Participatory Media and e-Culture

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Bericht über archäologische Arbeiten in Idikutschari und Umgebung im Winter 1902-1903
Motivation

• Internet is now recognized as an infrastructure for aggregating and sharing the power of people.

• User participation is one of the key concepts in “Web 2.0” movement.

• How can we design user participation for e-Culture?
Merits of Participation

• **Locality**: ‘where’ is important.
• **Diversity**: ‘what’ is important.

• **Locality**: local information that only people being there can collect (e.g. degree confluence project)
• **Diversity**: collect partial knowledge or personal ideas (e.g. Wikipedia)
Examples

• **Locality**
  1. Photographs of Past and Present
  2. DSR Imaginary Museum
  3. Citadel of Bam

• **Diversity**
  1. Senga Silk Road

• **Locality + Diversity**
  1. Digital Typhoon and Typhoon Front
Case Study: Digital Silk Road

• The goal is to create the cultural digital archive of Silk Road.
• Target users are not only experts, but also the general public (and kids).
• Web as a platform – every archive and tool is designed for the Web.
• Integrating heterogeneous data, such as images, text, maps and videos.
DSR Project - Portal Site
http://dsr.nii.ac.jp/

Digital Silk Road Project is a research project on creating digital archives of cultural heritage through collaboration between informatics and humanities. [Read More >>]

Latest News

* Senqa Silk Road
  The site is open to the public (only in Japanese).
  2007-08-23

* Photographs of Past and Present
  The site is open to the public. More photographs will be added.
  2007-08-23
Photographs of Past and Present
http://dsr.nii.ac.jp/past-present/

• Compare photographs in the past with those in the present.
• Photographs should be taken at the same place with the same composition.
How Can We Collect Them?

• You need to go to the place to take pictures, but, too many places to go by yourself.
• What you need is volunteers (or collaborators) being near the place.
• To ask volunteers, it is important to show small tasks that are clearly defined and easily to be done.
DSR Imaginary Museum
http://dsr.nii.ac.jp/imdsr/

- Collect photos, videos, and music recorded by the general people.
- Show them on a map with basic metadata.
- To become a collective album.
Citadel of Bam
http://dsr.nii.ac.jp/bam/

- Citadel of Bam, Iran, now World Heritage in Danger, was almost destroyed suddenly by the earthquake in December 2003.
- To keep record of Bam before the earthquake, we immediately started actions for collecting any materials recorded before the earthquake.
User Participation in Emergency

- We opened the Website just after 5 days of the earthquake.
- We finally collected 200+ photographs and one movie from volunteers across the world.
- The collection shows temporal changes of one specific location, difficult to be done by one person.
Collected Photographs
Before the Earthquake

Image Courtesy: Linda Kudrnovska, December 2002
After the Earthquake...

Image Coutesy: UNESCO Tehran Cluster Office, January 2004
User Participation for Diversity

- User participation is for collecting deep knowledge and various ideas.
- Experts’ knowledge is deep but partial, only within their expertise.
- Subjective impression of users is unique to users, and unpredictable.
- Participation leads to diversity.
• Users can make a tour (slideshow) by selecting interesting images and arrange them into a sequence.

• User-created tours show diverse ideas on interpreting images in a user context.
User-Created Tours
Locality + Diversity

• Locality: information which is local and only observable at user’s site.
• Diversity: information described from user’s own viewpoints.
• Locality and Diversity is combined for archiving on-going emergency events, in which many events occur simultaneously.
Case Study: Digital Typhoon

• Digital archive mainly for science.
• Collection of typhoon satellite images – 27 seasons, 144,000 images.
• Satellite images are integrated with heterogeneous data sources, such as sensor data, mass media news and participatory media.
• 850,000 p.v. per day at maximum.
Digital Typhoon
http://www.digital-typhoon.org/
Diverse Users and Usage

• Searching the past database, mainly for learning from historical data in research and education.
• Checking the latest information, mainly for supporting decision making by industry and government.
• Obtaining alternative information that mass media does not report.
Why User Participation?

• **Satellite images** are not enough to know about events on the ground.
• **Mass media news** are not enough to know about events at many places.
• **Sensor data (AMeDAS)** are not enough to know people’s reactions.
• **Participatory media** can compensate the lack of information.
• Trackbacks from weblogs.
• Geographic coordinates are based on zip codes.
• Mobile mails are acceptable from Sep. 2007.
How People Participated?
Participatory Media

- Local and personal information has been aggregated in near real-time.
- Personal information may not be so reliable, but is more emotional and speaks to the heart.
- Linkage of objective and subjective information will create a multi-facet information source.
Summary

• **User participation** has a large impact on the Internet, and e-Culture is better to take part in this movement.
• **DSR project** realized some user participation in a cultural domain.
• **Digital Typhoon project** challenged more active user participation in a scientific domain.
Future Work

• Typhoon Front 2.0 will be released in the beginning of September, 2007 at http://front.eye.tc/.

• Promoting diversity and raising quality (and blocking spams) at the same time is a challenging issue.

• Design a system so that participation itself is entertaining and rewarding.
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