Chapter 11

Wiki-Dic 2.0: An E-Voting Approach to Exploit User-Generated Content

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ABSTRACT

We may define e-voting as the process of evaluating an article or ranking a translation of a specific scientific term in a relevant web site. This all process of participation and interaction is one of the Web 2.0 definitions, the collaborative knowledge. On-line dictionaries have to consider this factor in order to succeed. They have to be interactive and they have to attract and support the users’ participation and contribution. In the proposed e-dictionary, namely “Wiki-Dic”, some experts begin a dictionary, they start filling it with words and translations, and all users are allowed not only to look for the translation, but also to vote for it. The most voted translations go to the top. In addition, appropriate security countermeasures are used to deal efficiently with the “one vote per person” problem and to avoid malicious software. Furthermore, an intelligent algorithm that is giving weights to the voters is implemented. In this way, the weights are computed automatically from our application, based on quantitative and qualitative information as well.

INTRODUCTION

Web 2.0 is basically the transition of a web site from an isolated information silo to interlinked platforms. According to the user, those platforms look and feel like locally available software.

Moreover, in Web 2.0 people can easily generate and distribute content (Wikipedia, 2008).

Web 2.0 is already heavily using e-voting. Indeed the implementations of e-voting are many nowadays, and they can vary from simple local plebiscites (asking users to vote for expressing their opinions on certain issues, e.g. for the location of the new polluting Power Factory), to the elec-
tion of the president of the United States. Internet voting goes beyond the classical voting models having the ability to dynamically present in real time the aggregated ranking (Tennenholtz, 2004).

We can easily extend the definition of e-voting to the participation of the users of a web site or portal, on just choosing the most preferable translation of a word, or even choosing the candidate they prefer as local representative in city council or elsewhere.

One of the major problems faced by various dictionary producers is the factor of time change. By the time a dictionary is finished it is almost outdated. New things, new definitions have arisen, plus some of the old ones do not exist (or are not accurate) any more. The dictionary has to be revised, re-print, publish the errata etc. Another issue is that such a work is subjective to the author (field of expertise, community subjective etc). All these issues require an adequate solution: the dictionary may be published on-line and the users-readers should be given the ability to place new words/translations and to vote for every translation they see. Thus, the more ballots one particular translation gets, the more rises to the scale of the available translations for this specific term-word. Users can simply use (read) the translation on the top of the list (obviously the most popular one), or they can vote for one of the less accepted (“lower”) ones.

The basic idea is this: a dynamic web page is launched and the administrators provide the basic terms. As users visit the page, they add new definitions or new words for translation. Other users add a translation, or vote for an existing one. The only thing the administrators have to do is to make sure that the page runs smoothly. No irrelevant suggestions (on purpose), no sexual discrimination, use of proper language etc. As the dictionary grows, the web page attracts more users who add more definitions, and so on.

**E-VOTING PERSPECTIVES**

E-voting is under study of the Council of Europe (Remmert, 2004). Application types (categories), motives/advantages, and requirements may provide three major perspectives for analyzing critical e-voting issues.

E-Voting process may fall in one of the following four categories (Mitrou, Gritzalis, & Katsikas, 2002):

a. public elections and/or referenda at state and/or local level (with binding effects),

b. internal elections and similar decision procedures,

c. advisory polls for decision-making and advisory referenda, and

d. internet polls.

As declared in the 2004 Council of Europe recommendation for electronic voting, the most important motives for implementing e-voting are (CoE, 2004):

1. enabling mobility of the voters,
2. facilitating the participation in elections from abroad,
3. raising voter turnout by offering additional channels,
4. widening access for citizens with disabilities,
5. reducing cost,
6. delivering voting results reliably and more quickly.

The first four are obviously helping and serving the voters, while the last two are significantly reducing the cost and the labor needed to perform any kind of an election.

Finally, it must be noticed that the elimination of direct physical intervention entails a careful management of the implications of virtual par-
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