The Vblogs: Towards a New Generation of Blogs

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Abstract

This article is part of a scientific research on the Web evolution, more precisely recent collaborative Web 2.0. It aims at suggesting an improvement of the blog, which is one of the two unique tools of publishing information at the level of Web 2.0, by trying to overcome the major problems that concern information quality, over-information and, finally, copyright management. In this context, we set the goal of answering the questions: who publishes what, when, where and what is the relevance degree of this information by adding the concept of content validation. To target this goal, we will establish a committee for blog's validation, which will be in charge of validating the information generated by users, in addition to another committee of monitoring publications on the blog, which will have as task: following the process of publication since the information creation to its deletion or final archiving. Information will not be published directly by a user on the blog but pre-published, submitted to validation in a non-official part of the website. Such ameliorations will make available to Internet users a new category of high quality information, validated and well-managed.

Keywords: Web 2.0, Vblog, validation, information quality..

1. Introduction

Since its creation in 2005, the Web 2.0 or collaborative web, as advanced by Tim O'Reilly [13], is proposed as a new mode of production, communication, sharing and dissemination of information by giving the opportunity to the users to become collaborating producers of the Web content [9]. Unlike web 1.0 where most of the content was made by professionals and administrators of the Internet, Web 2.0 involves more users by generating a limitless interactivity weaving thus, social communities. This basic change is a real evolution of the web, which has undoubtedly increased the quantity of information allowing thus, the possibility of creating a collective intelligence [12]. Thanks to this vision of the web, thousands of online services on the net, among which some are for free, have emerged to replace the software acquisition and installation. According to Richard

MacManus, "The web 2.0 is social, open and corresponds to new interfaces and modes of search and access. It is a ready platform to embrace educators, media, politics, communities, since practically, each has his own content "[11]. As for Devis Web 2.0 can be defined as a philosophy of social openness that aims at abolishing individual control in favor of the larger public participation "[3]. Web 2.0 is actually a series of existing technologies' use principles, suggesting a new mode of creating, publishing and sharing information on the Internet. It consists of approaching the web from different dimensions: technical, sociological and editorial. It is important to point out that the success of Web 2.0 is due to the large number of participants; for instance, in 2007, not less than 24% of Europeans published online or participated in forums [16]. Web 2.0 is characterized by the fact of possessing many tools that enable the production, the communication, sharing and dissemination of information, by involving more users and generating an infinite interactivity weaving thus, social communities. In the context of Web 2.0, users can create contents of all types, including videocasts and podcasts [6], quickly and simply by using blogs, and can comment on them, work collaboratively through wikis, introduce oneself and being introduced to others who share common interests on social networks, and be informed about news through RSS feeds. As for research, one can score, through the tags, information and share it while organizing it. Among the advantages of Web 2.0 are simplicity, flexibility, users' involvement, facility of publication, wide range of tools and the possibility of being informed about the news through RSS feeds. In the next paragraph, at the very beginning, we present the tool blog of web 2.0, then we will expose the limits of blogs namely, those related to users at first place, and then those related to information at second place in paragraph 3; thereafter, we will present the Vblog tool which is an extension of the blog tool of Web 2.0 by adding the concept of its content validation; Finally we will end the article with a conclusion where a set of perspectives is presented.

2. Blogs

Web 2.0 is characterized by the fact of having many tools that enable the production, communication, sharing and dissemination of information involving more users and generating an infinite interactivity weaving thus, social communities. The following table presents the most important tools of Web 2.0 and the utilities they provide:

Table 1: Utilities of Web 2.0 tools

Tool	Utility
Blog	Regular information publication Commenting information
Wiki	Editing content Collective Intelligence
Social Network	Creating online communities Sharing files and opinions
RSS feeds	Regular information monitoring
Tag	Improving and personalizing research
podcast	Sharing audio materials
Videocast	Sharing videos materials
Blog	Regular information publication Commenting information

The Web 2.0 has two types of publication tools that are blogs and wikis. Blogs are amongst the most prevailing tools on the internet, they are characterized by their simplicity, ease of use and they allow users to publish regularly information or comment on it in the context of Web 2.0. They are part of the strengths of Web 2.0 since they permit collaborative work; they are less costly or even for free and provide a space for sharing knowledge, allowing thus, a greater freedom and capacity of interaction, archiving articles and using the feature of grouping by specialty. We can define a blog or a web log (web diary) as an online diary that allows a user to publish regularly information or comment on the news about a specific topic [4]. Blogs, generally, are free to access and in case they are private, they are protected by password which replaces the vision of the instant messaging and chat. They are open to dialogue with the "Comments" function. As a content tool publishing and research and business intelligence, they allow informing users about the news in a given realm [10] and offer a vast area of knowledge sharing [2]. Like a book, a blog is identified by an IBSN (Internet Blog Serial Number), given by individuals and assigned a number in a list of over a thousand blogs. The blog can be the appointment of individuals or collective contributions of writers, journalists, consultants or members of a business, of retired experts, enthusiasts …and so on. It is a veritable

collaborative communication tool [5]. Some people regards it as a journal that is available on the web, permitting an easy publication of news (articles, notes, tickets) in bloggers language) on a subject, to illustrate it with multimedia materials and share one's ideas while collecting comments on one's articles [8]. It is a space of opinions, research and creation in which one or more authors publish over time contents as texts, images, media objects and data, sorted in reverse chronological order [10]. The strengths of blogs are: the ease of use, speed and facility of publication, wide freedom, great capacity for interaction, low or even free cost, archiving of articles and the feature of specialty grouping. Blogs also have limits, the classification of limits of blogs and the limits themselves will be presented in the following paragraph.

3. Blogs limits

Blogs are based on user participation to create the content and form communities that gravitates around a common area of interest to share, communicate and disseminate information. However the information quality management is absent in this type of tools as long as the information may come from different types of users without considering their scientific level, their ages and specialties. In addition, no audit strategy or evaluation is taken into account. We can break down blogs' boundaries into two parts. One concerns users, while the other concerns information contained in blogs.

The types of the problems of the blogs are illustrated in the following figure
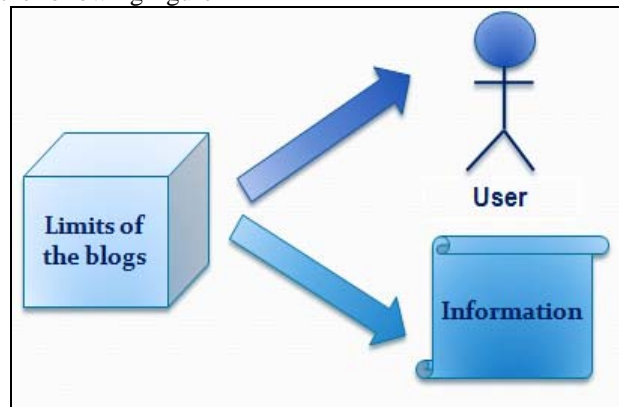

Fig. 1 The types of the problems of the blogs

3.1 Limits related to users

• High Rate of abandonment

The blogs are created and die quickly because of the very high dropout rate. Customers can not keep the same pace of participation all the time and quickly give up

participating in thousands of blogs per month. This is due to the large number of pages in which comments quickly increase in size with too much information while updating the blog is not regularly and promptly done.

- Few participants

Users rarely participate in the content production and satisfy themselves with simply reading, except few users who participate.

- Low participation rate

The limited number of content creators who participates in the development of blogs is characterized by a low rate of participation. This implies two types of producers, permanent producers and occasional producers.

- Heterogeneous participations

The small number of users who participate do not participate in the same manner and the same frequency; the participants are a lot when it comes to simple actions (reading, saving a bookmark, commenting), but they are less active when it comes to more complicated participation (writing, collaborating).

- The lack of motivation to participate

Blogs do not motivate users to participate regularly and regards those who produce and those who consume as identical. That is the reason why the participation rate is very low.

- Anonymous participation

Some information on blogs are anonymous, since an author can publish the information without any authentication on some sites or identify himself with a fake authentication using nicknames that do not allow to locate and show her/his true identity.

3.2 Limits related to Information

- Poor information quality

On blogs, everyone can create, publish, share, connect, influence, collaborate; this is a positive aspect, yet, what about the quality of what is published and to what extent is it relevant? To participate, one needs at least a minimum of knowledge and skills or may be even trainings before embarking on producing a relevant topic.

- On Information

The current mode of blogs gives a large number of pages and comments that increase in size quickly, over time, which requires readjustment from us. Everyone writes what he wants and hence there is no structure, no consistency and no convergence. It is a mixture of content coming from multiple types of users, with no classification.

- Redundant information

On blogs, you can find one ticket on several different sites. This ticket can be a translation of a text or a summary. In this context the user is lost and it becomes therefore, necessary to control the redundancy of the content by

deleting redundant information and the most troublesome comments.

- Dispersed and poorly sorted information

Comments are sorted with a reverse chronological order, while one can find good comments lost among useless ones. Several new tickets of less importance come to conceal important once. No sorting according to relevance or interest is made.

- Absence of copyright

Blogs pose the problem of copyright, especially the problem of reproduction of some contents. One can even find a ticket on several sites without knowing the original source.

- Lack of security

On blogs, virtual persons are infinitely created, sometimes for propaganda purposes and publish a lot of contents on the web that violate the general principles of debating and consents.

- Very short information shelf life

The duration of the information life on blogs is very short, even if it is of great importance; as long as other important information will be created, they will replace the first important information on the main page. Information is not archived on the servers in the order of relevance, but in reverse chronological order which is a major limitation of blogs. Responsibility for the blogs amelioration is a shared responsibility; everyone must participate to address this issue and find practical and effective responses to them in order to improve them.

4. Vblogs

Since their emergence, blogs depend on users' participation to create them and feed them. The point here is not communicating, publishing and sharing any type of information but rather producing good information. Moreover, for the same type of user we should not regard:

- The one who produces and the one who only uses as equals.
- The one who produces a lot and the one who produces a little as equals.
- The one who produces the right information and the one who produces the wrong information as equals

That is the reason why we propose within the philosophy of Vblogs to restrict access for non-producers or require from them to pay with a virtual currency so as to access all the services and the contents.

- Identification of users

Each user must be identified by a fingerprint reader and a webcam each time he connects to the Vblog sphere. Authentication must be made on a secure site with a unique identifier on every Vblogs and will be granted once

and for ever. This new method will provide more security and less piracy and allow a user who wants to browse a clear web that only has good information; however, the user is known and can be prosecuted in case of fraud.

• Classification of information on Vblogs

Information produced on Vblogs can take several formats such as text, image, podcast and videocast. It can be divided into five classes that are represented in the following table:

Table 2: Ranking of information on Vblogs

Symbol	Information type	Information significance
G	Good	Validated and relevant
M	Medium	Medium validated
L	Low	Submitted to corrections
E	Erroneous	Not validated
C	Opinion or comment	

• Categories of web users

We propose creating a committee for information validation, under the responsibility of experts who will be in charge of monitoring, sorting, grading and afterwards, deleting or final archiving publications. To this end, we suggest fragmenting Vblogs' users into three groups, as represented with their roles in the following table:

Table 3: Categories of Vblogs' users

Actor	Role
User	Reads and produces content
Validator	Validates what is produced
Expert	Publications' monitoring

In this context, participation in a Vblog cannot be limited in reading or producing information in the form of Vtickets or Vcomments, but may also take other forms. The following figure shows the forms of participations in Vblogs by users:
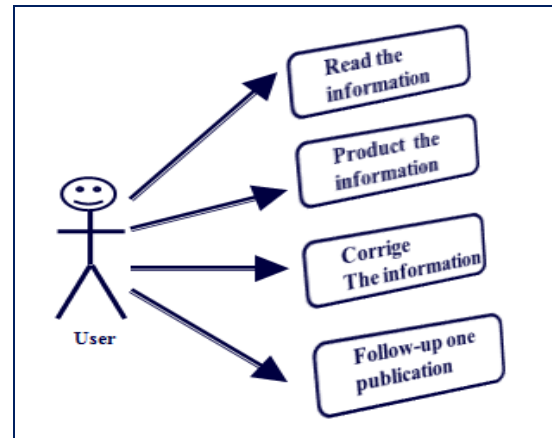

Fig. 2 Forms of participation in Vblogs.

Vblogs do not include anonymous interventions and poor quality or replicated information, but it shows the producer's identity, production date and the class of the information produced on the content.

Unlike blogs which have a single level of information, Vblogs offer four levels of quality information with one information clearly identified and sorted in order of relevance. The following figure shows the global architecture of Vblogs
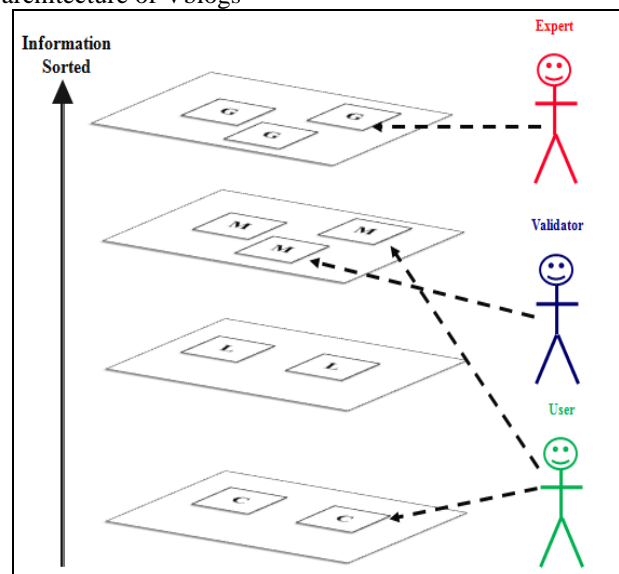

Fig. 3 Architecture of the Vblogs.

• Content validation

To validate content, an expert from the experts' community, specialized in the sphere, appoints two validators for any content submitted for publication. He publishes on the Vblog whenever both validators are in favor of the content to be published. If a validator accepts

the publication of the content while the other refuses the publication, a third validator will have the last word to decide whether the information will be published or not; However, certainly the produced information, if validated after the intervention of a third person, will be either of a medium or a low quality. In the other case, if the content was not validated it will not be published until the improvement of its quality be it a Vticket or Vcomment. A user can become a validator if s/he is recommended by two experts. In this case, the Vblogs will be organized in a hierarchical form classified, externally according to specialties and internally according to relevance, by experts who will publish only good, not redundant, non-reproduced, well sorted and validated information. They will proceed to the elimination of unnecessary information and will store the validated information in electronic archives.

- Content access

In Vblogs, our philosophy consists of limiting access for consumers and expanding it for producers and validators. Access to contents and services by types of users are represented in the following figure:
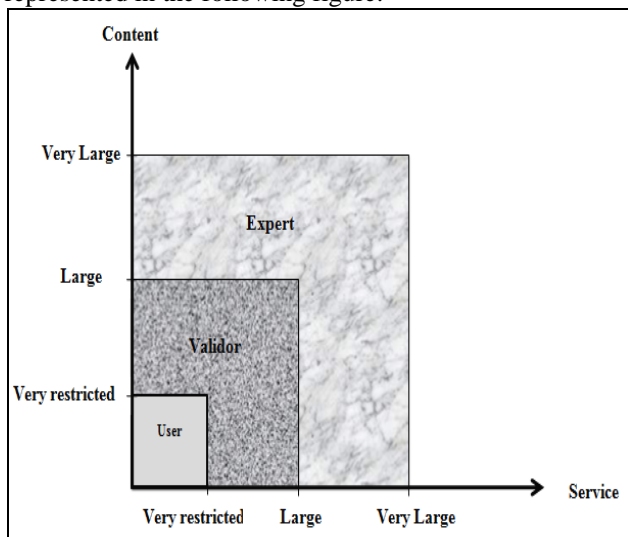

Fig. 4 Access to contents by Vblogs' user types

For instance, simple users, who do not produce the right information, will have a very limited access to Vblogs' content. Validators, who are the regular producers, will have a larger scale access by giving them the opportunity to access to the whole content made by users and the majority of Vblogs' services. Finally, experts will have the possibility to access all the content and also to additional services including secure data of Vblogs' management since they are in charge of administering it. They will have a percentage of advertisement revenues that are on the site to which they adhere. This mechanism that makes distinctions between those who participate and those who do not will urge a large population who do not participate to participate in order to have access to all documents hosted on Vblogs.

- Central Vblog

To know who published what and to avoid content duplication and to be able to manage copyrights, we propose to create a central Vblog where indexes will be stored in addition to abstracts and their producers. Before publishing validated information as Vticket or Vcomment, a check will be made at the level of the central Vblog. In case the information already exists, publication will not be allowed; otherwise, the information is accepted and will be attributed a unique number.

- Funding resources

In today's blogs, donations and advertisements are the main modes of collaborations' funding resources. In the new generation of blogs, that is to say Vblogs, the service will not be funded solely by donations or advertising; That is to say, on this part of valid and quality information of the web, in addition to the aforementioned resources we have also the contributions of users who do not produce to access various Vblogs' services.

4. Conclusions

Web 2.0 is the Web's new generation where the user becomes active and collaborative as opposed to Web 1.0. The problem in this version of the web is the information quality. The aim of our proposal is to answer the question about who publishes what, when and how. The information quality which is our main concern is bound to partitioning and classifying users and the produced information. In this new form, information is clearly identified, well structured, not redundant and eliminated when it is no longer useful. This will permit a better management, better reuse, and therefore a better research.

The integration of a virtual currency will urge users to participate more and take advantage from their experiences.

Many gains will be guaranteed on the levels of research time and efforts to find the right information, access will be free for producers while consumers will have to pay if they do not produce.

- Face recognition tools;
- Automatic synthesis and summary tools;
- Tools for organizing brainstorming sessions and creating collaborative projects;
- Selective dissemination of information tools.

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