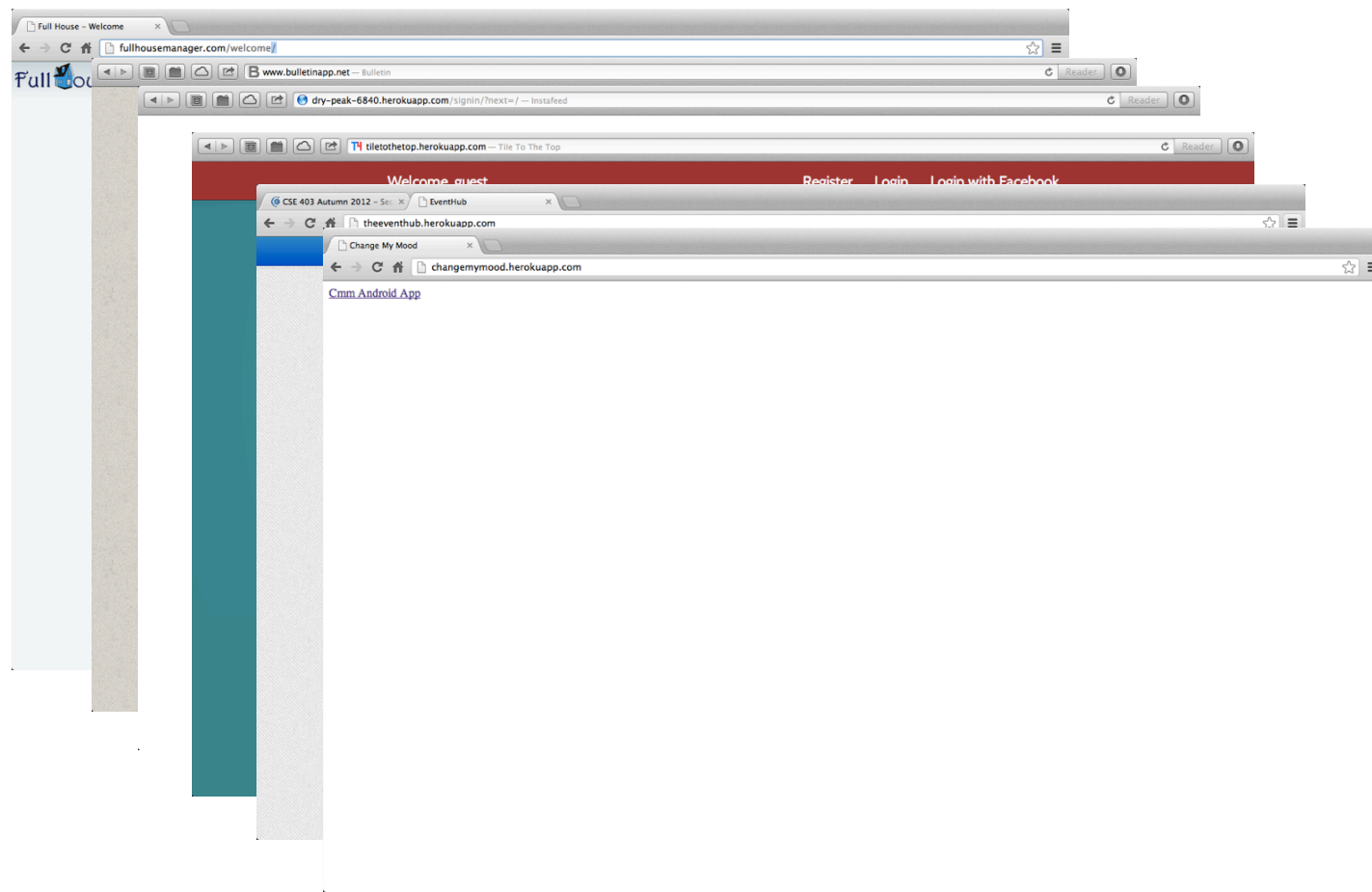
elevate! INC. Elevate Inc. Travel with returns. Register Now

NEED MORE POINTS? Buy, gift, or transfer points now. Learn More

Get Deals, Offers, and more. Sign up to receive special fares, promotional offers and news. (Virgin America's Privacy Policy)

Email Address: Confirm Email: Submit

Home page is a landing page: What are you converting for?



What are you converting for?

Click on an ad

Support by putting a badge on your web site

Too much?

Make a donation

Sign up

Add content

The screenshot shows the Charity Blossom website for Operation Nightwatch, Seattle, WA. The page includes a search bar, a 'Login with Facebook' button, and a 'Sign in' button. The main content area features a 'Free Fundraising Kit' section with links to 'Run an Online Fundraiser', 'Create. Promote. Raise More Money!', and 'www.biddingforgood.com'. Below this is a 'For Non-Profit Managers' section with a link to 'Learn to build stronger communities with a 100% Online & Accredited MBA' and 'onlineempa.usfca.edu'. There is also a 'Seattle Hotels' section with a link to 'Smart Hotels in Seattle, Free Hot Breakfast Bar!' and 'www.hiexpress.com'. A large red banner with the text 'Too much?' is overlaid on the page. Arrows point from the text labels to specific elements on the website: 'Click on an ad' points to the 'Free Fundraising Kit' section; 'Support by putting a badge on your web site' points to the 'Support Operation Nightwatch' section; 'Make a donation' points to the 'Join Charity Blossom' button; 'Sign up' points to the 'Join Charity Blossom' button; and 'Add content' points to the '+ Edit Mission Statement' button.

Less is more.

KILL A FEATURE.

Something Sucks. Find It. **KILL** It.

- **STOP** ADDING FEATURES.
- Find the ONE THING that users **LOVE**.
- How to figure out? **TAKE. SHIT. AWAY.**
- When they **SCREAM**, you've **FOUND** it.
- Then Bring it Back... Only **Better**.
- Tip: **KILL** a Feature Every Week.



Retention

Retention

- Will a first time visitor come back?
- Why? What's compelling?
- How can you prod them? (email, social media, advertising)
- What should they do if they do come back?
- Create an awesome experience

Retention

The Facebook logo, consisting of the word "facebook" in white lowercase letters on a blue rectangular background.

584,000,000 (of ~1 billion) users login every day

More than 40% of users logged in 6 past 7 days

Retention: Your projects

- Bulletin
- Instafeed
- Change My Mood
- Full House
- Tile to the Top
- Event Hub

Referral

Referral

- Get users to tell others about your product
- Key to viral growth
- Mechanisms: Email, social media, widgets, affiliates
- Works only if you have delighted user?

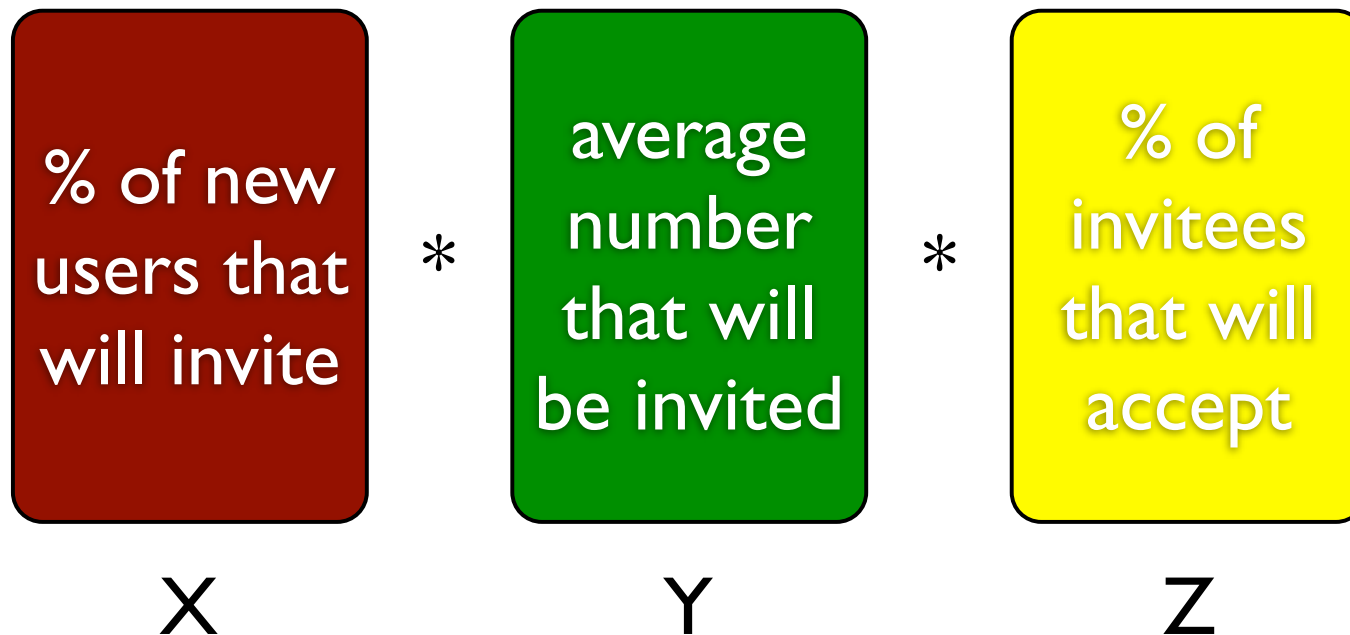
Viral growth

- Holy grail of social media marketing
- If you can acquire one new user, can he/she convince more than one new user to sign up?
- If so, you have viral, exponential, cost-free growth
- Sort of like a Ponzi (pyramid) scheme but

Viral, exponential growth

- Given an new user
- What's the percentage of users that will invite others? (X)
- On average, how many will they invite? (Y)
- What percentage likelihood these people will join? (Z)
- If $X*Y*Z > 1$, you've gone viral!
- “MBA math!”

Viral equation



- If $X * Y * Z$ is > 1 , you've gone viral
- If t is the number of days to complete the cycle,
- $(X * Y * Z)^{(365/t)} = \text{annual multiplier}$

Viral growth example

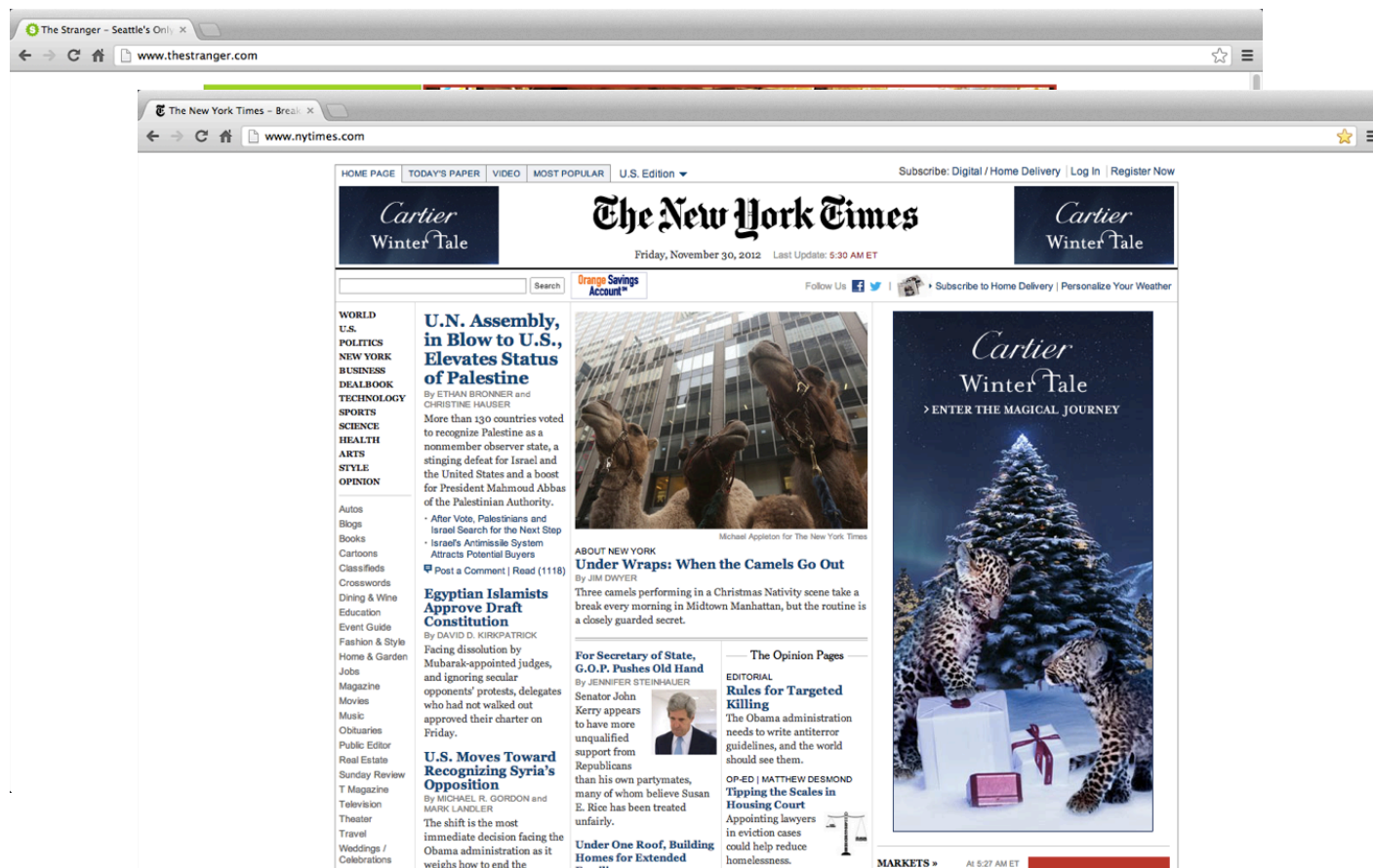
- Joe joins
- There's a 10% chance he'll invite (X)
- ...on average 100 friends to join (Y)
- There's a 15% chance they will join (Z)
- $10\% \times 100 \times 15\% = 1.5$ --> we've gone viral!
- The “cycle time” (time between the time Joe joins and his invitees join) matters too -- sort of like compound interest
- If cycle time is 90 days, Joe generates $1.5^4 \approx 5$ new users a year

Revenue

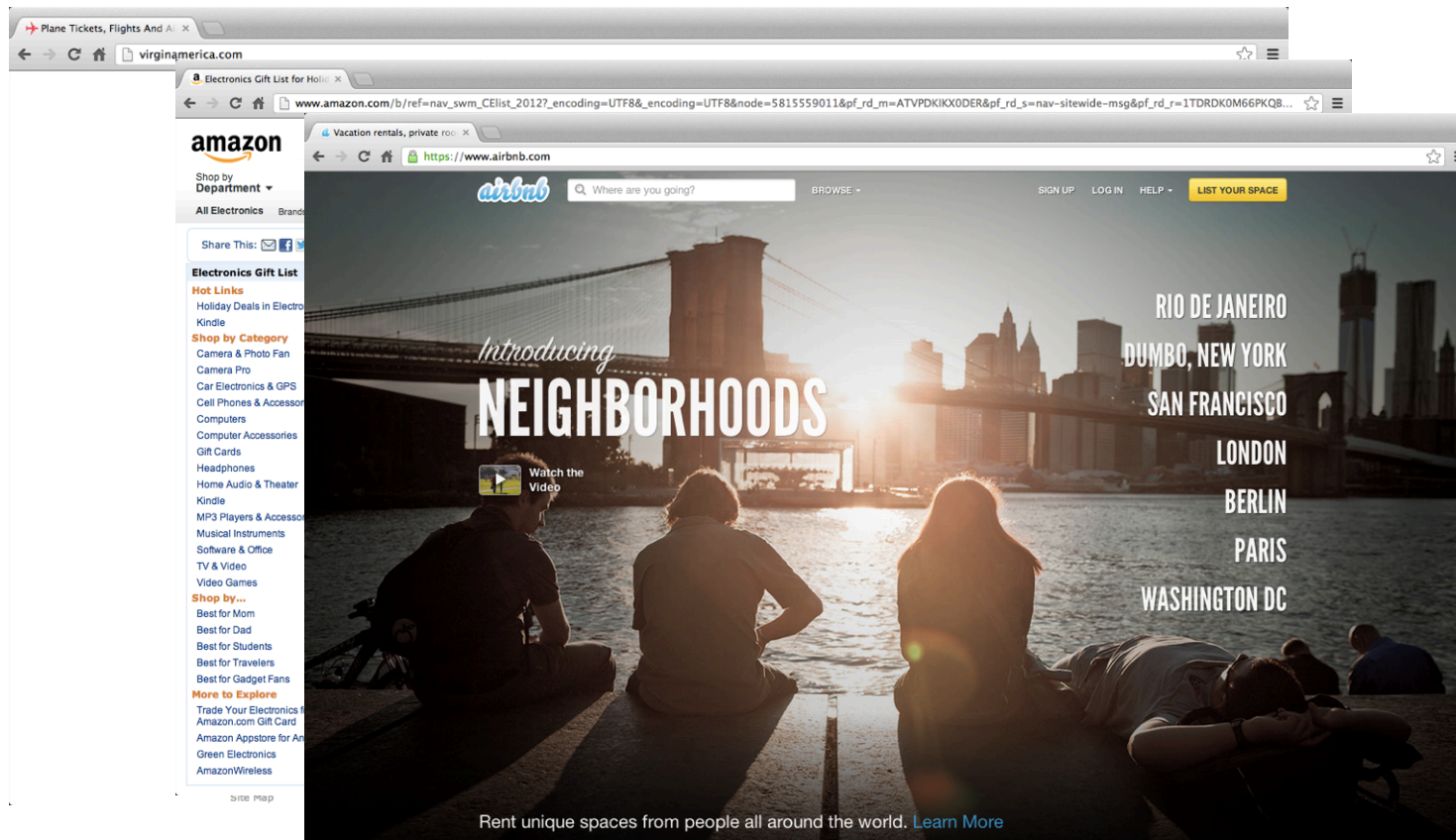
Revenue

- Advertising
- Commerce (including playing the “middleman”)
- Subscriptions (subset of commerce?)

Advertising



Commerce

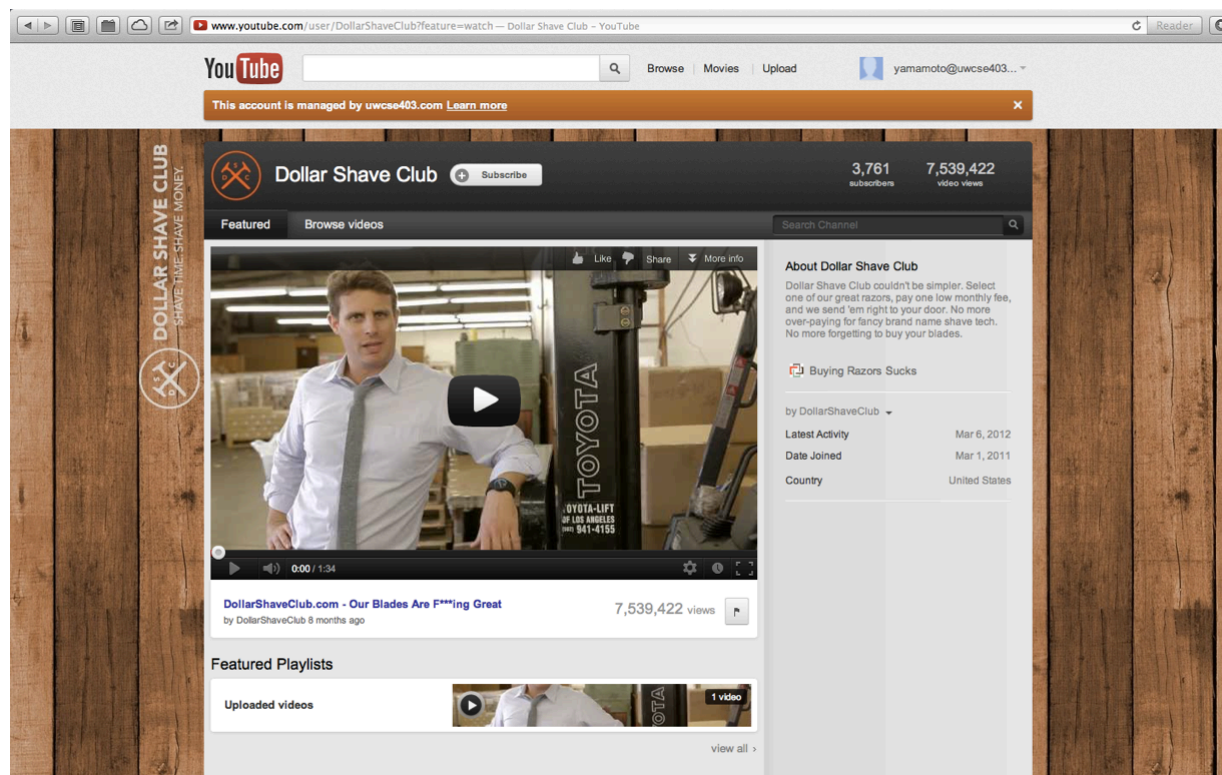


Subscription

The image shows a browser window with the Netflix website open, displaying the URL <https://signup.netflix.com>. Overlaid on this is another browser window showing the Dollar Shave Club website. The Dollar Shave Club page has a wooden plank background and features the following elements:

- Header:** "DOLLAR SHAVE CLUB" logo with the tagline "SHAVE TIME. SHAVE MONEY." and navigation links: "GET STARTED", "HOW IT WORKS", "OUR BLADES", "BLOG". There are also "Register" and "Login" buttons.
- Main Video:** A video player showing a man in a white shirt and tie, with the text "DollarShaveClub.com - Our Blades Are F***ing Great" and a play button. To the right of the video is the text "A GREAT SHAVE FOR A FEW BUCKS A MONTH" and a large orange arrow button that says "DO IT".
- Share video:** Social media sharing options for Facebook, Twitter, and Email, with a count of 43.3K shares.
- Testimonial:** A section titled "ENLIGHTENED CUSTOMER #167" featuring a photo of a man and a quote: "I save \$100/yr on shaving now. Basically, I'm a genius. - Jeff".
- Our Blades:** A section showing three different razor models with their monthly prices: \$1/mo, \$6/mo, and \$9/mo.
- Delivered Each Month:** An illustration of a USPS delivery truck.
- Media Logos:** Logos for "SHAVING THE PEOPLE AT" including ABC NEWS, Forbes, THE WALL STREET JOURNAL, npr, The Economist, and FAST COMPANY.
- Free Blades for Life:** A large banner with the text "FREE BLADES FOR LIFE" and a sub-header "Earn a free month for every friend you sign up. 1000 friends gets you 83 years of free razors. GO". Below this is a small line of text: "...and if you live longer than that, bravo, we'll be happy to keep sending".
- Footer:** "Follow Us:" with social media icons, "Contact Us", "Press", "Careers", "Terms of service", "Privacy", "Sitemap", and a copyright notice: "©2012 Dollar Shave Club All Rights Reserved". There are also logos for "ACCREDITED BUSINESS" and "U.S. MAIL".

Aside: Delighting customers



<http://www.youtube.com/watch?v=ZUG9qYTJMsI>

AARRR!

(A pirate's approach to customers)

- **Acquisition:** users come to site from various channels
- **Activation:** users enjoy first visit :“happy” experience
- **Retention:** users come back
- **Referral:** users like product enough to refer others
- **Revenue:** users conduct some monetization behaviour

AARRR!*

*Coined by Dave McClure



What's this have to do with software engineering?

- Being a successful software engineer requires you to have some understanding of the customer
- Sales, marketing, customer relationships are becoming intrinsically part of the software product
- Sales, marketing, customer relationships are increasingly becoming software engineering disciplines

“Software is eating the world.”

Take aways

- Customers are important
- AARRR! The pirate approach (Acquisition, Activation, Retention, Referral, Revenue)
- Sales, marketing, and customer support are increasingly part of the software and increasingly driven by engineers
- <http://www.slideshare.net/dmc500hats/startup-metrics-for-pirates-sept-2012>

AARRR!

