Integrating Cultural Content and Information Technologies in Cross-Media Platforms

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Cultural products are consumed by a minority and little marketing research is done to meet offers and demands. A larger base of potential consumers is an important requirement for fund raising to allow to continue the production of services and cultural products. Widening the audience implies also to emotionally engage people with different cultural background and cultural expectations. Information technology has the potential to affect the cultural sector introducing new model of fruition, breaking the barriers of time and space constraints and integrating different platforms as delivery channels. We discuss some project proposals.

1. Introduction

There is no great concern in modern Italian society about cultural demands and there is little marketing research going on about how to meet offers and demands. The cultural sector is rather minoritarian and is enjoyed by an elite. We give a few numbers: only 10% of the Italian population go to concerts or operas, 20% go to theaters and the 30% visit art shows or exhibitions [6].

An enlargement of the demands of the cultural offer can only be achieved by introducing dramatic changes in the present system of cultural services. The last century model of a well educated elite who consumes cultural products as a form of social recognition has become obsolete. Cultural products need to find a larger base of potential consumers, in order to allow the necessary fund raising and provide the financial resources to continue the production. Widening the audience implies also to take into account different way to emotionally engage people having a variety of cultural background and different cultural expectations. For instance, cultural services can assume unexpected and new leisure forms to become appealing to a wider and younger audience and new form of hybrid products, carrying their cultural content in less traditional ways, could find their place. The emergency of new media can play an important role in envisioning new form of fruition and delivery [4] [5].

There are observable trends triggered by information technology with the potential to affect cultural sector that should be explored more widely to be consolidated: an increasing number of delivery channels, that integrate media traditionally separated, a mixture of new form of production and consumption and a reshaping of the time-space model of fruition. We assist to a crossplatform integration of content. A visit to a museum, for instance, is not limited in time and space to the actual physical presence in the building, but can be extended by reading the printed catalogue or the web site. An exhibition can be augmented by using audioguides, hand-held devices, multimedia interactive applications on the web or on stand-alone installations. These new tools allow users to re-configure at any time their path, according to their interests and personal needs. On the other hand these tools pose a double challenge to designers: on a semantic level, it is required to transfer a content in a a new medium with its own technical features able to support it; on the expressive level, it is required to give the product identity in a visual coordinated design [3].

The emerging model of fruition opens different perspectives in the enjoyment of services. New technologies change the consumption behavior, breaking time and space boundaries and allowing a mixture of events and interactions traditionally unconceivable. As an example: broad-band Internet can bring at home in real-time a live event, to which one could usually participate only in institutional places out-of-home. Moreover, the video streaming can be embedded in application requiring active interaction and allowing communication with other users.

We see a number of similar phenomena that can be discussed: the changing of the TV traditionally modelled on the concept of unique center of production, that delivers the same content, good to everyone at the same time, to a new model shaped by Internet, easing the rise of virtual communities of praxis. In this change of perspective we quote the *Telestreet* experience, where local TV's are edited by the community at a very fine granularity, for instance at the level of apartment condo [7]; or the *BookCrossing* experience, an infinite book exchange that invites people to share their most loved readings, leaving them in specified physical places [8].

These concepts have been explored in a case study, Genoa 2004[1], with the intent to compliment the official program and to experiment with communication technology. The official Genoa 2004 calendar was structured in three main themes: Genoa, the *City of Arts*; the *Capital of the Sea*; and the *Contemporary City*. We used these themes to make proposals of cultural products and services of new conception and to implement prototypes. These proposals have been discussed in the frame of a semester long laboratory for forth year students in Industrial Design at the Politecnico di Milano.
In particular we used the following guidelines as evaluation criteria of the proposals:
- High level of interactivity;
- Innovation in the time scale and space model of fruition, breaking the constraints of the everyday schedules and calendars;
- New content to go along with the traditional one; and
- Crossmedia platforms as possible delivery channels.

The interaction design foresees that users should be responsible for their own agenda, allowing them to develop flexible and personalised material and to share with others. A key requirement is the time factor: most of the cultural products and services are time sensitive and being flexible in time is critical for an innovating product. Most of the events in a traditional programme are scheduled according to a calendar: an event takes place one day at a given time, may call for participation hundreds or even thousands of people and thereafter be over. The challenge in the use of technology is to overcome these limitations and to allow participation to the event in a flexible way both at the preparation stage and int the aftermath, building a more consolidated interest in the audience, that can have follow-up and be shared later on. A relevant point of the proposals is the creation of a community of users: the projects should support with various means a virtual space for personal exchanging. Users interact through cellular phones, sending messages to web sites and use local TV's.

2. A discussion of selected proposals

In the following we discuss the rational behind three projects that we select as the most meaningful and adherent to the given framework, embodying our goals. In these selected projects as well as the others, the complete process of use and consumption of the cultural event has been designed involving the use of different devices and tools: for instance, users receive their first information by TV spot or advertisements or via local newspapers; upon registering on a web site users can receive information on the schedule via sms on mobile phones, that can also be used to interact with the web site; arriving into the city of Genoa they interact with totem distributed in relevant points or receive a brochure at info points; in some cases hand-held devices are introduced as a useful tool to program the visit with a personal perspective and by returning them one could ask to master a CD with the information they got in touch with during their visit and pictures of the places and so on. These projects have been demonstrated as base for a discussion at a panel held among educators at SIGGRAPH04 [1].

2.1 Magazena

Magazena (*zena* means Genoa in dialect and the project title is a word game alluding to *magazzino* meaning warehouse in Italian) is a proposal of a creativity laboratory in an unused industrial building

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[1] Genoa has been designated as the European Capital of Culture 2004, along with the French city of Lille, by the Government of EU.

at the old port and a virtual community of music, video and digital art lovers. Users interaction takes place through a P2P software application for file exchange with home made audio and video as well as more mature products to present in the site show case. The mood of the city is captured by sampling city noises and industrial sounds from surrounding shipping activities. An editorial board from time to time set different themes. The collected material is mixed with live images and sounds, taken via web cams located in busy city places, by DJ/VJ during the final show in the *Officina Magazena*, the building chosen for the event.

Fig. 1. Still frame from the video spot to advertise *Magazena* event with an animated mascot.

2.2 Remescià. Your ideas live

Remescià in dialect means to mix and blend. The application concept is based on the idea of editorial contributions from the audience, to allow to express their desire to share and participate. Anyone can submit a drawing sketch, an image, a photograph or even a sound in a *remescià* of feelings and sensations. The cross-media platform includes: four physical locations in town, plus one virtual location in the net, a web site integrated with a street TV channel, and a magazine: each media plays a different role.

The web site is more informative and becomes the virtual place for collecting materials. The interactive TV creates atmospheres and suggests imagery, where nothing is defined completely and everything is fleeting and transient. The physical locations are the places of the Genoa nights, devoted to the town's artistic life. The magazine enables contacts among travelers and expresses a strong call for participation. The material submitted is constantly re-shaped by an editorial board as life in the city flows. The traveler is invited to share the colors and sounds of the city.

Fig. 1 - Still image from the video spot *Remescià* simulating the information flow between the community and the editorial board through the delivery channels.

2.3 Controsenso

The goal of this application is to reveal in poetry the everyday experience of the city life of seeing-impaired people [2]. Controsenso in Italian means contradiction or counter-sense and alludes to the choice of story telling through images what blind people see and perceive of the city. *Controsenso* conveys the strong feelings that blind people have about their city in terms of noise, smell, lights and

shadows, paving and walls textures, that mean objects, places, people and shops: the thousands of details that go unseen at a conscious level for most of us.

Fig. 3. An image from the advertisement campaign: a boy with shut eyes.

The application is based on interactive videos, launched from web pages. The videos can be seen linearly or can be browsed: the navigation is guided mainly by voices and sounds. To alert you of a possible link while you are exploring with the mouse there is usually a change of sounds underlined by a slight change of sight. You have to listen to the images, so to say, to find your way through the story.

Two videos have been implemented in the prototype: *I muri sbagliati* (The wrong walls) and *La forma della luce* (The shape of light). The first video is a tour of the old city center, the streets of which are locally called *carruggi*: places that may appear crowded, noisy and disorienting to unfamiliar visitors who have to rely on their full senses to balance orientation. The people are the links to follow to develop the full story: one has to identify the key people to enter secondary videos (6) recorded in spots typical of the neighborhood: a vintage cloth and dress shop, a smith shop, an historical pub, the fish market, fruit and vegetable stands, a worker. In the second video the goal is to convey the feelings about lights as seen by people with very poor sight: mere sensations that vaguely translate forms and movement of objects in ways that are different for most of us. Interacting with the video we follow lights moving along walls, running in a busy street, swimming on the water: the city is returned by its light and sound rather than its landscape.
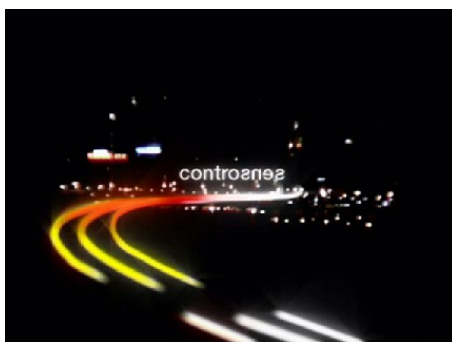

Fig. 4. Still frame from the interactive movie *Controsenso*. Seeing through the blind person experience: the perception of lights and shadows in the busy city night

Acknowledgements

References

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