RECENTRE 4th consortium meeting

The 4TU.RECENTRE project held its 4th consortium meeting on May 23, 2024, at the University of Twente. The consortium members envisioned a future that the RECENTRE program could create by immersing themselves in a virtual reality future home scenario. Through discussions, they reflected on present actions needed to realize this future vision.

The program began with a welcome for all participants, including two new PhD students. Each Work Package (WP) then provided a brief progress update. Key achievements included the recruitment of PhD students for WP2 and WP3, and WP4's successful funding proposal on "Hormonal Disbalances Impacting Body Composition in Women Living with Obesity". WP4 will collaborate with WP3 to enhance long-term health outcomes for patients with obesity through more accurate individual-level body composition measurements. Additionally, WP6 shared findings from its systematic realist review on adaptive digital interventions in healthcare.

After the lunchbreak, a plenary presentation introduced a "futuring" workshop with virtual reality elements to reflect on the shared vision within the RECENTRE consortium. Futuring describes a collection of methods that aim to explain how the emergence of the future can be explained and influenced. The workshop focused on one of these methods, namely "backcasting", to imagine a desired future and then trace back to identify the necessary present actions to achieve that future.



Fig 1. Consortium members listened to workshop schedule.

This was supported by a virtual reality scenario that immersed consortium members in a possible future, serving as a reference point for reflections on a shared vision. In the scenario, consortium members were transported to their future home after making some personalization choices, such as changing the color of the walls. Upon arrival, they completed a daily living task in the form of watering a plant to get acquainted with their surroundings. Then, they performed a sensor measurement to receive lifestyle-related feedback and were prompted to put an apple into their backpack to maintain the lifestyle change.



Fig2. Virtual reality future home scenario.



Fig 3. Program leader dr. Annemieke Witteveen at the virtual reality immersion lab.

After participating in the immersion activity, consortium members reflected on their virtual reality experience in groups to see how their visions align or diverge. Moreover, other reflection activities revolving around values for health and technology were conducted to generate additional input for imagining a shared vision of a desired future. During all reflection activities, sticky notes were created to serve as a starting point for backcasting.

The workshop was concluded by coming together for the plenary backcasting activity in which the previously made sticky notes were attached to a 10-year timeline at the furthest point to the future. Then, the consortium members were prompted to identify the circumstances which need to be created at various points between the present and the desired future to arrive at this future. The results of this workshop are currently under analysis and will be used to write an article about using futuring and virtual reality for interdisciplinary collaboration.



Fig 4. Backcasting result. Starting from the left side as "present current situation" to the right "Future home Scenario".

The consortium meeting concluded with a wrap-up presentation that included information on upcoming presentations, tutorials, conferences, potential collaborators, and arrangements for the next consortium meeting. This was followed by an opportunity for consortium members to share ideas about current and future projects.



Fig 5. Consortium meeting participants.