



CATIE

Presentation of CATIE

CATIE (Centre Aquitain des Technologies de l'Information et Électroniques), was created in 2014 on the ADEISO's initiative and on the impulse of various academics' players as well as on the Aquitaine Region's. CATIE is a non-profit organization which aim is to support Aquitaine companies when adopting and integrating digital technologies in their economic development. CATIE takes place at the technologies' level and its skills are mainly technical ones. The centre is closely linked to Digital Aquitaine and it complements local measures, aimed at sustaining companies, by focusing on technological transfers needs. In the centre of the university campus, the CATIE is an applied research and technological development centre that supports companies and especially small and medium ones. On products and/or services life cycle and mainly on innovative processes, CATIE is providing human and material resources which complement those of companies and laboratories. It also provides an industrial know-how in system integration. CATIE is closely connected both with local academic research centres and local companies. The technology centre plays an important role in contributing to the effective transfer of innovations into products and services. It also contributes in advising laboratories on companies' future interests and technological requirements. For example, CATIE provides technology transfer services for topics that will be soon on the market (see "CATIE services") or it participates to joint projects by developing technological bricks that it will then transfer. We can intervene in the following fields:

- Research and Development services, prospective research and expertise
- Access to optimized and proven technological bricks to be integrated into products
- Supervised access to CATIE shared means or Aquitaine laboratories/schools resources
- Individualized support for the transition from R&D to industry especially for small and medium companies.
- Joint R&D platforms

Project Information

Topic:

SwafS-24-2020: Science Education Outside the Classroom

Swafs-31-2020: Bottom-up approach to build Sawfs Knowledge base

Field of expertise related to the topic:

Learning, formation with new technologies, adaptive formation according to cognitive profiles. User tests and data analysis. Human factors and ergonomics.

We have already worked in learning and formation with new technologies, more precisely with virtual reality, augmented reality, tablet, phone, etc., in linked with researchers specialized in new learning models with numerical technologies. Our team Human Centered Systems is specialized in



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the evaluation of cognitive profiles in order to help choosing learning technological solutions adapted to users. We define experimental protocols and evaluation analysis. Some technologies can improve learning performances of users, but it is not always necessary to use technology according to certain skills to transfer. We work on this with different start-up, school and university but also with large companies (in the automobile sector for example).

Potential contribution to the project:

CATIE can provide a methodology to measure performances and acceptability of formation according to different users' profiles. We also propose to explore new models of learning related to digital technology. CATIE will defined a pedagogical content adapted to the user and the knowledge/skills to be transferred.

Role in the project:

Research / Dissemination / Technology development / Training

Project idea

Our project idea is to study behavioral and cognitive profiles of users in function of used technologies. This will be then used in order to help designing learning and formation with new technologies support fully adapted to the user and to the type of knowledge to transfert.

Project description:

Today school learning is greatly disrupted and influenced by the use of digital technologies. These are used more and more in and outside classrooms. However, there are many open questions on the resulting learning. Through this project we want to study the behavior, the learning capacity as well as the learning performance that digital tools bring. These analyzes will be carried out on different populations in order to identify the obstacles and biases of learning using digital media. Our goal is to offer a methodology for designing digital learning materials adapted to user profiles.

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