

H. Bouma. Technology for a purpose (key note). Gerontechnology 2008: 7(2):76. Gerontechnology is technology for a purpose. We wish to help realize a society in which products, services, and infrastructure will enable all ageing persons to realize ambitions, support independence, and compensate any restrictions to the greatest possible extent. How to make this true? **Two roads to travel** Firstly, we need to know which advantage is to be gained and in which life domain. Secondly, we have to apply all relevant insights provided by the research disciplines involved, dealing with human ageing processes and dealing with technology innovation. **Impact matrix** Consider the domains of daily life: health, daily living, communication, mobility, work. Each has specific options for technological support. We will have to give substance to the type of advantages for ageing people: serving ambitions, proactive prevention, compensating restrictions, and, if needed, supporting care. By plotting goals versus life domains, we get an overview of the type of products and services that can contribute to a good life. Also, we can plot existing products and services to see what positive impact these might have. An impact matrix has been proposed as a tool for insight in the actual values of existing and innovative technology¹. **Cross-fertilization matrix** The understanding of ageing processes comes from the disciplines of human physiology, psychology, and sociology. These supply a great many insights. Two examples: old age is not a steady state at 65+, but ageing is a process, starting early in life. Also: ageing people get ever more diverse, if only because of diverging life histories, environments, and skills. The understanding of technology innovation comes from material sciences, building, information science, mechatronics, design, and business management. This takes us to new materials, miniaturization, ambient intelligence, functionalities of the Internet, ergonomics, and their mutual integration. What we ultimately need is coordinated insight from the human disciplines and the technological disciplines. These can be plotted as a matrix. Relevant insights and methods as well as problems to be solved can be positioned in the matrix cells. Examples are inclusive design, situated learning, and the primacy of user benefits. The cross-fertilization matrix tool gives access to knowledge and insights specifically from disciplines outside ones' own experience². **Conclusion** For products and services for ageing people in their life domains, their potential is to be spelled out. The core of gerontechnology research is scientific insight and methodology from both the human and the technological disciplines. Two matrix tools have been developed for monitoring actual progress and utilizing the best available insights.

References

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Keywords: impact matrix, cross-fertilization matrix, tools, human sciences, technology

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