

Officina Emilia (Italy)<sup>1</sup> & Crafts Museum (India)<sup>2</sup>

present

## **Homm\_ICT for Hands On Multi Media Laboratories in Museums<sup>3</sup>**

*Background notes for the workshops and meetings to be held*

New Delhi, India (11<sup>th</sup> and 22<sup>nd</sup> November 2011)

Modena, Italy (5-6 December 2011)

Milan, Italy, at Museo della Scienza Leonardo da Vinci (2<sup>nd</sup> December 2011)

London, UK, at LSE (12<sup>th</sup> December 2011)

London, UK, at the Victoria & Albert Museum (13<sup>th</sup> December 2011)

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### *Abstract*

Museums are identified as agents of economic, social and cultural development that can contribute to lifelong learning and sustainable innovation. Given this perspective, Officina Emilia (Italy) and Crafts Museum (India) propose to develop a set of ICT tools to support hands on multimedia activities in museums (HOMM).

A multidisciplinary team is needed to develop HOMM with regard to: the software application; an initial set of specific contents to be browsed; the test and evaluation of this proposal in a network of museums.

A series of meetings will be held in the next months to boost a discussion on this proposal.

### *Keywords:*

Museums as agents of development; lifelong learning; India, Italy; innovation and sustainable development; handicraft; local production systems; regeneration of complex competence networks; interactive multimedia; visitor-museum interactions before, during and after museum visit, supported by ICT

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3 The web site of the project is [www.homm-museums.org](http://www.homm-museums.org). HOMM has been presented: at the kick-off meeting of [INSITE](#) (Innovation, Sustainability, Information Technology), a EU coordinated action, Venice, April 7, 2011; in the poster session on occasion of two conferences: "International Workshop on Multimedia for Cultural Heritage" ([MM4CH 2011](#)), May 3, 2011, Modena (Italy); "The European Future Technologies Conference and Exhibition 2011", Budapest May 4-6, 2011 (<http://www.fet11.eu>). A preliminary presentation of this project is forthcoming in *Procedia Computer Science*, 2011, The European Future Technologies Conference and Exhibition 2011.

Eng. Mauro Mattioli, coauthor of this proposal, has developed the sw architecture of HOMM. We wish to thank for comments and support: Kanu Agrawal, Elena Bassoli, Marie Eve Celio, Ilan Chabay, Siddhartha Das, Agnese Fogli, Sudha Gopalakrishnan, Francesco Guerra, Pallavi Singh Keshri, Mushtak Khan, David Lane, Sander van der Leuw, Paola Mengoli, Barbara de Micheli, Giulia Piscitelli, Anita Rampal, Rossella Ruggeri, Anupam Sah, Maddalena Vianello.

## **1. A comparative perspective in high tech Italian mechanical districts and Indian handicraft sectors**

### *The proponents and the idea*

The HOMM project ([www.homm-museums.org](http://www.homm-museums.org)) is promoted by Officina Emilia Museolaboratorio of the University of Modena and Reggio Emilia, Italy, and Crafts Museum (National Handicrafts & Handlooms Museum), New Delhi, India. The two institutions are, respectively, a new research laboratory on education policy and development, and an old crafts museum.

Since 2000, Officina Emilia has developed hands-on laboratories in science, technology, history and society to enhance the understanding of the processes and contexts of local development, in order to support the education system and encourage innovation.

Crafts Museum, originally set up in 1956, has recently embarked on a major restructuring programme to upgrade its facilities and exploit the possibilities offered by its large collection of handcrafted objects and the vast endowment of Indian craft traditions and technical skills held by crafts persons.

The larger goal of the project is to develop a new identity for museums as effective centres of education for a much wider range of users, complementing the knowledge gained in more formal institutions of secondary and tertiary education with the unique inputs and approach that museums can provide. It is hoped the project will attract the participation of other stakeholders, especially policymakers, at national, regional and local levels, whose support will be crucial in broadening the project's reach to populations that are not traditional users of museums.

As a specific action towards this goal, it is proposed to develop hands on laboratories in museums supported by ICT tools.

### *Motivations/Issues to be addressed*

The two museums share certain common issues:

First, the mechanical industries in Italy and the craft sector in India are both repositories of abundant skills and knowledge that need to be sustained for future growth.

Second, exposure to skills and practices in these sectors is an important instrument for education and innovation.

Third, to support employment, livelihoods and sustainable innovation in these sectors, it is crucial to nourish the regeneration of both the individual competencies and the networks of relationships, allowing them to be effective within and between organizations. Such networks encompass not only the strictly productive networks (as generally studied in value chains), but also the social and institutional networks of relations in which production networks and innovation networks are embedded. In both countries the mechanisms to support such competence networks must be strengthened, also through a leading role of better education for all.

## **2. Knowledge Society and New Technologies: Hands on laboratories and ICT for LLL in Museums**

Policy programmes to support the knowledge society stress the need for radical change in the traditional educational and training paradigms and the importance of non-formal and informal learning<sup>4</sup> strategies. These are required nowadays for a wide variety of 'Learners' many of whom may benefit from Life Long Learning (LLL) programmes. New 'learners' are increasingly experiencing new needs and museums can play a vital role in addressing these with new technologies. Museums occupy a very distinct space among educational institutions and have the potential to reach a wide audience. Museums can also target particular constituencies, including disadvantaged or marginalized groups, and help to foster social cohesion and active citizenship.

Hands on laboratories and ICT tools are being used increasingly within museums to support informal learning. Hands on laboratories which involve individual visitors or small (often school) groups are used mostly in science and technology museums, while ICT tools are employed in many museums for interactive games and sharing resources. More recently they have been used to build 'communities of users' (e.g., in the Louvre).

The benefits of ICT tools are well known: they can be used repeatedly and in different and personalized ways. Nevertheless, so far, their use in museums, especially their integration with hands on practices, has not been fully exploited. ICT tools can support hands-on labs in several ways including - improving knowledge acquisition through interaction; extending the experience before, during and after the visit, focusing not just on the object or final output but on the processes involved in production, their history, and the relationships within and between producer communities; offering the opportunity to connect, and share information with other users and creating networks of users. The design and evaluation of new approaches to learning are also possible with ICT, adding an important reflexive dimension to such innovative projects.

A variety of communication tools, appropriate to different ages and audiences, is necessary to support the different levels of learning implicit in the idea of 'lifelong learning' from 'cradle to maturity'. By combining principles of LLL with ICT, museums can become significant alternative sites for non-formal education. HOMM intends to give a contribution in this direction.<sup>5</sup>

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4 On formal, informal and non-formal learning, see OECD "Recognising Non-formal and Informal Learning: Pointers for policy development", March 2010, [http://www.oecd.org/document/25/0,3746,en\\_2649\\_39263238\\_37136921\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/25/0,3746,en_2649_39263238_37136921_1_1_1_1,00.html)

5 These are core issues in promoting sustainable development, as discussed in the idea of 'generalized ICT' proposed by the INSITE EU project. HOMM is an example of what this concept implies for the future of ICT and its role in building a sustainable society. See <http://www.insiteproject.com/pagine/163/it/generalized-ict--technology-in-agentartifact-space>

### **3. A demo to kick-off the project**

With HOMM we intend to produce an integrated set of tools based on ICT for museums, to support learning practices, for individuals and communities participating in workshops on technology, culture and society.

As a first step we are developing a demo to illustrate the main features of both the software and the multimedia contents, in particular, an audio video presentation with images, text on history, economy, technology, science, culture and society related to Officina Emilia and Crafts Museum. The demo will be presented in the workshops to be held both in New Delhi and Modena by the end of 2011.

The software-demo will present the tools to manage, in an interactive way, multimedia contents, in all the phases of visitor-museum interactions.

HOMM software is designed to allow each user, i.e. a museum visitor, to access an on line 'personal space' that will support her use of the contents and activities proposed by the museum on the web and on site. Activities are multimedia interactive presentations that can be integrated in the modular architecture of a personal space. Examples of such activities are 'network of stories', where the user can navigate the present documents in a personal way and 'timeline', allowing a browsing of documents in a temporal perspective. Interactive games could also be developed at a further stage. The personal space will offer a range of activities to enrich user knowledge and interest on the themes proposed by the museum.

The personal space will follow and trace the user from the first contact before the visit, to activities accessed inside the museum or during workshops, to a follow-up web consultation that will offer further elements of recall, self evaluation and deepening.

The HOMM demo will show the current advancement in development of a prototype of one of the 'activities' ('story network') based on the architecture defined for personal space integration. The current implementation is the 'story network' about 'The Monarch Lathe' an important piece in the Officina Emilia collection. In addition to the validation on the field for software architectural design, this 'story' is currently used to evaluate both the process of content organization and the resulting user-experience for a non-linear storytelling model.

The presentation of the demo in the next months will give the HOMM team the opportunity to describe other functionalities of HOMM with regard to different types of users involved in the learning activities, such as: the producers of new contents on the part of museums; the tutors coordinating groups of students in a class; the classes of students or the on-line communities that will be able to use HOMM to share contents (documents and links related to the museum's activities); those responsible for education services in the museum who will be endowed with tools for evaluating HOMM.

### **4. Further development**

The further development of HOMM will involve the identification of a network of museums interested in funding the development and implementation of HOMM. Expanding the set of museums will make the investment required to develop the ICT tools more attractive and viable because of significant economies of scale; it will also

allow economies of scope, with the sharing, evaluation and development of effective practices from which all partners will benefit, even if these are not offered by each; it will help satisfy the growing demand for informal education that museums can uniquely provide.

To develop a business plan for realizing HOMM in such a network will require the following:

- (a) identifying a multidisciplinary research team which should include computer engineers, mechanical engineers, handicraft experts, designers, manufacturers of hands-on experiences for museums, multimedia communication experts, experts in complex systems, education planning experts, professionals in the design and implementation of multimedia documents, researchers (history, technology, economics) for the production of multimedia content.
- (b) defining the appropriate format for laboratory activities with different groups of users;
- (c) developing the features of the contents and interactions targeted at different groups of users and at different phases of interaction in the museums involved. Multimedia products will be produced specifically for HOMM. These will include video clips, 3D modeling, graphic design slideshows. The multimedia production will be modular and scalable and will cover historical, cultural, social, economic, technical and organizational topics.
- (d) designing a methodology for monitoring and evaluating the implementation of HOMM in the network of museums.

## **5. A series of workshops to boost a discussion**

Officina Emilia and Craft Museum are seeking partners for the multidisciplinary team, and financial support to develop and implement HOMM. In line with this goal, a series of meetings and two workshops – promoted within the Coordinate Action INSITE - will be held in New Delhi (November 2011, exact dates to be confirmed) and Modena (5-6 December 2011).

The two venues, in India and Italy, will provide the opportunities to identify people of the many communities (listed above) required for the discussion. Moreover, the active involvement of other agencies will be crucial in taking this concept to the public, and developing the proposal to use HOMM in innovation, development and education policy. Private investors interested in a new field of social investment for communities would be an essential part of the project.

The workshops are intended to help develop a broad view on the state of the art in this area and to evaluate the potential for further applications of multimedia ICT tools in museums. The workshops will be open to invited speakers and discussants (approximately 15-20 participants).

## **6. Schedule of the meetings and workshops**

Each main workshop in New Delhi and Modena is grounded on several meetings with the individual participants and organizations.

*Programmes for Delhi meetings*

**11<sup>th</sup> November at Crafts Museum h. 14.30-18.00**

**Museums, Education and New Technologies | HOMM\_1st Meeting |**

List of participants

Kanu Agrawal | architect

Siddhartha Das | designer

Sudha Gopalakrishnan | executive director Sahapedia

Nidhi Harit | Deputy Director at Crafts Museum

Arundhati Mitter | designer education and museum

Abhimanyu Nohwar | designer, Sahapedia

Mushtak Khan | former Deputy Director at Crafts Museum, New Delhi

Pallavi Singh Keshri | entrepreneur, eyaas.com

Margherita Russo | economist

Ruchira Ghose | chairman at the Crafts Museum

Themes for the discussion 11/11

While we hope to enjoy a freewheeling discussion on the general theme of Museums and Education in the context of New Technologies, we thought we could perhaps keep two themes in mind to structure the discussion just a little, which might help also to arrive at some concrete proposals at the end of the session.

The two themes:

1. In terms of Information Communication Technologies (ICT) what would each of you, as a visitor, like to have in place at the Crafts Museum? Two desiderata/proposals/specific needs that each participant feels are important or essential. The basic idea is that to support education and life long learning (LLL) we have to understand what kinds of interest and information the Crafts Museum can offer.
2. Two Case Studies in the context of the Crafts Museum (Textiles and Ceramics). Given the different constituencies we might want to address, what kinds of information and levels of knowledge can we envisage in the context of the two significant craft groups (eg. textiles and ceramics). These two cases could become a pivot around which the possibilities and implications of HOMM could be explored.

*Summary of suggestions from this meeting are available on line at*

<http://www.homm-museums.unimore.it/site/home/articolo16508.html>

**22<sup>h</sup> November at Crafts Museum h. 10.00-17.00**  
**Museums, Education and New Technologies | HOMM\_2nd Meeting |**

List of participants

Kanu Agrawal | Architect, New Delhi  
Cesare Bieller | Italian Embassy in New Delhi  
Rossana Cazzato | Economist, New Delhi  
Vaibhav Chauhan | Paper conservator, Sahapedia, New Delhi  
Marie Eve Celio | Art historian, museum curator, consultant for UNESCO, New Delhi  
Siddhartha Das | Designer, New Delhi  
Loredana Enea | New Delhi  
S. Gopalakrishnan | Project manager Sahapedia, New Delhi  
Sudha Gopalakrishnan | Executive director Sahapedia, New Delhi  
Ruchira Ghose | Chairman at the Crafts Museum, New Delhi  
Nidhi Harit | Deputy director at Crafts Museum, New Delhi  
Venkat Matoory | Chief Executive, Junior Achievement India, New Delhi  
Arundhati Mitter | Designer education and museum, New Delhi  
Abhimanyu Nohwar | designer, Sahapedia, New Delhi  
Pallavi Singh Keshri | Entrepreneur, crafts, eyaas.com, New Delhi  
Leopoldina Lopez y Royo | artist, New Delhi  
Giulio Passarelli | student at Goldsmith, London  
Anita Rampal | Dean of the Department of Education, Delhi University  
Margherita Russo | Professor of Economic Policy, University of Modena and Reggio Emilia, Italy  
Anupam Sah | Head of Art Conservation, Research and Training, CSMVS Museum Art Conservation Centre, Mumbai  
Gitanjali Surendran | Historian, Sahapedia, New Delhi  
Awadhesh Tripathi | Sahapedia, New Delhi

Themes for Discussion

With this second meeting we will continue the discussion we started in the 11th November meeting. We will focus on two or three exhibits/techniques on display in the galleries of the Crafts Museum. The goal is to explore the use of information communication technologies for:

- education in museums (for lifelong learning)
- support and sustainability of handicraft
- cluster and innovation policy
- widening and diversifying the constituencies served by the Museum

Programme 22/11

1. Participants introduce themselves
2. Ruchira Ghose 'Crafts Museum: a new identity'
3. Margherita Russo 'Beyond ICT in Museums: HOMM at Crafts Museum as a pilot project on innovation and development for sustainable handicraft'

4. Discussion with participants about pilot project - information available, multidisciplinary resources required, time for design and implementation, policy issues
5. Preview of short film by Siddhartha Das on The Lathe

*A summary report of this 2<sup>nd</sup> meeting in Delhi will be soon available on line at [www.homm-museums.org](http://www.homm-museums.org) >NewDelhi\_2nd\_meeting\_summary*

## **Homm ICT for Hands On Multi Media Laboratories in Museums**

**Modena, Italy (5-6 December 2011)**

The workshop in Modena will be in four sessions with some main talks aiming at generate discussion among participants.

### **General timetable and venues**

#### **Sunday 4<sup>th</sup> December**

20.00 **Welcome dinner** at Caffè Concerto,  
*meeting point: hall, Best Western Hotel Libertà*

#### **Monday 5<sup>th</sup> December**

8.30 *meeting (hall, Best Western Hotel Libertà)*

**9.00-12.30 First session: (Facoltà di Economia, viale Berengario 51)**  
**Issues to be addressed in developing homm**

12.30-13.45 *Lunch, Faculty venue*

14.05 *bus n 2 to reach Officina Emilia*

**14.30-18.30 Second session: [Officina Emilia, via Tito Livio 1]**  
**SW demo: applications and narratives**

20.00 *Dinner (restaurant "name to be confirmed"),*  
*meeting point: hall, Best Western Hotel Libertà*

#### **Tuesday, 6<sup>th</sup> December**

8.30 *meeting (hall, Best Western Hotel Libertà)*

8.45 *bus to reach Officina Emilia*

**9.00-12.30 Third session:**  
**ICT in museums and lifelong learning**

13.00-14.00 *lunch, Officina Emilia venue*

**14.30-18.30 Fourth Session:**  
**shaping the future: policy issues and collaborative actions**

20.00 *Dinner (restaurant "name to be confirmed")*

## Workshop 5-6 December 2011: a more detailed programme

### First session:

#### Issues to be addressed in developing homm

Monday 5<sup>th</sup> 9.00-12.30

[Facoltà di Economia, viale Berengario 51]

Discussion moderated by Margherita Russo and Ruchira Ghose

Notes summarized by Roberto Molinari, Angela Giampaglia, Stefania Sardo, Rosy

Nardone, Giulia Piscitelli

Time keeping Giulia Righetti

#### a. Margherita Russo and Ruchira Ghose:

opening of the workshop: issues to boost the discussions

#### b. Participants introduce themselves (approx.. 60 mins)

#### c. Talks/presentation (15 minutes) and discussion

- David Lane:** what is intended by 'innovation' and 'sustainable innovation'; what is meant by 'sustainable development'; what is meant by 'generalized ICT'; 'competence networks' and innovation
- **Ruchira Ghose:** Crafts Museum: a new identity; museums and education, the demonstration program, future of handicrafts; why is handmade relevant for development
- **Paola Mengoli:** formal, informal and non formal education; LLL and museums; the Officina Emilia experience
- Margherita Russo:** 'competence networks' and innovation in machine production; museums as agents of development: LLL education, innovation and local development
- Anna Natali** in which ways are handicraft museums, museums of science and technology, eco-museums, facing issues of LLL and socio-economic development?
- Pallavi Singh Keshri:** crafting a sustainable future: economics, environment and society connected for sustainable value chains in the handicraft sector

#### Specific issues:

Tradition and innovation in Indian handicraft;

why is handmade relevant for development and how is innovation connected to it or indeed actively encouraged by it *versus* 'craft is a sunset sector in India';

how might a multidisciplinary perspective on innovation and sustainability (economy, society, gender, environment, culture, ...) be developed to deal with issues of handicrafts and development, and regeneration of complex competencies and development

## **Second session:**

### **Software demos: applications and narratives in the context of museums**

Monday 5<sup>th</sup>, 14.30-18.30

[Officina Emilia, via Tito Livio 1]

Discussion moderated by Kanu Agrawal, Abhimanyu Nohwar and Rosy Nardone

Notes summarized by Roberto Molinari, Angela Giampaglia, Stefania Sardo, Rosy Nardone, Giulia Piscitelli

Time keeping Giulia Righetti

- a. Visit to Officina Emilia: museolaboratorio and laboratories
- b. **Mauro Mattioli, Margherita Russo, Siddhartha Das:** Presentation of the HOMM\_sw\_demo, with some applications for OE and CM; discussion of the sw architecture chosen; description, through narratives, of the features that we wish to incorporate into HOMM
- c. **Sofia Pescarin:** V-Must.net project
- d. **Sudha Goplakrishan:** Sahapedia: an online encyclopedia on Indian culture and heritage;  
**Abhimanyu Nohwar:** Presentation of Sahapedia\_sw\_demo

#### **Specific issues:**

Design ICT as an integral part of the museum narratives

Architecture of sw and hw: interoperability; proprietary issues vs creative commons;

Obsolescence of ICT (hw and sw) and graphics

Encyclopedic vs selective content

Information overload

## **Third session:**

### **Design perspectives on ICT in museums**

Tuesday 6<sup>th</sup>, 9.00-12.30

[Officina Emilia, via Tito Livio 1]

Discussion moderated by Abhimanyu Nohwar and Anna Natali

Notes summarized by Roberto Molinari, Angela Giampaglia, Stefania Sardo, Rosy Nardone, Giulia Piscitelli

Time keeping Giulia Righetti

#### **Talks/presentation (15 minutes) and discussion**

**Kanu Agrawal, Zsofia Ruttkay, Elena Corradini, Siddhartha Das, Sofia Pescarin, Stefano Mazza**

Exploration of implications (including trade offs) of the use of ICT in museums

#### **Specific issues:**

What is the role of design? Creation of value: which values?

Narratives used to bring new constituencies (young people, non-literate, ...) into learning processes (eg about relevance of handicraft sector)

Leisure

Artistic dimension

How do we counter immanence of ICT experience? Seriality vs intensity

**Fourth session:**

**shaping the future: policy issues and collaborative actions**

Tuesday 6<sup>th</sup>, 9.00-12.30

[Officina Emilia, via Tito Livio 1]

Discussion moderated by Pallavi and Margherita

Notes summarized by Roberto Molinari, Angela Giampaglia, Stefania Sardo, Rosy Nardone, Giulia Piscitelli

Time keeping Giulia Righetti

A dialogue on the development of HOMM for funding in the next EU calls

### **Invited speakers and discussants in Modena 5-6 December 2011**

The following persons have confirmed that they will participate at the workshop in Modena (5-6 December 2011):

- Kanu Agrawal, Architect, New Delhi
- Prof. Sonia Bergamaschi, Dean Dipartimento di Ingegneria dell'Informazione, University of Modena and Reggio Emilia, Italy
- Anna Conti, Architect, Florence, Italy
- Dr. Elena Corradini, ICOM's international board of University Museums, UniMORE, Italy
- Siddhartha Das, Designer, New Delhi
- Francesca De Bernart, designer of a virtual museum for music interpretation
- Dr. Ruchira Ghose, Chairman at Crafts Museum (India)
- Dr. Sudha Gopalakrishnan, Executive Director Sahapedia (India)
- Dr. Emmanuel Grimaud, ethnographer, expert in multimedia analysis of handcraft, France
- Prof. David Avra Lane, University of Modena and Reggio Emilia, Italy, Director of the MD\_EU project
- Eng. Mauro Mattioli, Homm project
- Stefano Mazza, Visual-Media, multimedia designer
- Dr. Paola Mengoli, Director of Education initiatives, Officina Emilia
- Anna Natali, Emilia Romagna Region
- Abhimanyu Nohwar, Director Kiba Designs, Consultant for New Technologies for Sahapedia, New Delhi
- Dr. Sophia Pescarin, Archeologist, Coordinator of the EU project V-MUST.NET
- Giulia Piscitelli, Responsible for the documentation, Officina Emilia
- Prof. Margherita Russo, University of Modena and Reggio Emilia, Italy, Head of the Scientific Committee Officina Emilia
- Prof. Zsófia Ruttkay, (MOME), Designer, Creative Technology Lab at a Moholy-Nagy University of Art and Design, Budapest, Hungary
- Prof. Annamaria Simonazzi, Sapienza University of Rome, Italy, (Italy), Head of the Scientific Committee of Fondazione Giacomo Brodolini
- Pallavi Singh Keshri, Entrepreneur in Craft, [eyaas.com](http://eyaas.com), New Delhi

### **Invited participants who were unable to attend the meeting**

- Louisa Anastopoulou . B5 . Scientific Officer, European Commission . Research & Innovation DG
- Prof. Jeffrey Johnson, Open University, UK
- Prof. Tommaso Minerva, Director of the e-learning Center, University of Modena and Reggio Emilia, Italy
- Prof. Sergio Paba, Pro-Rector, University of Modena and Reggio Emilia, Italy

## List of institutions and organizations

- Officina Emilia (University of Modena and Reggio Emilia), the scientific director Prof. Margherita Russo is in the project team developing HOMM, <http://www.officinaemilia.unimore.it>
- Crafts Museum, New Delhi, the Chairman Dr Ruchira Ghose is in the project team developing HOMM; <http://nationalcraftsmuseum.nic.in>
- INSITE, EU Coordinated Action on 'Innovation Sustainability and Information technology', coordinated by Prof. David Avra Lane, University of Modena and Reggio Emilia, <http://www.insiteproject.com>. Officina Emilia is involved in WP7: 'Generalized ICT: Concepts and Examples' Coordinated by Denise Pumain, Géographie Cités Laboratory, University of Paris, <http://www.parisgeo.cnrs.fr>
- MD, 'Emerging by Design', EU project, coordinated by David Avra Lane, University of Modena and Reggio Emilia (Margherita Russo is in the MD's research team on Modeling Policy Evaluation Dynamics)
- étoile, EU Coordination Action 'Enhanced Technologies for Open Intelligent Learning Environments', is coordinated by Prof. Jeffrey Johnson, Open University, UK, <http://www.etoilecascadesideas.eu>
- FGB, Fondazione Giacomo Brodolini, Roma, Italy, is engaged in carrying out research activity and cultural promotion with an interdisciplinary approach to foster dialogue and continuous exchange between social forces. <http://www.fondazionebrodolini.it> (Officina Emilia's research partner)
- Sahapedia - An online encyclopedia on Indian culture and heritage (educational multimedia project) aimed at the enhancement of the cultural, historical, artistic heritage of India <http://sahapedia.wordpress.com>
- ICOM-Italia, International Council of Museums, [www.icom-italia.org](http://www.icom-italia.org)
- MOME, Creative Technology Lab at a Moholy-Nagy University of Art and Design, Budapest, Hungary, <http://create.mome.hu>
- Dipartimento di Ingegneria dell'Informazione, University of Modena and Reggio Emilia, Italy, Dean Prof. Sonia Bergamaschi, [www.dbgroup.unimo.it](http://www.dbgroup.unimo.it)
- Centro e-learning, University of Modena and Reggio Emilia, Italy, Director Prof. Tommaso Minerva, <http://www.cea.unimore.it>
- DG Research & Innovation of the European Commission, <http://ec.europa.eu/research>
- DG Information Society of the European Commission - FET Programme, New Paradigms and Experimental Facilities, <http://cordis.europa.eu/fet-house>
- Visual-Media, Bologna, Italy, <http://www.visual-media.it>
- V-MUST.NET (<http://www.v-must.net/>), a new European Network of Excellence dedicated to Virtual Museums

**Persons met in the Milan meeting, 2<sup>nd</sup> December 2011**

Dr. Cristina D'Addato, Museo della Scienza Leonardo da Vinci, Communication Programme, Milan, Italy

Dr. Maria Xanthoudaki, Museo della Scienza Leonardo da Vinci, Education Services and International Relations, Milan, Italy

Dr Paolo Cavallotti, Museo della Scienza Leonardo da Vinci, Digital Programme, Milan, Italy

Kanu Agrawal | architect

Abhimanyu Nohwar | designer, Sahapedia

Pallavi Singh Keshri | entrepreneur, eyaas.com

Margherita Russo | University of Modena and Reggio Emilia, Officina Emilia

Ruchira Ghose | chairman at the Crafts Museum

**Persons to meet in the and London meetings, 12-13 December 2011**

Dr. Tirthankar Roy, economist, expert on India's handicraft sector, LSE, UK

Dr. Nadia Arbach, Digital Programmes Manager, Victoria & Albert Museum, London, UK.

Margherita Russo | University of Modena and Reggio Emilia, Officina Emilia

Ruchira Ghose | chairman at the Crafts Museum

[www.homm-museums.org](http://www.homm-museums.org)

[www.homm-museums-software.org](http://www.homm-museums-software.org)