

Low Value Answers as Q&A Strategy: Understanding Changing Behavior (On-Going Research)

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Hong Kong Baptist University - Kyoto University
Ph.D Student Forum
Kyoto University, 30.3.2013

Subject: Crowdsourcing: CHI Designation: Information interfaces and presentation: Human Factors: Strategy.

Venue: Q&A sites which provide free (gratis) asking and answering of questions to an open audience.

Controlled Data: Topics/Questions that require factual responses.

Purpose: Exploring the strategies of users put at a systematic disadvantage (New entrants in mature ecosystems).

Motivation: Identifying a hidden problem.

Field is defined here as “a spatio-temporal area that is difficult to grasp via any analytical and/or engineering approach due to the co-existence of various individuals and entities, which results in the unexpected occurrence of seemingly accidental events thus necessitating our continuing commitment and caring.

(Osamu Katai)” Field based design aims to discover problems arising in various fields, and to provide solutions to those problems.

A COMPELLING REASON TO MANIPULATE: COMMON CASE IN SOCIAL MEDIA (CREDIT FOR IDEA: ZERVAS 2013)




Yelp! A popular restaurant and retail review site in North America.

Users can write review and rate the store based on a 1-5 star system (5 being the best).

“Each ratings star added on a Yelp restaurant review translated to anywhere from a 5 percent to 9 percent effect on revenues” (Luca, HBS)

A COMPELLING REASON TO MANIPULATE: COMMON CASE IN SOCIAL MEDIA



Search for (e.g. taco, cheap dinner, Max's)


Near (Address, Neighborhood, City, State or Zip)

Chicago, IL 60607

Search

WelcomeAbout MeWrite a ReviewFind FriendsMessagingTalkEventsMember Search


Pleasant House Bakery

 226 reviews [Rating Details](#)

Categories: Bakeries, British [\[Edit\]](#)

964 W 31st St
(between Lituanica Ave & Farrell St)
Chicago, IL 60608
Neighborhood: Bridgeport

(773) 523-7437
<http://pleasanthousebakery.com/>

 [Explore the menu](#)

Hours:


Tue-Thu 11 am - 9 pm
Fri-Sat 11 am - 10 pm
Sun 12 pm - 8 pm

Good for Groups: No

Accepts Credit Cards: Yes

Parking: Street

Attire: Casual

 [Edit Business Info](#)

Price Range: \$\$

Good for Kids: Yes

Takes Reservations: No

Delivery: No

Take-out: Yes

Waiter Service: Yes

Outdoor Seating: Yes

Wi-Fi: No

Good For: Lunch, Dinner


Alcohol: No





Noise Level: Average

Ambience: Hipster, Casual

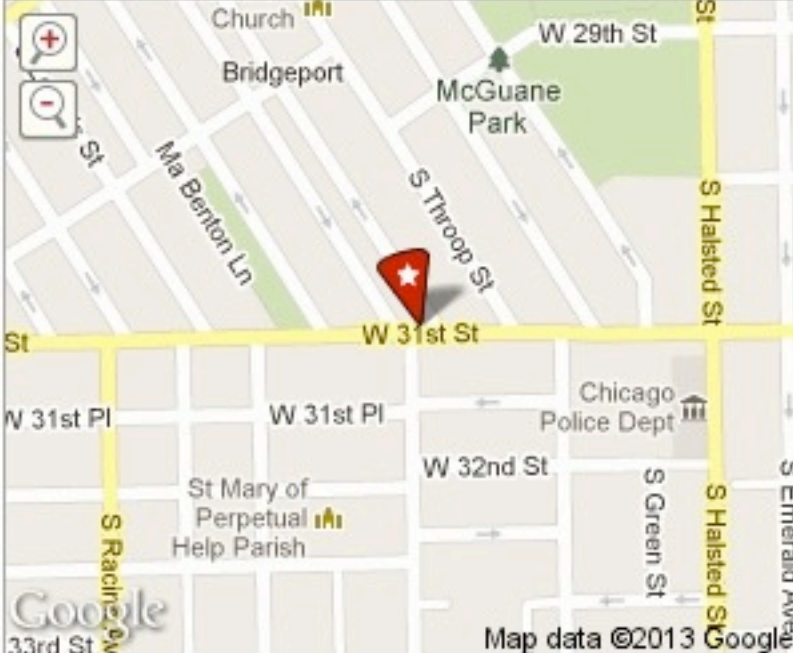
Has TV: No

Caters: Yes






Add Photos






View Larger Map/Directions

Browse Nearby:
[Restaurants](#) | [Nightlife](#) | [Shopping](#) | [Movies](#) | [All](#)

People Who Viewed This Also Viewed...




EL Ideas
 92 reviews
"Chef Foss and Brochu is the Dynamic Duo."

 First to Review  Lisa L.

Monday, April 8, 2013

A COMPELLING REASON TO MANIPULATE: COMMON CASE IN SOCIAL MEDIA

226 reviews in English



Elite '13
17
160

Gino W.
Chicago, IL

★★★★★

3/11/2013

4 photos

1 Check-in Here

A few months ago, a friend had sent an email to me with a link about a certain British public house in Chicago. Knowing of my British roots, the email was right on time. And then I recalled the public house being in Bridgeport. (Mouth wide shut) I was all set and ready to go to Pleasant House and it had dawned on me that while Bridgeport is undergoing a bit of change, there is a still a lingering sentiment in that part of Chicago that reminds me of being in the Southern part of the US again.

Kale and mushroom pie. Steak and ale pie. Chicken balti pie. Ginger soda. Black tea. Trifle.

On my first visit, I ordered a kale and mushroom pie for take-away. The inside of Pleasant House is small and all of the tables were taken. Even when one became available, there was an older guy there who stared at me as though I had decended in a spacecraft and ruined his garden. Leaving was a good option, as I enjoyed the kale and mushroom pie without further concern. I returned a few months later and got a seat. The steak and ale pie made me want to weep, as it was so reminiscent of what I've had in London that I was homesick. So much flavour from the tender steak and light gravy. The spuds with the red wine gravy and ginger soda were worthy of a second try of the eatery. For a third calling, I returned with a friend and had the chicken balti pie with spuds [again] and English peas buttered with mint. Pure happiness. And for a sweet, I had a trifle, a parfait of sponge cake, apples, and whipped cream.

The service at Pleasant House is very representative of the name. There is a hipster air about the eatery in terms of the customer base, unlike what I had experienced the first time going. I support independent businesses and will give a lot of business to Pleasant House. Be forewarned that the place fills up fast, and understandably so. Those royal pies are worthy.

Was this review ...? Useful (3) Funny (1) Cool (2)

[Bookmark](#) [Send to a Friend](#) [Link to This Review](#) [Add owner comment](#)

A COMPELLING REASON TO MANIPULATE: COMMON CASE IN SOCIAL MEDIA

Sort by: **Yelp Sort** ▾ | **Date** | **Rating** | **Elites** | Facebook Friends

91 reviews in English


Elite '12
13
112

Dave B.
Fountain Valley, CA

★★★★★ 10/1/2012

Bert and his family and employees are fantastic. My wife needed a couple of rings re-sized and a bracelet I had gotten her years ago fixed. Bert was very responsive via e-mail and even

Consumer Alert



We caught someone red-handed trying to buy reviews for this business. We weren't fooled, but wanted you to know because buying reviews not only hurts consumers, but also honest businesses who play by the rules. Check out the evidence [here](#).

Show me the reviews

Brandon C.
Fountain Valley, CA

For my graduation present, my dad surprised me with a trip to Bert Levil It is a tradition in my family to get sterling silver rings after "becoming an adult" so I have been anticipating this day for the last 21 years! Even though I still behave like I'm 5, MY MANHOOD WAS IMMINENTLY NEAR :D

Manipulation of ratings is rampant on Yelp!

Why?: Monetary Incentive

Strategies include: Buying Good Review, Buying Bad Reviews for Competition, and Using Fake Accounts.

Yelp! conducts sting operations to try and catch cheaters.

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**The Problem lies in that
Yelp! catches only the
most obvious forms of
manipulation.**

- New Stores/
Restaurants*****
- Places with poor review
histories getting sudden
boosts**
- Places that use ads to
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- Fake accounts**

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But it doesn't catch:

- Places owned by people
with large social networks
(get your friends to
review)**
- Places who manipulated
ratings in Yelp!'s nascency**

A COMPELLING REASON TO MANIPULATE: COMMON CASE IN SOCIAL MEDIA

What word have I not mentioned?

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Cheating!

Is asking one's friends to rate your restaurant cheating? Or is it proper social networking?

QUESTION AND ANSWER FORUMS (Q&A)

Pay: Google Answers used contractors who would answer questions for money. Question askers would put prices on their questions. (Google answers was shut down in 2006.)

The Amazon Mechanical Turk can also fit the description of a Q&A pay site.

Gratis: Yahoo! Answers (Y!A) revolves around a community that answers questions for free.

Various message boards are also studied. For example, the Turbo Tax Questions forum. In addition, recently launched web applications from Quora and Facebook are being studied.

Stackoverflow.com (SO)

Origin: Started in 2008 as a Q&A system devoted completely to computer programming. The goal of the site is to create a highly accurate corpus of computer programming Q&A.

General operating procedure: The site is operated by users. Users with enough reputation points are given privileges. Elite users can edit and modify questions and site information.

You need an account to gain reputation, gain badges, be able to vote, and have other privileges.

Questions Asked:

SO is a niche Q&A system. According to their FAQ, these types of questions are acceptable:

- a specific programming problem
- a software algorithm
- software tools commonly used by programmers
- matters that are *unique* to the programming profession

Questions Asked:

SO requests that questions you ask be problems that are actually faced. According to their FAQ, these types of questions are unacceptable:

- every answer is equally valid: “What’s your favorite _____?”
- your answer is provided along with the question, and you expect more answers: “I use _____ for _____, what do you use?”
- there is no actual problem to be solved: “I’m curious if other people feel like I do.”
- we are being asked an open-ended, hypothetical question: “What if _____ happened?”
- it is a rant disguised as a question: “_____ sucks, am I right?”

Importantly, SO discourages redundant or simple questions in order to create the best possible corpus of information.

Example Exchange:



How to call a method every time an activity is being viewed?

For an example, I navigate from `activity1` to `activity2`. Now I again navigate to `activity1`. Each and every time the `activity1` is being displayed/navigated to that activity, I need to run the method `loadEveryTime()`. How can I do this? Please help!

`java` `android` `eclipse` `android-activity`

[share](#) | [improve this question](#)

asked Feb 15 at 17:40



Yohan

2,121 ● 7 ● 25

1 Answer

[active](#)

[oldest](#)

[votes](#)



`onResume()` is called every time the Activity is resumed, so put your method call in there. Make sure to call up to the superclass.

```
@Override
protected void onResume()
{
    super.onResume();
    loadEveryTime();
}
```

[share](#) | [improve this answer](#)

answered Feb 15 at 17:41



A-C

12.3k ● 6 ● 15 ● 29

Excellent! Thanks! – Yohan Feb 15 at 18:25

You're welcome! :-)) – A-C Feb 15 at 18:28

GAMIFICATION TO ENTICE PARTICIPATION IN GRATIS Q&A

A popular way to encourage participation in Q&A is through gamification (Zhuolu, et al 2012). That is, allowing members to gain status through points and privileges. This can be more effective than monetary incentives (Chen, 2010).

Reputation Points: Players earn points and compare themselves with other users.

Badges or Awards: Players gain specific titles via completion of tasks.

GAMIFICATION TO ENTICE PARTICIPATION IN GRATIS Q&A

130,350 Reputation

80 ▼ today

| | | | |
|-----|-------------|----------|--|
| +40 | 5 hours ago | 4 events | ▶ Scanf countdown |
| +20 | 4 hours ago | 2 events | ▶ Understanding toString() method ? |
| +20 | 5 hours ago | 2 events | ▶ converting from binary to decimal |

230 ▼ yesterday

| | | | |
|-----|-------|----------|--|
| +45 | 22:31 | 5 events | ▶ Get value of type object |
| +40 | 18:23 | 4 events | ▶ scanf regex - C |
| +30 | 01:52 | 3 events | ▶ Does this produce a memory leak? |
| +20 | 22:31 | 4 events | ▶ What is the purpose of primary and foreign keys, if I can join without defining them? |
| +20 | 17:45 | 2 events | ▶ A query to find if any two fields in a row are equal? |
| +20 | 15:34 | 2 events | ▶ Divide and conquer - why does it work? |
| +20 | 01:34 | 2 events | ▶ What Does it Mean Object reference not set to an instance of an object |
| +15 | 22:31 | 3 events | ▶ There has to be a better way to substr |
| +15 | 01:39 | accept | How do I use LINQ to Enumerate Dictionaries |
| +10 | 07:46 | upvote | Designing in landscape with Storyboards |
| +10 | 00:20 | upvote | Dynamic way of looping through X number of nested arrays in Objective-C |
| -15 | 12:13 | unaccept | JDBC Transaction vs Connection Clarification |

305 ▼ 2 days ago

| | | | |
|-----|-------|----------|--|
| +45 | 13:58 | 6 events | ▶ float value condition |
| +45 | 01:29 | 4 events | ▶ C initialize const struct member with existing const variable |
| +40 | 21:16 | 5 events | ▶ are hidden globals bad programming practice? |
| +40 | 01:57 | 4 events | ▶ How to store every 2 characters in c# |

GAMIFICATION TO ENTICE PARTICIPATION IN GRATIS Q&A

Badges

generaltags

allgoldsilverbronze

As you use Stack Overflow to ask and answer questions, you'll earn badges, which appear on your user page and in your user card.

| | |
|---------------------------------|---|
| • Altruist × 2577 | First bounty you manually awarded on another person's question |
| • Analytical × 39421 | Visited every section of the FAQ |
| • Announcer × 13031 | Shared a link to a question that was visited by 25 unique IP addresses |
| • Archaeologist × 382 | Edited 100 posts that were inactive for 6 months |
| • Autobiographer × 87749 | Completed all user profile fields |
| • Benefactor × 14166 | First bounty you manually awarded on your own question |
| • Beta × 2527 | Actively participated in the private beta |
| • Booster × 726 | Shared a link to a question that was visited by 300 unique IP addresses |
| • Caucus × 85194 | Visited an election during any phase of an active election and had enough reputation to cast a vote |
| • Citizen Patrol × 48953 | First flagged post |
| • Civic Duty × 20267 | Voted 300 or more times |
| • Cleanup × 12550 | First rollback |
| • Commentator × 211953 | Left 10 comments |

Voting Mechanism:

How to Earn Points

| <i>Action</i> | <i>Points Earned/Lost</i> |
|---|---|
| Answer is Voted Up | +10 - Maximum of 200 Points can be earned a day from Answer Votes |
| Question is voted up | +5 |
| Answer is accepted | +15 |
| Question maker accepts answer | +2 |
| Question is voted down | -2 |
| Answer is Voted down | -2 |
| Voter votes answer down | -1 |
| Edit of another post is accepted by peer review | +2 (Maximum of 1000 points gained through editing) |

Reputation: Points Earn Privileges

15 Points - Vote up

15 Points - Flag for moderator attention

50 Points - Leave comments[†]

100 Points - Edit community wiki posts

125 Points - Vote down (costs 1 rep on answers)

200 Points - Reduced advertising

250 Points - Vote to close, reopen, or migrate your questions

500 Points - Retag questions

1000 Points - Show total up and down vote counts

1500 Points - Create new tags

2000 Points - Edit other people's posts, vote to approve or reject suggested edits

3000 Points - Vote to close, reopen, or migrate any questions

5000 Points - Vote to approve or reject suggested tag wiki edits

10000 Points - Vote to delete closed questions, access to moderation tools

15000 Points - Protect questions to prevent answers by new users

20000 Points - Vote to delete negatively voted answers and stronger question deletion votes

SO User Overview:

There are over 1,000,000 users.

The top is very small, but powerful.

Total Reputation

| Total Rep* | Users | Change |
|------------|---------|---------|
| 100,000+ | 41 | +41 |
| 50,000+ | 97 | +97 |
| 25,000+ | 271 | +271 |
| 10,000+ | 1,291 | +1,291 |
| 5,000+ | 2,249 | +2,249 |
| 3,000+ | 2,915 | +2,915 |
| 2,000+ | 3,595 | +3,595 |
| 1,000+ | 9,347 | +9,347 |
| 500+ | 14,724 | +14,724 |
| 200+ | 23,779 | +23,779 |
| 1+ | 772,401 | ★ |

Stack Overflow Breaks Users Up Into 3 Groups:

Class A: Users: 0-999 points

Class B: Established users: 1000 - 19999 points

Class C: Trusted users: 20000 + points

Results: Reputation Test

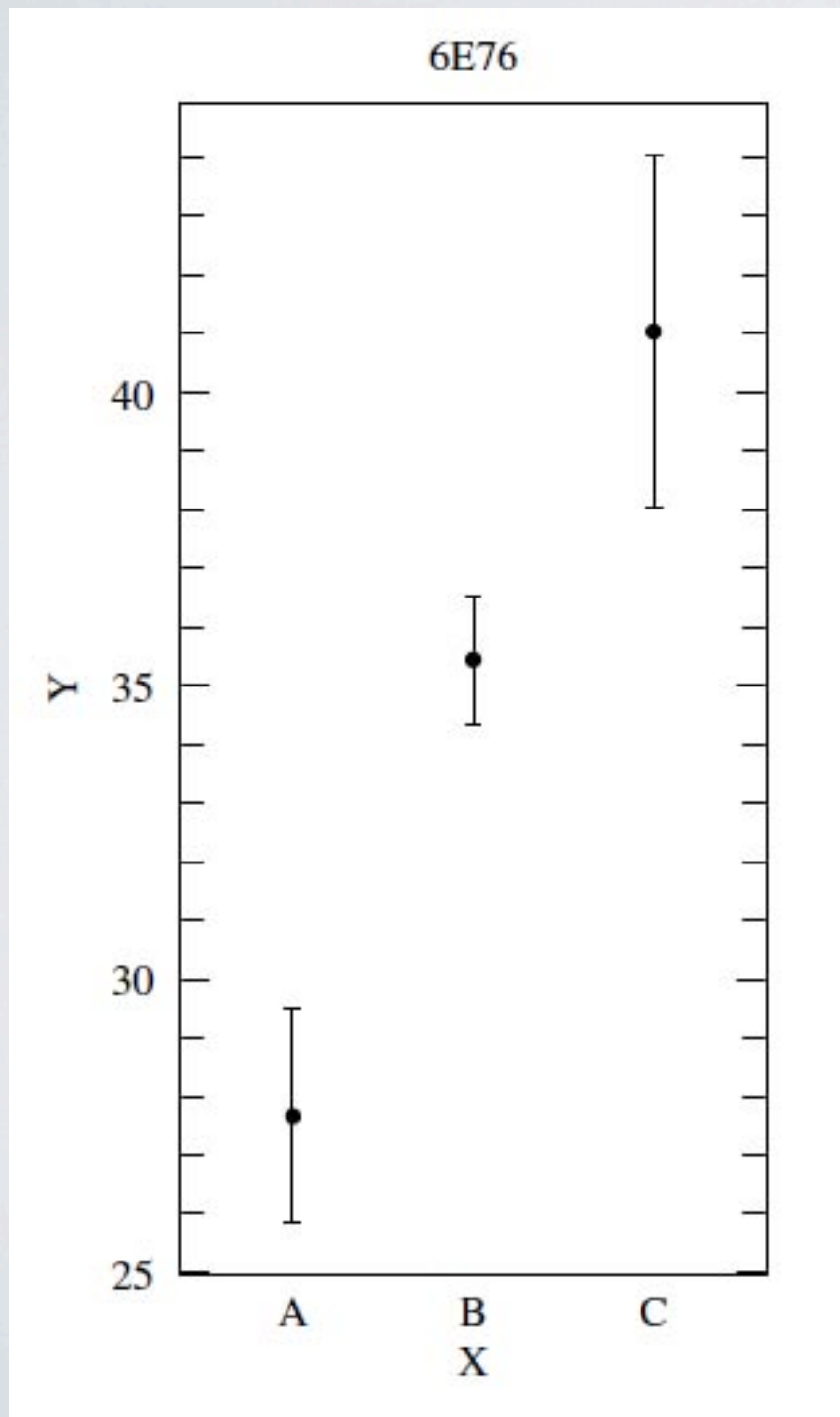
Months served and reputation:

$P = .0001$ $F = 37.72$

Trusted Users are more likely to serve longer.

| | A | B | C |
|---------|--------|-------|--------|
| Mean | 27.663 | 35.11 | 41.031 |
| Std Dev | 13.3 | 12 | 9.88 |

A= User
B= Established User
C= Trusted User



How to Answer Successfully:

According to Anderson et al. (KDD 2012): SO has an implicit Reputation Pyramid:

I. Successful answers are usually given at around 5 minutes after posting.

II. The Higher the reputation, the quicker the user is to answer.

III. There is a conceptual pyramid in which questions go through higher ranked users first. If a question lingers, it is more likely to be answered by a low reputation user.

Anderson et al. (KDD 2012):

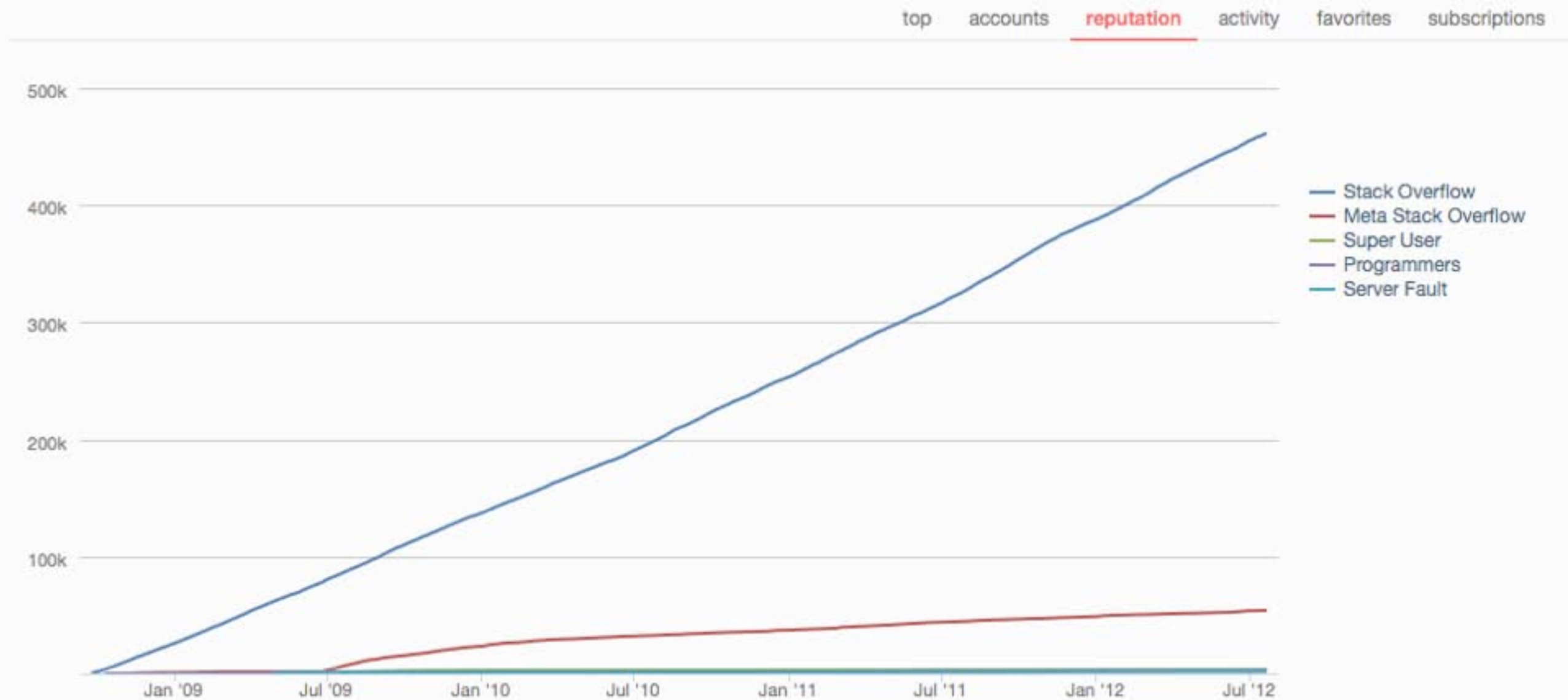
IV. Elite users (100,000 Points Plus): Consistently hit the 200 point/day rule, and these users derive more points from “best answer chosen.”

V. Elite users tend to focus on answering rather than asking questions.

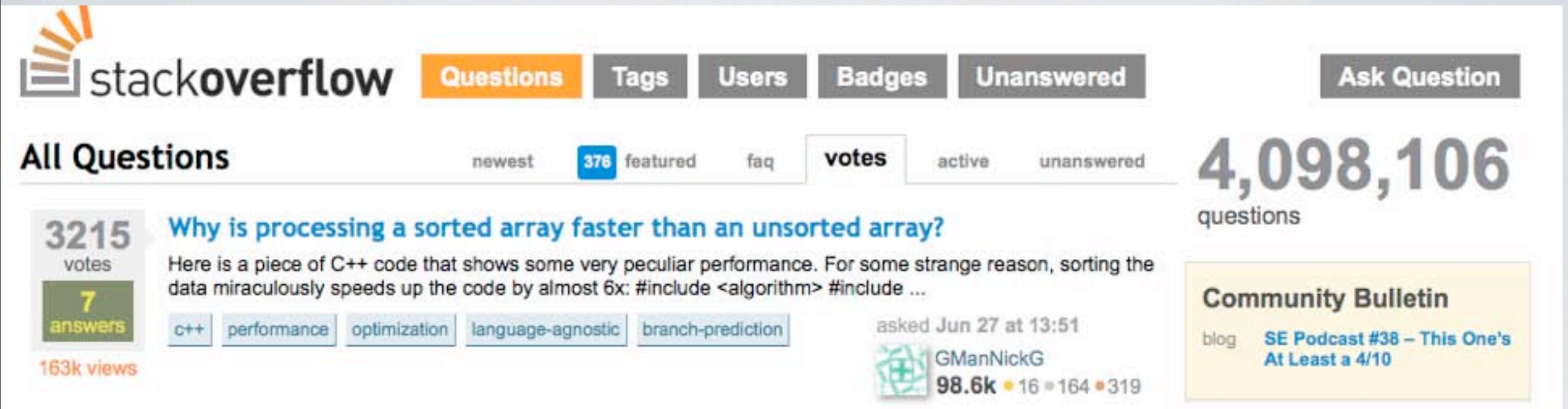
VI. The long-lasting (archival) value of a question is determined around an hour after its being posted.

At a Certain Point, Elite Users Produce Smooth Graphs:

Elite Users begin to exhibit smooth charts, which stem from maxing out on the +200 Upvote limit



As Anderson makes clear, some questions are valuable, while most are not.



The screenshot shows the Stack Overflow homepage. At the top, the Stack Overflow logo is on the left, and navigation links for Questions, Tags, Users, Badges, and Unanswered are in the center. An 'Ask Question' button is on the right. Below the navigation, the 'All Questions' section is active, with filters for newest, featured (376), faq, votes, active, and unanswered. A large number '4,098,106' indicates the total number of questions. The featured question is 'Why is processing a sorted array faster than an unsorted array?' with 3215 votes, 7 answers, and 163k views. The question text describes a C++ code snippet that shows a performance improvement of almost 6x when sorting data. The question is tagged with c++, performance, optimization, language-agnostic, and branch-prediction. It was asked on Jun 27 at 13:51 by GManNickG, who has a reputation of 98.6k. A 'Community Bulletin' on the right mentions 'SE Podcast #38 - This One's At Least a 4/10'.

stackoverflow Questions Tags Users Badges Unanswered Ask Question

All Questions newest 376 featured faq votes active unanswered 4,098,106 questions

3215 votes 7 answers 163k views

Why is processing a sorted array faster than an unsorted array?

Here is a piece of C++ code that shows some very peculiar performance. For some strange reason, sorting the data miraculously speeds up the code by almost 6x: `#include <algorithm> #include ...`

c++ performance optimization language-agnostic branch-prediction

asked Jun 27 at 13:51

GManNickG 98.6k 16 164 319

Community Bulletin

blog SE Podcast #38 - This One's At Least a 4/10

If there is a pyramid and the most valuable questions are answered by the most elite members first, how do new users gain points?

Reasons to care about Reputation on SO:

I. Careers 2.0

- Accomplishments and stats can be used in CVs, etc.

II. Free advertisements of skills and products.

- Authors of Books, Web site owners, etc.

III. Succeeding at the “game” of being a member on SO.

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III. How do we play the game?

How to Manipulate on SO:

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III. Answer easy and redundant questions.

These yellow answers received the “best answer” by asker, but did gain any aggregate positive votes.

2,001 **Answers**

- 0 Validate an html document that I wrote with document.write()
- 0 Fuzzy outline on a form button when using a background image with a 20px border-radius
- 0 How to put a Javascript event on something?
- 0 How to check that all html tags are closed with Regex
- 0 return confirm delay problem
- 0 How can I re enable a setInterval after I called clearInterval?
- 0 Catch a javascript error in an external script file
- 0 how to access user id from cookie using javascript: Rails, Devise, Page Caching
- 0 How do I store static content of a web page in a javascript variable?
- 0 jquery problem in opera browser
- 0 Javascript issue with Dates
- 0 Are there any security concerns with allowing developers run hidden WebBrowser?
- 0 Position span inside input - NOT FOR PLACEHOLDER
- 0 Resizing one element over another element

These Questions are often low-value, or redundant.

This example comes from a quartile performer in 2012.

In the on-going sample, new users with more than 10,000 points but fewer than 24 months service than who have had the highest change in reputation have an average of having nearly 40% of their answers receive 1 or fewer (including negative) votes.

| | |
|----------|-------|
| 100,000+ | 0.178 |
| New | 0.405 |

Problems with Stack Overflow's reputation/point system



The point system makes new users "addicted", in a sense, Stack Overflow becomes like a role-playing game (RPG), you stay here, try to earn points. Points are important, they're labeled "reputation", as if they indicate your level of expertise, as if it's a testimony to your skills.

Fundamental Design Issue:

Low value questions should be discouraged. However, if answering these questions becomes an effective strategy, it can alter the terrain of the Q&A system.

Research will continue to point out that elite users dominate, the valuable questions.

But, there can be a symbiotic relationship between poor question askers and answerers looking to score easy points to build up their reputations.

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Why is this Interesting?:

V. Do user's change their behaviour once they ascend into the upper class levels of points?

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