

# universal access to cultural Web resources

creators and users  
in the MINERVA model:  
the Archives profile

# abstract

- **Minerva** network for quality cultural Web
- Who are the **stakeholders**? What are the **products**?
- The **creators**: cultural entities and cultural contents. The goal-oriented perspective.
- The **users**: Accessibility and usability of contents: the premises for universal access.
- The **Archives** profile
  - Archives between tradition and the Web.
  - Presenting and describing archives.
  - The archives' users point of view.
  - Archival challenges

# the MINERVA project

**MINERVA** is the instrument to support the **implementation of the Lund Action Plan**

a network of Member States' Ministries to discuss, correlate and harmonise activities carried out in digitisation of cultural and scientific contents **for creating** an agreed European common platform, a set of recommendations and guidelines about quality, digitisation, metadata, long-term accessibility and preservation.

[<www.minervaeurope.org>](http://www.minervaeurope.org)

# the MINERVA project

## *Original Partners*

- **Italy**, coordinator (Ministero per i Beni e le Attività Culturali)
- **Belgium** (Ministère de la Communauté Française)
- **Finland** (University of Helsinki)
- **France** (Ministère de la culture et de la communication)
- **Spain** (Ministerio de Educación, Cultura y Deporte)
- **Sweden** (Riksarkivet)
- **United Kingdom** (The Council for Museums, Archives and Libraries)

# the MINERVA project

*Actual partners*

- All the **EU nations**
- From **February 2004**, the network is enlarged to **MINERVA Plus** initiative, already approved by the European Commission in the 6FP, to enlarge the existing thematic network
- Now are part of the network all the **New Accession EU nations**, plus **Russia and Israel**

# the MINERVA project

## *the structure*

### **National Representatives Group (NRG)**

established by the EU Commission to monitor progress regarding the objectives encapsulated in the Lund Principles; a NRG meeting is scheduled every 6 months under the chairmanship of the current Presidency

### **Partners**

- A core group, responsible for the day to day management of the network
- National Commissions: each Minerva partner establishes a National Commission to coordinate the ongoing activities on digitisation.

### **Project working groups**

They involve experts, research centres, enterprises and institutions belonging to the EU Member States, plus other non-EU countries interested to join the discussion to concertate their efforts in this field (US, Canada..)

**Project Management** the Italian Culture Ministry General Secretariat

# the MINERVA project

## *the Working Groups*

- Benchmarking framework
- Identification of Good practices and Competence centres
- Interoperability, Service Provision and IPR
- Inventories, discovery of digitised contents, multilingual issues
- Identification of user needs, contents and quality framework for common access points (**WP5**)

# the MINERVA WP5 project

## *WEB QUALITY*

- ▶ **To define** and encourage the adoption of **quality criteria** for the access to digitised contents
- ▶ **To support the initiatives** launched by the European Commission with the provision of national digital content on these issues
- ▶ **To encourage training actions** on cultural sites, to promote knowledge and collaboration for multicultural issues



# the MINERVA WP5 project

## *Handbook for quality in cultural web sites*

**April 2001** - The Lund principles

**December 2001** - The Brussels Quality Framework

**February 2003** - The first WP5 deliverable on quality

**March 2003** - The first index of the « Quality Handbook for Public Cultural Web Applications »

**November 2003** - The Handbook 1.2 draft published, approved by the NRG meeting and presented to the Minerva European Conference in Parma (IT) «Quality for Cultural Web Sites»

**November 2003** - The Parma Charter, that continues and supports the Principles of Lund

**February 2004** - The Italian edition of the Quality Handbook

# a question of words...

## *stakeholders*

- Contents creator / Cultural entity
- ICT professional
- User

## *products*

- Contents
- Web application
- Digital library

# 1. what about cultural contents creators?

The term *creator* is not usual in Web environment. For archives it defines

*any entity (corporate body, family or person) that creates, accumulates and/or maintains records in the conduct of personal or corporate activity... (ISAAR)*

We can use it referred to a cultural entity as

*an institution, organisation or project in all cultural sectors, whose stated aim is to create, conserve, manage and give access to cultural heritage*

## 2. what about cultural contents creators?

The sector of culture is vast and composite.

In the **EU**, the categories of CE have been formed in an essentially common historical process, with the common **aim of managing** – in the widest sense of the term – **the cultural heritage**:

- **Archives**
- **Libraries**
- **Cultural heritage diffused on territory**
- **Museums**
- **Institutes for administration and safeguarding**
- **Centres for research and education**
- **Temporary exhibitions**
- **Cultural projects**

### 3. what about cultural contents creators?

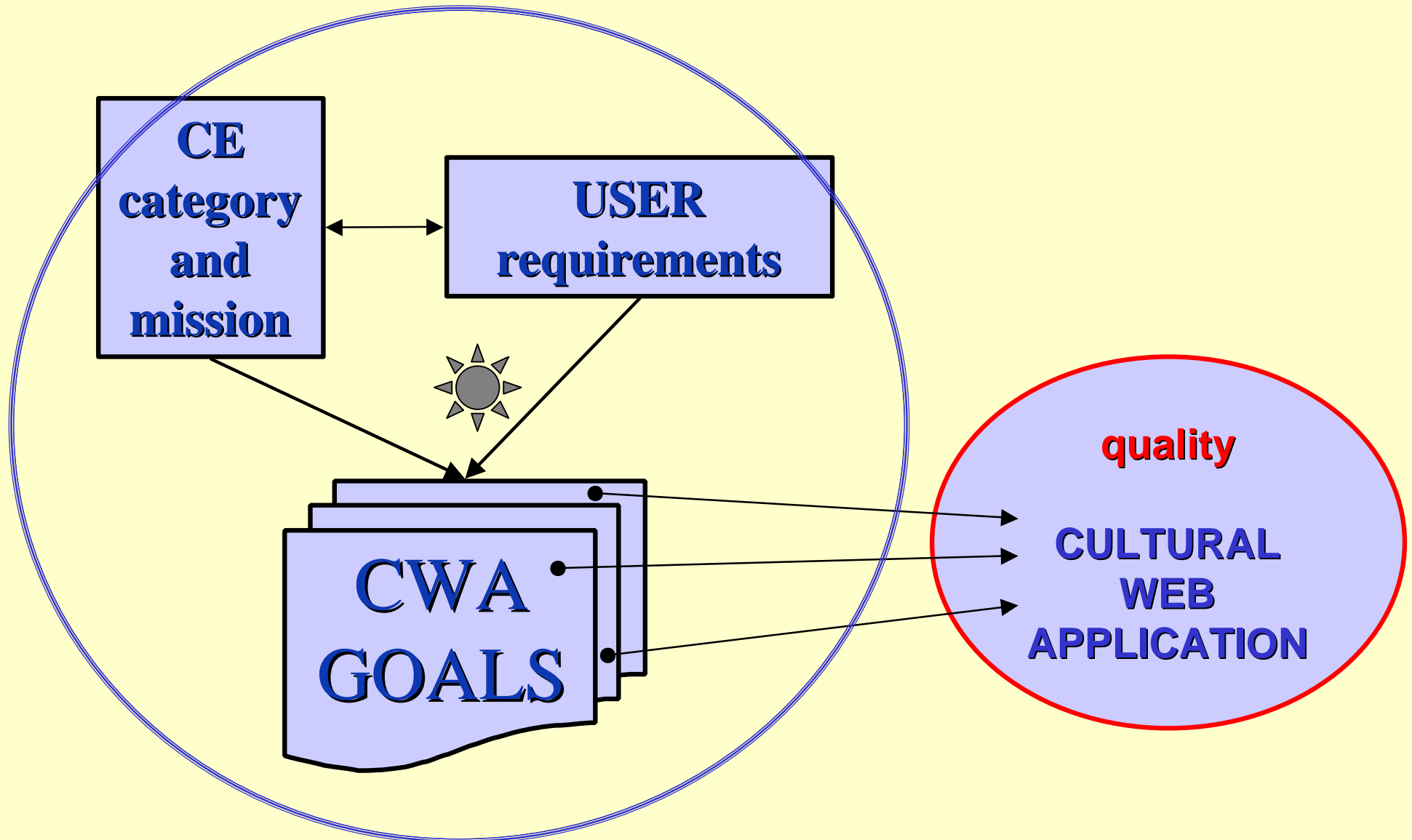
- Besides the respect of technical quality of contents (accessibility and usability, see later), the specificity of Cultural Web Applications require specific planning, easily reachable through a **goal-oriented perspective**.
- The quality is reached when the Cultural Entity mission and the Web strategies are clear, direct result of the analysis of the interaction between Cultural Entity goals and users requirements.
- In the Minerva model, **12 goals** are provided

## 4. what about cultural contents creators?

### *cultural web 12 goals*

1. Presentation of the identity of the Cultural Entity
2. Transparency on the activities of the Cultural Entity
3. Transparency on the mission of the Cultural Web Application
4. Efficiency in the sector networks
5. Presentation of standards and regulations
6. Spreading of cultural content
7. Support of cultural tourism
8. Offer of educational services
9. Offer of services of scientific research
10. Offer of services to professionals
11. Offer of services of reservation and e-commerce
12. Promotion of Web communities

# the Minerva Web Quality Framework



## 5. what about creators' staff?

“Two important communities are the source (...). One group is the **information professionals** (...) The other community contains the **computer science researchers** and their offspring, the Internet developers”. (*W.Arms*)

The **interaction** between the two communities is basic for the quality of results:

**collaboration and understanding**  
**between the contents creators**  
**and the ICT professionals**  
**must be core objectives**



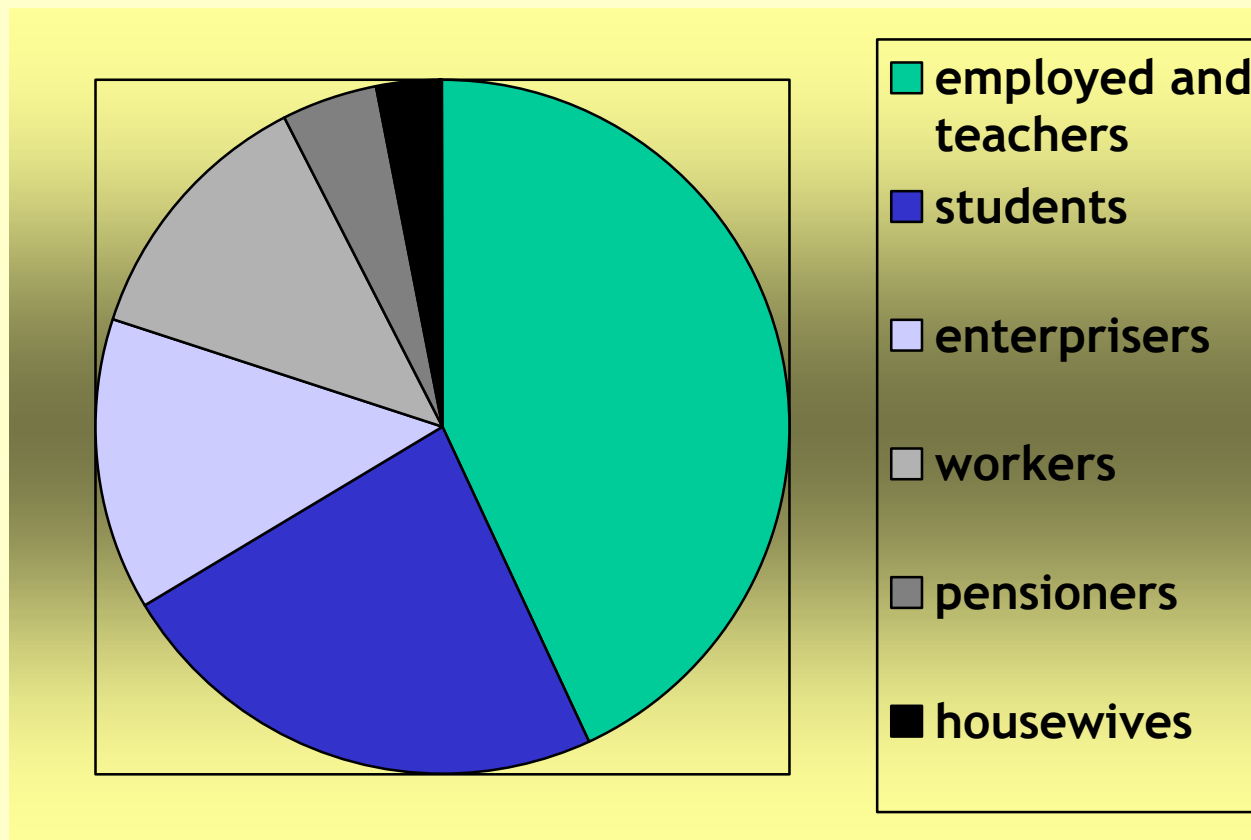
# what about cultural users?

in MINERVA model,

**a cultural user is one who**, professional or not, specialist or not, casually or with specific aims, occasionally or systematically uses Cultural Web Applications.

**cultural user identity** is extremely variable depending on cultural profiles, aspirations for cultural growth, professional aims and even momentary curiosity.

# Web user profiles (Italy, 2000)



\* culture requirements

24% from home

11% from work

11% at school

# 1. cultural user requirements

User requirements include always the desire for accessible, reliable, comprehensible, rich, up-dated contents

While it is not possible to predict all possible user requirements, a CWA must aim for the widest possible satisfaction.

All users should be able to choose the cultural content that most satisfies their individual requirements.

## 2. cultural user requirements

Anyway, we can't forget that ICT applications users first requirement is

**to have access to knowledge, data, and informations**

the UNIVERSAL ACCESS is obtained when informational content, navigational modes and all the interactive features **are accessible to all users**, regardless of disabilities and independently of technology used and of the context in which they are working.

# 1. accessibility: user contexts

(from WCAG 1.0)

- o They may not be able to see, hear, move, or may not be able to process some types of information easily or at all.
- o They may have difficulty reading or comprehending text.
- o They may not have or be able to use a keyboard or mouse.
- o They may have a text-only screen, a small screen, or a slow Internet connection.
- o They may not speak or understand fluently the language in which the document is written.
- o They may be in a situation where their eyes, ears, or hands are busy or interfered with (driving, working in a loud environment, talking to telephone, etc.).
- o They may have an early version of a browser, a different browser entirely, a voice browser, or a different OS

## 2. accessibility: disabilities

WHO International Classification of Functioning, Disability and Health (ICDH-2, 2001):

- o refers to **human functions** and not simply to disability. Functioning is related to the **state of the individual** not only at the level of body functions, but also in terms of the **activities** of the individual and of **participation in society**.
- o moves away from the **consequences of a dysfunction** to **components of health**, grouping them together under the heading of **health domain** (sight, hearing, movement, learning..) and **health-related domains** (mobility, education, participation in social life...)

This model is **UNIVERSAL**: it concerns all people.

### 3. accessibility: numbers

In Italy, the ISTAT 1994/1999 statistics, based on the WHO 1(1980) based on the strict concept of *impairment*, counted:

• mobility disables	=>	1.000.000	(60.000 on wheelchair)
• blind	=>	350.000	
• deaf	=>	800.000	(50.000 deaf and dumb)
• psychic	=>	750.000	
<b>TOTAL</b>	<b>=&gt;</b>	<b>2.900.000</b>	<b>6% of population</b>

applying the ICDH-2 model, this percentage would become higher, including aged people, digital semi-literate, social disadvantaged, etc.

## 4. accessibility: laws

In several recent resolutions the Council of Europe invited the Member States to implement specific measures to reach the objective of accessibility of Web sites of public administrative institutions and indicated the adoption of the WCAG.

While not all Member States have formally adopted the WCAG 1.0 for the realisation of Public Web Sites, it is universally accepted that these must conform to at least Level A as defined in the GuideLines.

In Italy the 3/2004 law establishes accessibility for all public and semi-public Web applications, according to specific technical requirements in course of promulgation.



# usability

can be defined as “*the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.*” (ISO 9241-11)

The **product** is the Web

**Effectiveness** indicates the accuracy and completeness to achieve specified goals

**Efficiency** indicates the use of resources in relation to effectiveness

**Satisfaction** indicates freedom from obligations and a favourable tendency

**Context of Use** is composed by the task, the hardware and software used, the physical and social environment in which the product is used.

# usability + accessibility

The **principles of Usability**, often generic and difficult to apply, and the **criteria** that supply more detailed instructions can be interpreted in different ways or are tied to a specific technological area.

These problems, though to a lesser extent, are also found in the **application of GuideLines to Accessibility**.

**The keynote is that the user must be involved** in the Web planning process (user-centred model)

A different approach to the concrete problems of planning and realisation of Quality Web could be the use of **Patterns** to resolve recurring problems through consolidated solutions.

This method was included in Minerva handbook, chapt. 2, as an operative proposal for Web quality

# 1. patterns

The **Patterns method** aims to describe both the context and the solution, grouping the experience and the solutions adopted under the same title.

A Pattern is made up actually of **three parts**:

- o **Context**: the conditions and the surroundings, the environment, all of the forces which constrain the choices of solution
- o **Problem**: a recurring situation in the context that creates imbalances between the forces at play
- o **Solution**: an algorithm, a piece of technology, an organisational structure, a well-known method, a model of reference which can resolve the recurring problem in that context

## 2. the catalogue of patterns

The same general categories usually considered for usability and accessibility criteria were used to create a **Catalogue of Patterns**, inspired by the work of Martijn Van Welie, to be applied to the planning and realisation of an accessible and usable CWA:

1. Making Contents Clear
2. Presenting the Contents
3. Navigating the Site
4. Searching
5. Interacting with Users

the catalogue of patterns is freely available

<[http://www.minervaeurope.org/publications/qualitycriteria1\\_2draft/appendix2.htm](http://www.minervaeurope.org/publications/qualitycriteria1_2draft/appendix2.htm)>

## what about cultural Web?

“A **Web site** is a collection of information that the user perceives to be a single unit” (W.Arms, *Digital libraries*”, chapt. 2)

A Cultural Web Application (**CWA**) is considered to be every Web application where the contents deal with cultural heritage, and where at least one of those aims are realised:

- supplying and spreading cultural informations
- working as an instrument for education and scientific research

# what about Digital Libraries?

An informal definition of a Digital Library is a **managed collection of information**, with associated **services**, where the information is stored in **digital formats** and **accessible over a network** *(W.Arms)*

...The concept of a "digital library" is not merely equivalent to a digitized collection with information management tools. It is rather an **environment to bring together collections, services, and people** in support of the full life cycle of creation, dissemination, use, and preservation of data, information, and knowledge *(from the Introduction of Santa Fe Workshop on DL, 1997)*

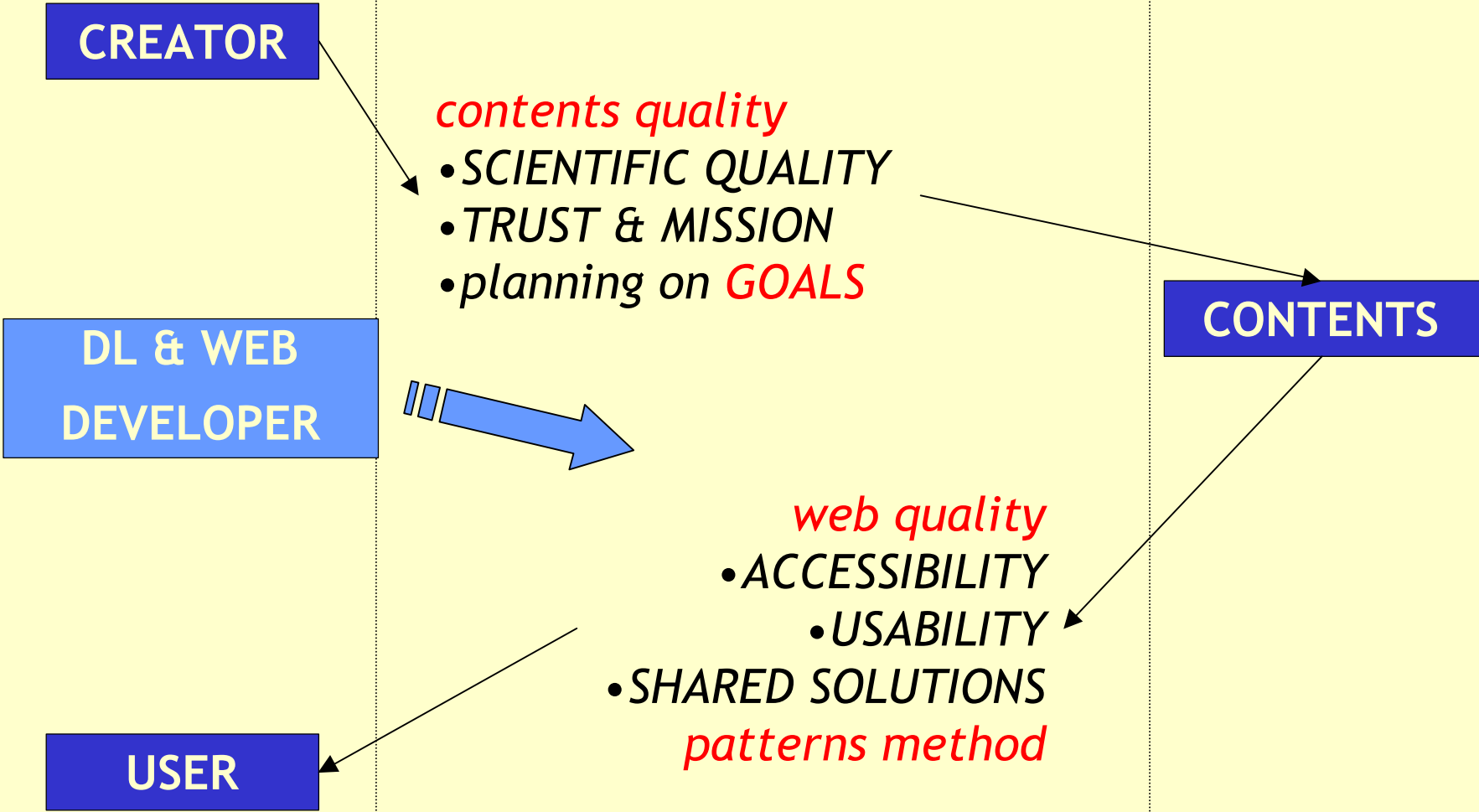
# what about cultural Digital libraries?

Thus, a **Cultural Digital Library** may be defined as

a digital environment to bring together collections, services, and people in support of the full life cycle of creation, dissemination, use, and preservation of cultural data, informations, and knowledge

interactions...

# quality process



# MINERVA model



# 1. the Archives profile

**Archives** - The division within an organization responsible for maintaining the organization's records of enduring value.

- An organization which collects the archives of individuals, families, or other organizations; a collecting repository.
- The building (or portion thereof) housing archival collections

*(from the SAA Glossary of Archival and Records Terminology)*

*not "a long-term storage area for backup copies of files "  
"a file containing one or more files in compressed format"*

# 1. the Archives profile

## what contents?

**records, documents, materials of some media  
conserved as evidence of facts or because of  
their historical interest**

they represent the *fixed* memory of mankind, of human interactions, of juridical rights, of human forms of organization, of individual or social lives

usually they are not conserved separately, but together with others, in *groups* that we call **archives** or **fonds**

**archives contents** are **descriptions, interpretations  
or reproductions** of archives

## 2. the Archives profile

Contents preserved by archival organizations (Archives) **connect juridical and administrative field with culture** and are therefore visible both to academic world and to civil society.

The **first archive Web sites** go back as far as the dawn of the WWW and UNESCO soon created a world level portal dedicated to the sector.

There is still great need for the **widest possible co-operation** among Archives, particularly concerning the diffusion of descriptive standards and good practices.

The Web has quickly become a **particularly effective tool** for Archives' mission, through individual archives sites, multi-institute informative systems and thematic or territorial portals or digital libraries.

### 3. the Archives profile *specific contents*

Francesco Bonaini declared 150 years ago that the person who enters an archive **must look for institutions (i.e. creators), not for subjects.**

Describing archives means providing information about the records, their creators and historical context and about the available finding aids (needful for a remote or direct access).

Thus, an archival digital library must connect minimum 3 domains of information (fonds, creators and finding aids) and the necessary tools for **browsing among their complex and multidimensional relationships**

## 4. the Archives profile

*describing contents*

The **Archival international descriptive standards**, defined by the ICA/CDS Committee, provide a guidance to govern such complexity:

**ISAD(G)** provides a guidance for the preparation of archival descriptions, to identify and explain contents and contexts of archival material in order to promote its accessibility.

**ISAAR (CPF)** suggests a model for separate and linked descriptions of archives creators and archival materials.

*Guidelines for the Preparation and Presentation of Finding Aids* offers a guidance for the preparation and presentation of public archival descriptions.

# 5. the Archives profile

## some *pros* and *contras*

### *PROs*

- the adoption of common standards, irrespective of the form or medium of archival material, is a **requisite for collaboration** and interoperability
- the separate and multi-level descriptions provide a **correct representation** of the complexity of fonds and their context
- the separate and multi-level descriptions enable and favour the **permanent updating** of each item at its own level

### *CONTRAs*

- the **reappraisal of traditional finding aids** have often great cost
- in some cases, we don't know that much about archives creator, thus **the information system will have consistent blanks**
- the complexity of a separate and multi-level description system may **discourage non-professional users** to approach archives

## 6. the Archives profile

### *users point of view*

Archives' *live* users are essentially of 2 kinds:

- **users who have a research plan** and have to browse archives, verifying on documents their theories. They are good finding aids readers, are interested in archives creators, need to scroll finding aids, include and exclude search paths, can appreciate the lack of records as useful informations. They know that archives need time.
- **users who look for specific records**. They have no theories, want quick results and don't want to read complex finding aids, would love **miraculous fishing tools**.

## 7. the Archives profile

*users point of view*

The XXI<sup>st</sup> century mission of archival professionals seems to be **governing the transition** from the traditional way of giving public access to archives in reference rooms, with the help of archivists:

**personalised - individual - measured - mediate**  
**- analogic - flexible - *sacerdotal***

to the new way, based on ICT and on international standards

**faceless - anonymous - general - measureless**  
**digital - remote - automatic - *secular***



## 8. the Archives profile

### *future tasks*

the **digital challenge for Archives professional** is to create **models for effective user interfaces and user personalisations** in order to:

- keep the context informations of archival materials as primary
- help browsing the complexity according to different user requirements
- preserve the scientific value of informations and of their connections
- provide training e-tools, thematic paths, references

## 8. the Archives profile

### *future tasks*

some possible future tasks:

- collections of good practices
- user requirements frameworks
- involving users with the creation of thematic panel groups
- collecting consolidated solutions to common problems in common contexts (*patterns*)

# some references

- Report of the Santa Fe Planning Workshop on *Distributed Knowledge Work Environments: Digital Libraries*, March 9-11, 1997 <<http://www.si.umich.edu/SantaFe/>>
- The online edition of *Digital Libraries*, by William Arms, (c) 2000 MIT Press, updated with additional material by the author <<http://www.cs.cornell.edu/wya/DigLib/index.html>>
- *Handbook for quality in cultural Web sites: improving quality for citizens*, version 1.2-draft, edited by the Minerva Working Group 5, 2003 <[http://www.minervaeurope.org/publications/qualitycriteria1\\_2draft.htm](http://www.minervaeurope.org/publications/qualitycriteria1_2draft.htm)>
  - Appendix 2 - Catalogue of Patterns:  
<[http://www.minervaeurope.org/publications/qualitycriteria1\\_2draft/appendix2.htm](http://www.minervaeurope.org/publications/qualitycriteria1_2draft/appendix2.htm)>
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- A bibliography on patterns for the Web <<http://iawiki.net/WebsitePatterns>>
- The Martin Van Welie site Web Design patterns <<http://www.welie.com/patterns/>>
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<<http://www.ica.org/biblio.php?pbodycode=CDS&ppubtype=pub&planguage=eng>>
- R. Pearce-Moses, A Glossary of Archival and Records Terminology <<http://www.archivists.org/glossary/>>
- EAD - Encoded Archival Description <<http://www.loc.gov/ead/>>
- EAC - Encoded Archival Context <<http://www.library.yale.edu/eac/>>

thank you for your attention

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