The Loupe at the National Museum of History

Preliminary results from the living lab validation experiment conducted at NMH in November 2014

1 Dec 2014, ESoCE-NET Industry Forum, Rome

Dr Stavri Nikolov
Digital Spaces Living Lab (DSLL) Founding Director
stavri.nikolov@digitalspaces.info
DSLL Main Activities

living lab trials, technology and UI/UX consulting, software and hardware development and testing, workshops, etc
DSLL Main Objectives

- to help IT, media and communications companies to test new technologies and products in early stages of their development and with real users
- to support new ideas and start-up companies in the digital media, LBS and smart city sectors
- to foster co-creation and co-development of new technologies and products that combine and fuse core technologies developed by industrial and academic partners
Main Goals of DSLL Loupe Project

• Improve the Loupe in terms of design, functionality, and usability
• Trial the Loupe with school children in an living lab validation experiment at NMH
• Start a broader discussion on how to design and make devices and apps as the Loupe, and test and use them in museums and art galleries around the world
• Ultimate goal: further development of the Loupe and other interactive and innovative heritage tools and apps and their use in museums and art galleries.
The National Museum of History (I)
The National Museum of History (II)

- The National Museum of History (NMH) is the national treasury of the Republic of Bulgaria, a depository of relics with international importance and one of the largest museums of history on the Balkan Peninsula.
- It preserves more than 650,000 cultural monuments and an enormous historical archive.
- The objects can be linked to seven large European civilisations, which left their mark on the Bulgarian lands (prehistorical, Ancient Greek, Thracian, Roman, Byzantine, Bulgarian and Ottoman civilisations).
The National Museum of History (III)

- NMH in Sofia is probably the most visited museum in Bulgaria.
- NMH is one of the consortium members of the ‘Eurovision – Museums exhibiting Europe’ (EMEE) project (2012-2016).
- The main goal of this project is to make museums more accessible in many ways.
- EMEE initiates a European network for the Europeanisation of museums which in the course of the project shall be consolidated and expanded.
Designers, Makers and Kids Workshop at Smart Fab Lab Prior to Trial in Museum
Main Loupe and Trial Setup Changes

• **Design changes:** make Loupe lighter (linden wood) and thinner; longer handle; side hole to charge phone, etc;

• **Content:** tell a story – connect objects in a story that is interesting for school children

• **Use:** No board to pick the Loupe from and no written instructions – demo how the Loupe works and then give it to museum visitors

• **Trial:** check how participants navigate the museum space and to what extent they remember/learn the story the Loupe tells them and the museum artefacts it is linked to
Loupe Trials at the National Museum of History (I)
Loupe Trials at the National Museum of History (II)

- Trials on 18, 19 and 20 Nov 2014 from 1:30pm until 4pm each day in Hall 2 of NMH
- 30 school children tested in total over 3 days
- Age 11 or 12 (mixed boys and girls)
- Most have been to NMH previously but not recently
- Short lecture about Thracian culture by museum staff
- 2min introduction of Loupe and demo how it works
- Then participants used the Loupe one by one in sessions lasting 13min on average
- After completion of the story each participant had to fill in a questionnaire (outside Hall 2)
Loupe Trials at the National Museum of History (III)

Film
Preliminary Results of Loupe Trials at NMH (I)

- Children love the Loupe and they find it easy to use.
- They feel thrilled and special when using the Loupe.
- Most of them have found and matched nearly all objects (90%) and successfully completed the story.
- Children expect matching of an object to be very easy once they have found it in the museum.
- They generally prefer the phone to be hidden in the Loupe (the wooden casing) but some would also want to have directly a phone with similar functionality.
- Most like carrying the Loupe as they feel explorers.
but…

• Children don’t remember much from the story they have been told by the Loupe. It seems the exploration and gaming experience is so dominant, they just flip through the content of the story and don’t learn much.

• They remember even less about the exhibits in the museum the story is linked too…

• The storytelling and the way the Loupe works need to changed. Perhaps use quiz/questions before showing next target to reinforce learning.
A new ecosystem is needed to design, make, test and use cultural heritage tools and apps for museums and galleries:

**Fab Lab <> Living Lab <> Museum/Gallery**

design <> test <> use
make improve
Contacts

• DIGITAL SPACES LIVING LAB
  Dr Stavri Nikolov
  Digital Spaces Living Lab Director
e-mail: stavri.nikolov@digitalspaces.info
• Digital Spaces Living Lab is coordinated and managed by Digital Spaces Living Lab Ltd.
• For more information, news and updates see – http://www.digitalspaces.info/