The “digital pathologies concept”: new methodologies and approaches for future digital applications and resources

Rafik Belloum, Amélie Loche, Manon Moal, Frédéric Sudraud, Laurent Billonnet

laurent.billonnet@unilim.fr

University of Limoges, Limoges, France,
Existing solutions

Additional application layer for internet browsers

- Visual disturbance
- Physical impairments
- Cognitive impairments

Solutions for websites accessibility & browsing comfort
Our new concept of digital pathologies

Even without being disabled, everyone can be confronted to constraints

Digital does not only mean websites (it can be digital objects)
The research question

What kind of problems can prevent us from interacting with digital technologies?
“Pathologies” parameters that are obstacles to the use of digital

- Technicality
- Financial aspect
- Confidentiality
- Digital dependance
- Technological skills
- E-administration
The proposed solution: online Platform service

- Sharing objects
- Websites standards
- Online support
- Simple and adaptable tutorials
Community aspect: sharing digital objects

To offer digital equipments service online

- Connect people to rent and swap digital equipments between them such as:
  - Smartphone
  - Tablet
  - Laptop
  - etc.
Tutorials adapted to everyone’s level of digital capabilities and competences

Setting difficulties:
- Beginner
- Advanced
- Expert

An expert will access to a tutorial, using a digital jargon that would not include a person who understands only the basic of digital knowledge.
Real-time support to help the digital context appropriation

- Guide the consumer in terms of use, regarding technology products such as:
  - Mobile phones
  - Televisions, computers
  - Software products
  - Other electronic or mechanical goods

- Ensure confidentiality: access to the data of the computer with the agreement of the user

- Available 24/7
Website accessibility in terms of use or understanding

- Using a design easy to understand:
  - Offering a wide range of languages
  - Arranging information consistency in relation with its importance
  - Making the content **responsive** by adapting the layout to the viewing environment whether smartphone, tablet or laptop, etc.
Perspectives

- Defining the ethical part to ensure more confidentiality when interacting with the online support
- Implementing training in the digital appropriation within the structure
- Financial plan based in sharing economy like Uber, Airbnb, etc.
Some more information ?…

Contact

- Laurent Billonnet

laurent.billonnet@unilim.fr

Professor at the University of Limoges
ENSIL Engineering School
Director of the international MSc Auton’Hom-e [otonomi]
Director of the BSc « Home Automation for Elderly and Disabled People »