Creative Contents Community

A Multimedia Contents Authoring Environment for a New Digital Community

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Abstract. A new paradigm is proposed for a network-based community called the "creative contents community". Typical examples of network based communities are bulletin boards and mailing lists, which have a "free talk" communications style but are not always productive. In the creative contents community, open and flexible human groups are formed with members having different skills, knowledge, viewpoints, etc, enabling them to create multimedia contents with a certain value. One of the models of such a community has many creators providing small pieces of a final output and a producer who gathers and edits these pieces into one artifact. A feasibility study was conducted at an elementary school where groups with creators and a producer were easily formed (i.e. students and a teacher). From the study, a newly developed authoring environment consisting of a Kids editor and a Producer tool was implemented in an experiment to create multi-media contents. The concept of the community model, the authoring environment and the results of the experiment are discussed in detail.

1 Introduction

Although great and rapid advances having been made in the hardware and software that support multimedia in the home, office, school or anywhere for that matter in daily life, opportunities are still limited for large populations of users to utilize the multimedia infrastructure fully. For users to receive a great deal of advantages from the coming information-oriented society, they should be able not only to consume information but also to enhance their creativity by producing and distributing information or software contents by themselves. A shortage of high quality content that can encourage people to participate and stimulate their creativity is widely expected.

On the other hand, networking technologies as represented by the Internet have been producing various types of new communities. Many of these communities
presently seem to have common features such as wide open participation, i.e. anybody can join any community freely because of this intrinsic characteristic of the Internet. Undoubtedly, this has been contributing quite a bit to an increasing number of end users and an increasing awareness of the need for popularizing computer literacy. These communities have much potential to produce new values that could not arise before the recent network infrastructures were introduced. This is because people who have very different backgrounds, skills, knowledge and cultures can gather so flexibly. As seen with mailing lists and chat corners, however, there have been many cases of a community being formed just for "information exchange" among "people holding some knowledge in common", not for producing new information or values. As a result, opportunities for deeply enjoying multimedia content or enhancing creativity have rarely been provided even to Internet users who are capable of operating computer tools.

Taking the above two viewpoints into consideration, the authors have come to believe that development of communities is a social necessity. Such communities should be open to a wide range of users and be able to stimulate or enhance creativity through the activities of making multimedia content, which would allow participants to produce yet unknown innovative value as the output of the communities. The authors call such communities "creative contents communities". To form such communities, "self-propagating contents" have been assumed to be essential, and a platform has been developed to promote such contents. To evaluate the effectiveness and usability of the platform in the real world, the platform was implemented in an experiment at an elementary school. The following part of this paper describes the platform which consists of a Kids editor and a Producer tool in detail, and briefly introduces how they can be used in an elementary school lesson.

2 Previous Projects

Groupware or CSCW might have a similar concept to what the authors are aiming at, in the sense that each group has a common objective of producing some artifact. The difference between them is that one side has closed groups while the other has groups open to the public. In other words, while members of communities do not necessarily know each other [1], members of groupware or CSCW know each other, and producing artifacts is somewhat beyond their expectations.

In artistic fields, several cooperative projects have been introduced. One example is the Renga project which introduces an idea from the traditional way of making poems in Japan [2] into modern network systems. Suppose some member presents an artificial work such as a design sketch on the Internet, and then some other member inspired by the work, provides his/her own work on the WWW in relation to the original one. The repetition of this cycle can be expected to yield a growth of the work or other innovative concepts. In this case, the participants are actually closed to certain individuals because they are expected to handle some drawing tools and to have artificial skills of a high level (even though this might not be intended obviously).

Widely known open community projects include digital communities such as Amsterdam Digital City [3], which conveys some real-world regional constraints into