# IR in Community Question-Answering (CQA) Chirag Shah

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### IR in CQA – Schedule

Day-1: Introduction to CQA services

Day-2: Extract data from CQA sites (lab)

Day-3: Ranking and evaluating CQA content

Day-4: Using CQA data for analyses (lab) and conclusion

# Day 1

Introduction to CQA

### What's football (futball)?

#### why is american football called football?



Search

About 3,740,000 results (0.33 seconds)

Advanced search

#### Answers.com - Why is American football called 'football'

American Football History question: Why is American football called 'football'? Some might say, simply, because they kick the football.

wiki.answers.com > ... > American Football History - Cached - Similar

#### Answers.com - Why is American football called football Q

Football - American question: Why is American football called football ... wiki.answers.com > ... > Categories > Sports > Football - American - Cached

Show more results from answers.com

#### Americans, Why is American Football called football? - Yahoo! Answers

7 answers - Dec 14, 2008

I'm from the UK. Everytime I talk about our **football** (the sport ... This is a pretty good question. One thing that has to be thought of is that ...

answers.yahoo.com > ... > Sports > Football (American) - Cached - Similar

Why is american football called football? - Oct 24, 2010

Why is american football called football and football called ... - Aug 15, 2010

Why is football called football if you play it with your hands ... - Aug 26, 2009

Why is (American) football called "football"? - Aug 12, 2008

More results from answers.yahoo.com »

### What's football (futball)?



Chris &

### Americans, Why is American Football called football?

I'm from the UK. Everytime I talk about our football (the sport which players use their feet to control the ball) I feel the need to add (soccer) to avoid confusion with you guys.

But I was thinking, your football is only kicked to start each quarter, to punt or for a field goal. The rest of the time the ball is in play, it's held in the players hands.

I know you guys can call our "soccer" association football, I generally refer to NFL when I'm talking about your professional game, but what's the real deal?

It's a serious question, how did your football become known as football?

2 years ago

Report Abuse



Grizz (2-3)

#### Best Answer - Chosen by Asker

This is a pretty good question. One thing that has to be thought of is that many people don't actually think the word football comes from the action of kicking a ball with feet. Rather, it was used to distinguish certain games from games played on horseback, like polo. That's where "foot ball" possibly came from. Therefore, any game that descended from these early games generally kept the name football, despite the fact that many of them are vastly different (American football, soccer/association football, Australian football, Canadian football, rugby, etc.) There isn't any conclusive evidence to support either theory though. The popular games in an area apparently were called football by the locals.

Believe it or not, soccer was actually coined by a British man.

Well, after thinking maybe I shouldn't trust an article on Wikipedia that doesn't have sources quite so fast, I looked up some more stuff. Apparently there are a LOT of theories on why some people call the same sport football and soccer.

I suppose the best explanation is that football comes from soccer and rugby, and it was more popular than either of them in the US, so Americans just substituted the word. But why we call association football soccer is harder to explain.

Source(s):

I knew a couple of facts here, but most of it, especially the origins of soccer, I got here.

http://en.wikipedia.org/wiki/Football\_(w...

http://www.gavinrymill.com/origin-of-the...

### What's the meaning of life?

#### what's the meaning of life?



Search

About 1,290,000 results (0.15 seconds)

Advanced search

#### Meaning of life - Wikipedia, the free encyclopedia

"What is life all about?", and "What is the meaning of it all?" It has been the subject of much philosophical, scientific, and theological speculation ...

Meaning of life (disambiguation) - Value of life - Ultimate reality en.wikipedia.org/wiki/Meaning of life - Cached - Similar

#### Phrases from The Hitchhiker's Guide to the Galaxy - Wikipedia, the ... Q

Jump to <u>Answer to the Ultimate Question of Life, the Universe, and ...</u>: The Answer to Life ... when **the meaning of life** became known. ... Arthur ... en.wikipedia.org/.../Phrases\_from\_The\_Hitchhiker's\_Guide\_to\_the\_Galaxy - Cached - Similar

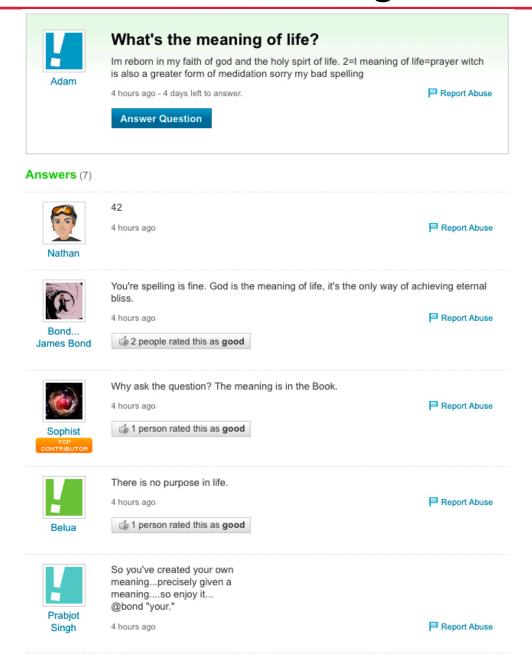
Show more results from wikipedia.org

#### Answers.com - What is the meaning of life Q

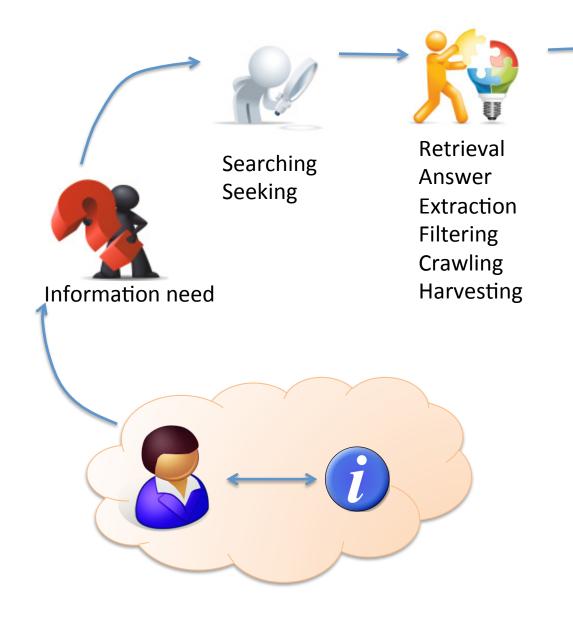
Religion & Spirituality question: What is the meaning of life? The meaning of life Making life meaningful: The importance of life is to live it to the full.

wiki.answers.com > ... > Categories > Religion & Spirituality - Cached - Similar

### What's the meaning of life?



### Information Behavior





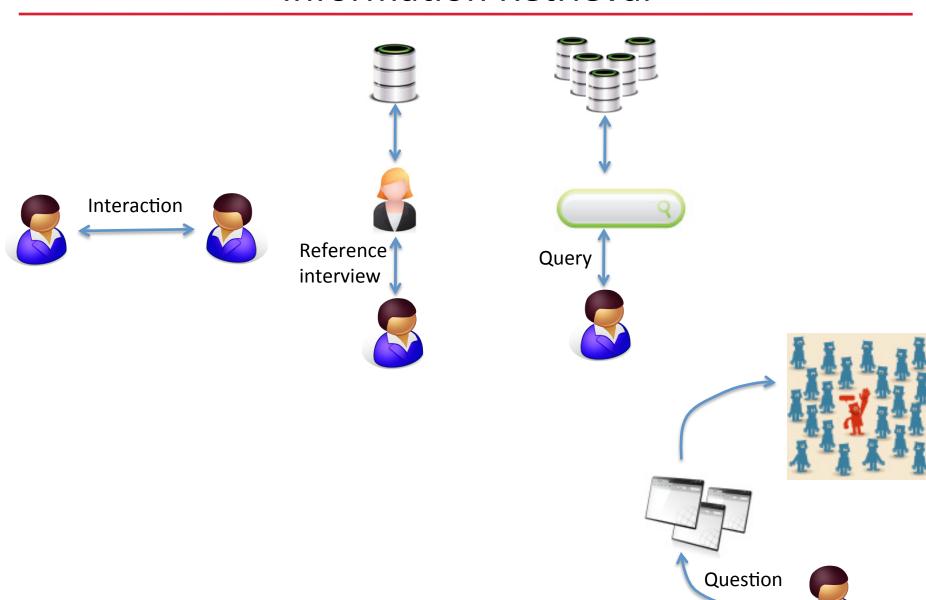
#### Synthesis

- Link
- Summarize

#### Sense-making

- Perceive
- Recognize
- Gist
- Understand
- Interpret
- Analyze
- Evaluate

### **Information Retrieval**



### Community Q&A (CQA)





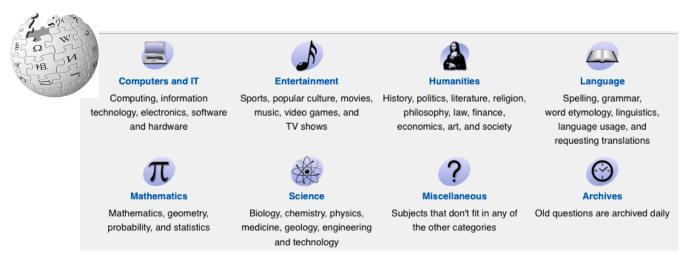




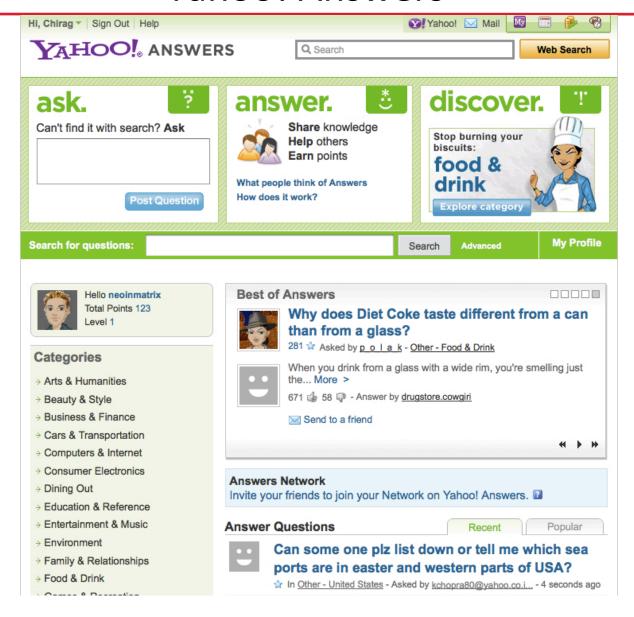








### Yahoo! Answers



### Seeking the Wisdom of Crowd



# Based on your own family's experience, what do you think we should do to improve health care in America?

4962 dr In Other - General Health Care - Asked by Hillary Clinton - 38022 answers - 3 years ago



#### How can we engage more people in the democratic process?

4466 😭 In Civic Participation - Asked by Barack Obama - 17377 answers - 3 years ago



#### What should we do to free our planet from terrorism?

4146 A In Civic Participation - Asked by Dr. APJ Abdul Kalam - 29727 answers - 3 years ago



#### How will Sanjaya's continued success on American Idol impact the show's credibility?

2622 😭 In Reality Television - Asked by Constantine Maroulis - 24754 answers - 3 years ago



#### What would you do to stop wasteful government spending in Washington?

2071 In Government - Asked by John McCain - 16709 answers - 3 years ago



#### What will you remember most about Michael Jackson?

1862 A In Celebrities - Asked by Jack - 6416 answers - 5 months ago

### Seeking the Wisdom of Crowd



#### **Open Question**

Show me another »

## Which items are you eager to see on sale for the upcoming Black Friday or Cyber Monday?

We all have our eyes peeled on a gift for our loved ones, or a gift for ourselves, that may show up with discounted prices during these upcoming shopping days. What do you anticipate the most?

2 days ago - 4 weeks left to answer.







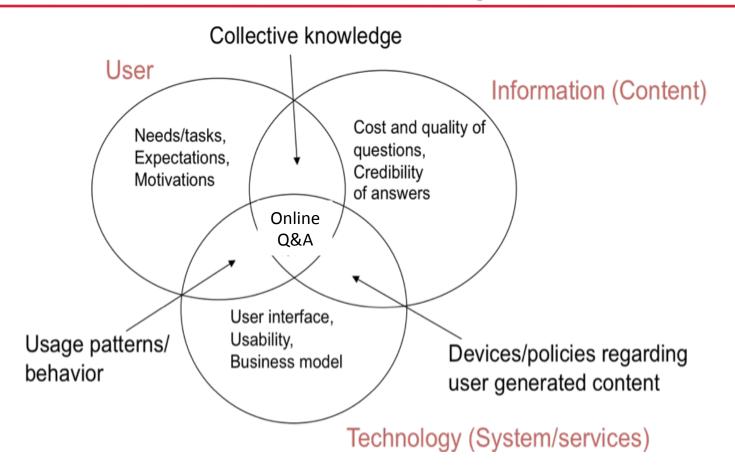


### Class Exercise

### Content analysis

- Yahoo! Answers
- WikiAnswers

### CQA Research Agenda



Shah, C., Oh, S., & Oh, J. S. (2009). Research agenda for social Q&A. *Library & Information Science Research*, 31(4), 205-209.

### **Up Next**

- Collecting CQA data using APIs and other methods
- Ranking and evaluating CQA content
- CQA experiments

# Day 2

Data Collection for CQA

### Today is CQA Lab!

- Learn/revisit basic PHP and MySQL
- Basic REST call to Yahoo! Answers
- Write a simple harvester for collecting CQA data

### A Harvester for Yahoo! Answers

- Yahoo! Answers APIs
- PHP, MySQL
- http://answers.yahooapis.com/AnswersService/V1/ getByCategory? appid=1234&category\_name=cat123&type=resolved&s ort=date\_desc&start=1&results=50
- http://answers.yahooapis.com/AnswersService/V1/ getQuestion?appid=1234&question\_id=5678

# Day 3

Ranking and Evaluating CQA Content

### **CQA Content**

Questions
Answers
Comments
User profiles

Let's think about their attributes!

### **Evaluating CQA Questions**

- Think about the kind of questions
- Take a step back and think about Online Q&A types
- How does this inform us about evaluating questions in the context of Q&A service?

Harper, F. M., Weinberg, J., Logie, J., & Konstan, J. A. (2010). Question types in social Q&A sites. *First Monday*, *15*(7). Available from http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2913/2571

### **Evaluating CQA Answers**

- Quality is subjective.
- There's more to quality than relevance.
- Heuristic: on Yahoo! Answers, we consider an answer to be a high quality answer, if
  - the asker chooses it as the best answer, and
  - 2. gives it a rating of at least 3.

### Using Human Assessors to Evaluate Answers

- Informative
- Polite
- Complete
- Readable
- Relevant
- Brief
- Convincing

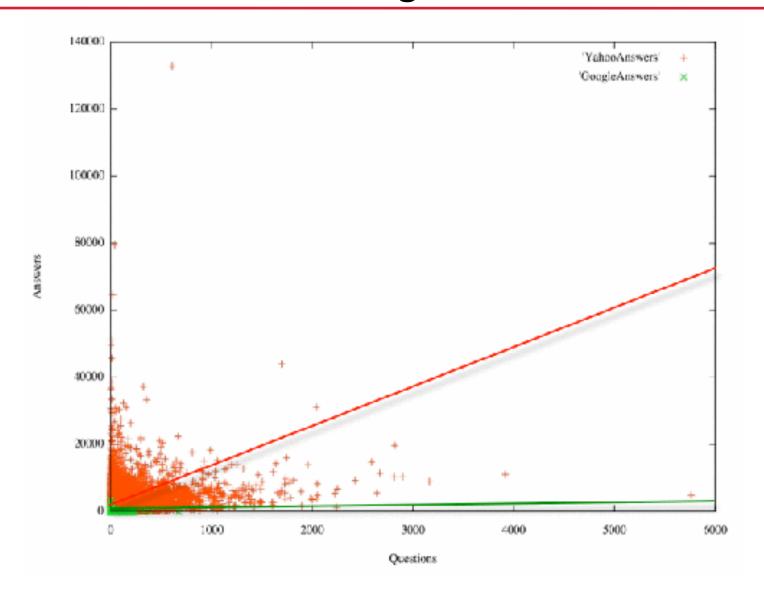
- Detailed
- Original
- Objective
- Novel
- Helpful
- Expert

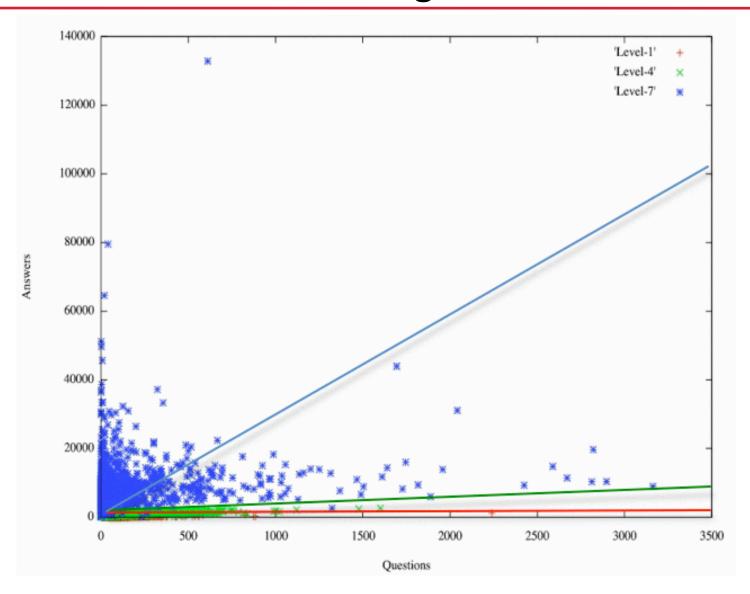
Harper, F. M., Raban, D., Rafaeli, S., & Konstan, J. A. (2008). Predictors of answer quality in online Q&A sites. In *Proceeding of ACM CHI 2008 Conference*.

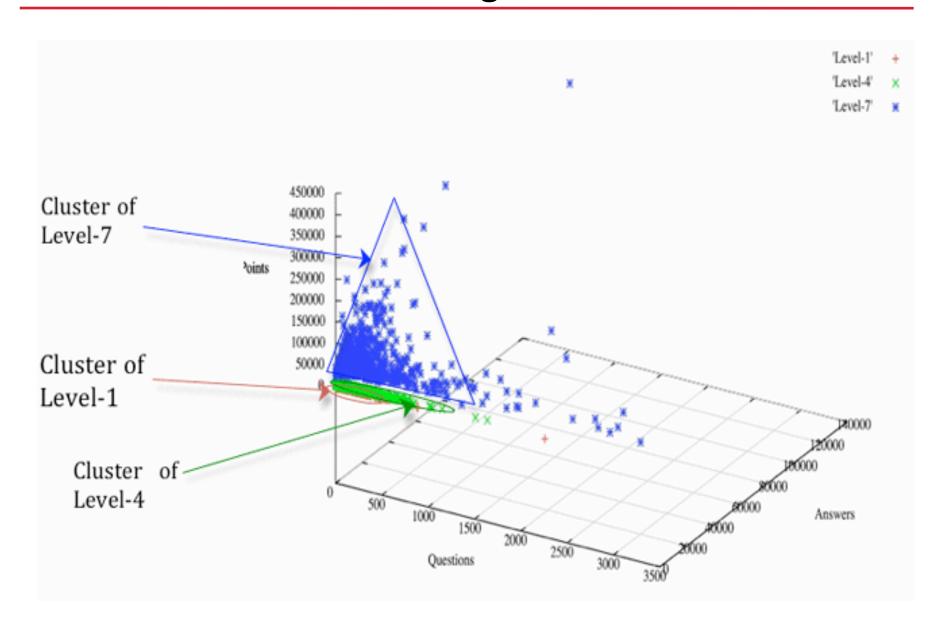
Shah, C., & Pomerantz, J. (2010). Evaluating and predicting answer quality in community QA. In *Proceeding of the ACM SIGIR 2010 Conference*.

### CQA users typically have

- Name (real and screen)
- Location
- Gender
- Age
- Profile picture
- History (no. of questions and answers)
- Points
- Level, rank, or reputation







### **CQA Features Summary**

#### Question

- Subject length
- Content length
- No. of answers
- No. of comments

#### **Answer**

- Content length
- Reciprocal rank

### **User (asker/answerer)**

- No. of points
- Level
- Stars received
- Questions answered
- No. of best answers
- No. of questions asked
- No. of questions resolved

### **CQA Evaluation Summary**

- CQA's unique challenge to evaluate content quality.
- Merely looking at content features not enough. Person (s) behind that content is an important aspect.
- A person's social capital (reputation/authority) is vital in perception of quality produced by him/her.
- Answer position is equally important in predicting its quality.

# Day 4

**CQA Experiments and Conclusion** 

### Today is CQA Lab!

- Collect a sample of questions and answers from Yahoo! Answers
- Extract relevant features
- Run correlations and other statistical analyses
- Prepare and/or present a summary of findings