

J.J.N. Lichtenberg. *Product development for adaptive elderly housing. Gerontechnology 2008; 7(2):155.* Slimbouwen® (SLIM in Dutch stands for both smart and lean, BOUWEN is the Dutch word for 'to build') starts from the statement that the traditional way of building does not meet today's requirements. Building substantially affects the environment in many ways. The building process has become extremely complex and buildings are hardly adaptable whilst requirements are rapidly changing within a few years. Especially this last topic is of great relevance for the gray growing society and the costs of health care. Among others, a great challenge for the future is to design and construct houses with the ability to change in order to support independency for elderly people or to support healthcare organizations to provide 'at home' services. Slimbouwen is a building strategy that offers a great deal of flexibility<sup>1</sup>. Research on flexibility of building is carried out in the frame work of Slimbouwen. Which are the essential parameters that make a building flexible? We elucidate the concept of Slimbouwen, including the development of new products and full scale practical experiences. We focus on the aims of two projects that started in 2007 and in which Slimbouwen principles are applied. One project is aiming at new building concepts for an organization in services for housing and care. This organization is now confronted with the limited adaptability of buildings in which they invested some 35 years ago. In this frame work a working group consisting of representatives of Eindhoven University of Technology, the organization mentioned above, and the Municipality of Eindhoven, is now preparing a research program in order to investigate in which way houses should be flexible and to perform well in the future. The work is partly based on the combination of the Slimbouwen program and the dissertation of Van Vliet about ageing-in-place and the necessary conditions<sup>2</sup>. The other project is focusing on ICT applications (new products in the field of domotics) and the adoption of technology by consumers in existing houses. Three dwellings are prepared with a number of domotic applications in order to be able to evaluate their use. Product development and product adaptation is carried out<sup>3</sup>. On the basis these and other examples, it will be explained how adaptability depends on separating services from building parts and the accessibility of structures, in order to work on the services during the utility phase. At the same time the simplification of the process offers a gain of building time and also a substantial reduction of costs, which is an important precondition for a successful development and diffusion in the market.

### References

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