# An Ontology-Based Adaptive Personalized E-Learning System, Assisted By Software Agents on Cloud Storage

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## **ABSTRACT**

Yahoo! Answers is an online platform wherein customers can submit questions and answer other users' questions. It is a user knowledge base oriented and analyzes the user behavior. We also propose a friendship-knowledge oriented Q&A (Question & Answer) Activity. Collecting and analyzing a huge amount of Q&A activity data driven long time. We believe that the results presented in this paper to understanding the collective intelligence in the web Q&A and finding the best answer. To avoid owner hacking here word alignment is used. The design of spammer detection algorithms and distributed Q&A systems. We also propose word alignment model based quality assessment algorithm for the purpose of relevant query and best finding answers.

Keywords: Knowledge sharing, Question and Answer (Q&A) systems, Yahoo! Answers and Word Alignment model.

## 1. Introduction

The past few years and are receiving the attention of researchers in the educational field as possible supports for formal learning or opportunities of informal learning. Their learning potential, however, cannot be taken for granted just because learning has long been recognized as social in nature. Social spaces can widely differ as concerns aims, operation and internal structure, and all of these factors affect their usability and affordances. It is therefore necessary to investigate the potential of different types of social spaces in order to highlight their possible contribution to improve and innovate education. In this paper, we take into consideration a kind of social space that has so far been scarcely considered in the educational field, that is, question answering (QA), with the aim to understand if informal learning opportunities are actually provided by such online environments. Social QA services have been widely developing in the past decade, with the mission to be laces where everybody can contribute what they know, because everybody, not only teachers and experts, has some knowledge to share. Such services are also viewed as an expression of the collective intelligence of all of their users.

Online social spaces have become increasingly popular in the past few years and are receiving the attention of researchers in the educational field as possible supports for formal learning or opportunities of informal learning. Their learning potential, however, cannot be taken for granted just because learning has long been recognized as social in nature. Social spaces can widely differ as concerns aims, operation and internal structure, and all of these factors affect their usability and affordances. It is therefore necessary to investigate the potential of different types of social spaces in order to highlight their possible contribution to improve and innovate education. In this paper, we take into consideration a kind of social space that has so far been scarcely considered in the

educational field, that is, question answering (QA), with the aim to understand if informal learning opportunities are actually provided by such online environments. Social QA services have been widely developing in the past decade, with the mission to be laces where everybody can contribute what they know, because everybody, not only teachers and experts, has some knowledge to share. Such services are also viewed as an expression of the collective intelligence of all of their users. QA spaces, and in particular Yahoo! Answers (YA), which is currently one of the largest and most visited, are extremely popular, with hundreds of thousands of users and new questions every month. Proposed a social network-based system for supporting interactive collaboration in knowledge sharing over a peer-to-peer network.

They have become prominent places for online information seeking, especially since answered questions remain available in the website's database and can be retrieved also through search engines. This exploratory study aims to shed light on the learning potential of QA spaces by building a descriptive picture of the kinds of information exchange that actually Take location in it and of the viable gaining knowledge of-oriented attitudes confirmed with the aid of its customers. To this stop, we selected and analyzed a small corpus of posts within the Languages phase of the Italian chapter of YA. We select to pay attention on one subject matter, due to the fact it is identified that there are extensive variations amongst customers 'involvement and conduct in special content categories, and as a result, the common outcomes of a transversal analysis might possibly fail to faithfully mirror the actual scenario in any category.

We selected the Languages section for our evaluation, due to the fact languages are a have a look at difficulty, but they're extensively utilized in regular life to speak in the present day globalized global. This fact presents the opportunity for YA

# Volume 1, Issue 3, Pages 278-280, April 2017

users to ask each educational and really realistic question, leaving apart the kind of vague, opinion-orientated questions (commonly known as "factoids" inside the literature which can be regularly diffused inside other topics.

#### 2. PROPOSED SYSTEM

The framework uses language models to exploit categories of questions for improving answer search. Expert location systems have been proposed to facilitate users to identify the experts of interests. Proposed a market-based Q&A service called Mi Mir, in which all questions are broadcasted to all users in the system. Proposed a social network-based system for supporting interactive collaboration in knowledge sharing over a peer-to-peer network. Proposed a social network-based system for supporting interactive collaboration in knowledge sharing over a peer-to-peer network.

# Advantages

- These systems take advantage of the collective intelligence of users to find information.
- Estimate the expected time of occurrence of future events of interest.

## 3. PROPOSED SYSTEM ALGORITHMS

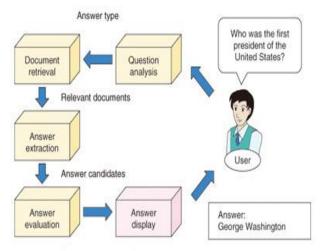
#### Spammer detection algorithms

We finally discuss the implications of our findings on the design of spammer detection algorithms in Q&A systems and a distributed Q&A system that integrates both web Q&A system and OSN-based Q&A system.

#### Load balancing algorithm

Distributed Q&A systems use load balancing algorithm to evenly distribute the traffic among different experts. However, the assumption that every expert is willing to answer questions does not hold true.

# 4. PROPOSED SYSTEM ARCHITECTURE



Scored answer candidates

## Methodology

Methodology of Our Study We extracted a corpus of 500 questions and related answers from the Languages section of YA Italy posted and resolved within a few days in December 2013. We limited our choice to "closed" questions, that is,

questions whose authors had already chosen the best answer, in order to work on a consolidated situation. None of the classification approaches described in the literature, therefore, appeared suitable to support our analysis, and we needed to work out our own approach.

Our choice to base this exploratory study on these aspects is due to four main reasons:

- ➤ All of them underwrite in some way to shed light on users orientation to knowledge
- ➤ These pieces of information are usually found in the posts themselves and, hence, can be acquired straightforwardly without requiring inferences on our part
- ➤ These are the only learning-related clues that we have detected by analyzing the posts
- ➤ They are sufficient to draw a meaningful picture of the language learning potential of the considered QA space.

#### **Modules Description**

- Yahoo! Answers
- Question and answer platforms
- Collective intelligence
- User behavior

# Yahoo! Answers

Question and Answer (Q&A) websites such as Yahoo! Answers provide a phase somewhere users can post queries and obtain answers. A number of investigates have been accompanied on YA in other aspects. Considered the content features of the answers, based on which, they tried to expect whether a specific answer will be chosen as the best answer. Studied the quality of human revised documents on the Internet using the answer grades in YA. By using content analysis and human coding, the structure uses language replicas to exploit categories of questions for cultivating answer search. Performed an investigation on the YA data focusing on the user base, and studied several aspects of user behavior, such as activity levels, roles, interests, connectedness and reputation. Liu et al. presented a general estimate model with a variety of content, structure, and community-focused features to predict whether a question author will be satisfied with the answers submitted by the civic participants.

# Question and answer platforms

In the impending, we will additional extract the knowledge base of the non-top providers by data mining their question and answer traces and inspects the association between their information base and behaviors.

## Collective intelligence

In an OSN-based Q&A system, users post and answer questions through the OSN to take advantage of the collective intelligence of their friends. By synergistically integrating the web Q&A system and OSN-based Q&A system through building a social network in web Q&A system, both systems' shortcomings can be overcome. To achieve this, it is important to understand the nature and impact of collective

# Volume 1, Issue 3, Pages 278-280, April 2017

intelligence in the OSNs of both systems. YA as a knowledge-oriented OSN, we have investigated the collective intelligence in the YA OSN in terms of OSN structure, user behavior and knowledge, and the knowledge base in a user's social network.

#### User behavior

The main contribution of this paper is an extensive trace-driven analysis of OSN structure, user behavior, user knowledge base and their relationships. Unlike many other friendship-driven OSNs that are centered on building social relationships, YA is a Q&A site that is centered on sharing knowledge. In YA, user A connects to other users that are knowledgeable in the topics A is interested in. As the Q&A OSN is knowledge-oriented, it is very important to examine the user knowledge distribution and associated user behaviors. Behavior, such as activity levels, roles, interests, connectedness and reputation. As far as we know, our work is the first to study the structure, user behavior, and user knowledge in the YA OSN from the perspective of knowledge sharing oriented OSN. We have investigated the collective intelligence in the YA OSN in terms of OSN structure, user behavior and knowledge, and the knowledge base in a user's social network. Our study shows that the YA OSN has some very distinct features compared to other major OSNs.

#### 5. EXISTING SYSTEM

The power-law dissemination is caused by the privileged attach process, in which the probability of a user A connecting to a user B is proportional to the number of B's existing connections. The user information in the YA OSN from the knowledge sharing in collective intellect of users to find information. It is suitable for non-factual of context-aware queries (suggestions, recommendations and advices), which are more subjective, relative and existing connections.

## Disadvantages

- Characterize and compare the performance of different QA sites in which an event of interest occurs
- Identify relevant factors that exert a positive or negative influence over the happening.

## 6. CONCLUSION

Regarding YA as a knowledge-oriented OSN, we have investigated the collective intelligence in the YA OSN in terms of OSN structure, user behavior and knowledge, and the knowledge base in a user's social network. Our study shows that the YA OSN has some very distinct features compared to other major OSNs. It has low level link symmetry, exhibits weak correlation between in degree and out degree and nodes tend to connect to nodes with different degree from their own. By studying the knowledge base and behaviors of users, we find that 10% of the users contribute to 80% of the best answers and 70% of the all answers. The first 12 most popular KCs include 80% of the questions among all questions. The top contributors consistently and selflessly contribute knowledge to the system. The KCs of the users are highly clustered since users are likely to have knowledge within the same general KC. By studying the knowledge base in a user's social network, we find that the knowledge base of a user's social network is small because common-interest users are likely to be clustered. Also, a strong pattern of homophile is observed. We have outlined how these observed properties can be leveraged for spammer detection and distributed Q&A system design. In the future, we will further extract the knowledge base of the non-top contributors by data mining their question and answer traces and investigate the relationship between their knowledge base and behaviors.

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