The autonomy of the elderly : when students ideas beyond those of experts

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The aim of this paper is to present an original cross-disciplinary and cross generation methodology in order to bring out the problems and to find solutions about our near future: stay independent, free, and happy as long as possible despite aging effects. To untie this knot entangling technologies, humanities, management, in a complex system, ask for some ergonomics core value elements such as : work and task analyse in real situation, users and workers involvement... We will discuss the methodology, the centre of witch are interdisciplinary problem solving workshops, an overview of tangible results and a discussion about an apparent enigma “ how students started from scratch have to highlight problems and solutions which have escaped to the experts”.

Aging populations are more and more large in our modern world. Cities, countries, insurances... look for solutions to ensure elderly people well-being with a reasonable cost for society. Social, financial, professional aspects are studied and also some technological responses are in progress. As a technological university we have to support this topic with a systemic approached including technological questions but not only by “technologist” and not separate to social, economic, ergonomic questions. System most important elements are : elderly people, workers who support them, as direct users and society, family, friends, as indirect users. References are very large on this topic (cf ref) all aspects of the problem are presents. Regarding this pool of references an important issue exists for small or medium companies: what are the relevant references. Each case have particular problem, the results of international survey could be applicable or not regarding law, standards, cultural factors of the country.

Our approached was to organise a case study on the two possibilities existing in France to manage dependence due to the handicaps of age
- Home in specialised establishments
- Help maintain home

In both case the issue of working conditions arises as much as the well-being of the beneficiaries. We applied our pedagogic formula WPS Workshop Problem Solving with an elderly residence of 200 beds and an association to help people at home. During 2 weeks 24 students from different UTC departments such as computer engineering, mechanical engineering, process management, biological sciences, industrial design, cities management, have to work together to identify relevant issues and to propose projects to solve. The first week is focused on visits in order to analyse real situations and will end by a diagnostic and solutions. A first jury have to approve, discuss, complete, the propositions. During the second week, student teams have to complete theirs solution and to perform a demonstrator as a mock up that users and workers could test. A new jury composed with academics, professional, institutional, have to comment the result and add some testimonies...In the opinion of all (students, workers, residents, institutional, professional...) the result are amazing ! so many ideas, and some new ideas that expert have no idea before have emerged. All the level of the system are affected with... (UTC 2013)

Now what about the question : why professional expert haven't find ideas as far as students have ? Our purpose is based at the moment only about hypothesis. The partitioning of jobs and discipline impede to think the situation as a whole... ergonomist have to think ergonomics, architect architecture, manager management ... and the most innovative ideas of this project results of an interdisciplinary thinking. Expert tackles to the situation current methodologies and his culture, and his thinking is oriented by that and sometime his look is blind ! despite students are totally open because they have no ideas at the beginning of the observation. The open mind atmosphere between all stack order during the project was also very productive. One reason of this free language between project actors was AIRP is an exercise without direct issues : no power issue, no time, no budget constraint ...

References