

## Changing Behaviour in the Digital Era: A Concrete Use Case from the Domain of Health

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**Abstract :** Humans do not behave rationally. We are emotional, easily influenced by others, as well as by our context. The study of human behaviour became a supreme endeavour within many academic disciplines, including economics, sociology, and clinical and social psychology. Understanding what motivates humans and triggers them to perform certain activities, and what it takes to change their behaviour, is central both for researchers and companies, as well as policy makers to implement efficient public policies. While numerous theoretical approaches for diverse domains such as health, retail, environment have been developed, the methodological models guiding the evaluation of such research have reached for a long time their limits. Within this context, digitisation, the Information and communication technologies (ICT) and wearable, the Internet of Things (IoT) connecting networks of devices, and new possibilities to collect and analyse massive amounts of data made it possible to study behaviour from a realistic perspective, as never before. Digital technologies make it possible to (1) capture data in real-life settings, (2) regain control over data by capturing the context of behaviour, and (3) analyse huge set of information through continuous measurement. Within this complex context, this paper describes a new framework for initiating behavioural change, capitalising on the digital developments in applied research projects and applicable both to academia, enterprises and policy makers. By applying this model, behavioural research can be conducted to address the issues of different domains, such as mobility, environment, health or media. The Modular Behavioural Analysis Approach (MBAA) is here described and firstly validated through a concrete use case within the domain of health. The results gathered have proven that disclosing information about health in connection with the use of digital apps for health, can be a leverage for changing behaviour, but it is only a first component requiring further follow-up actions. To this end, a clear definition of different 'behavioural profiles', towards which addressing several typologies of interventions, it is essential to effectively enable behavioural change. In the refined version of the MBAA a strong focus will rely on defining a methodology for shaping 'behavioural profiles' and related interventions, as well as the evaluation of side-effects on the creation of new business models and sustainability plans.

**Keywords :** behavioural change, framework, health, nudging, sustainability

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