

Wake Up and Smell the Coffee

16 alarm clock designs and the fundamental needs they satisfy

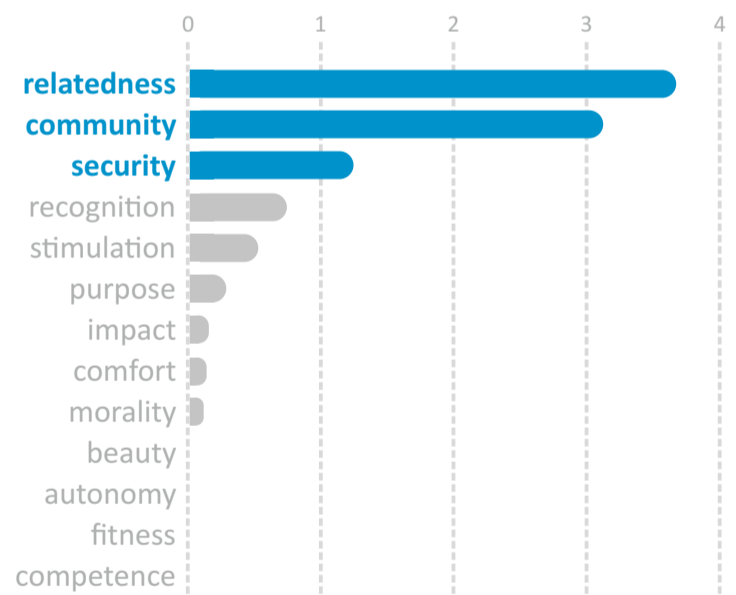
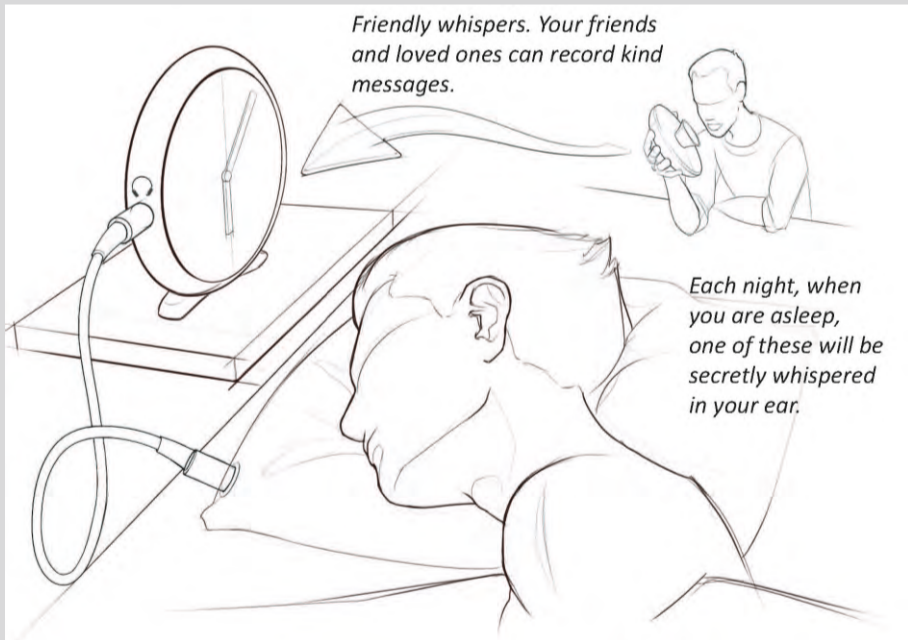
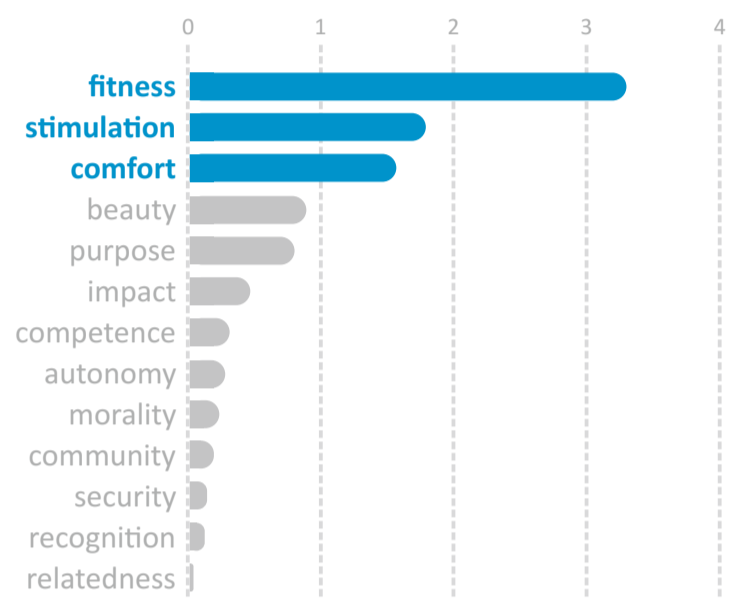
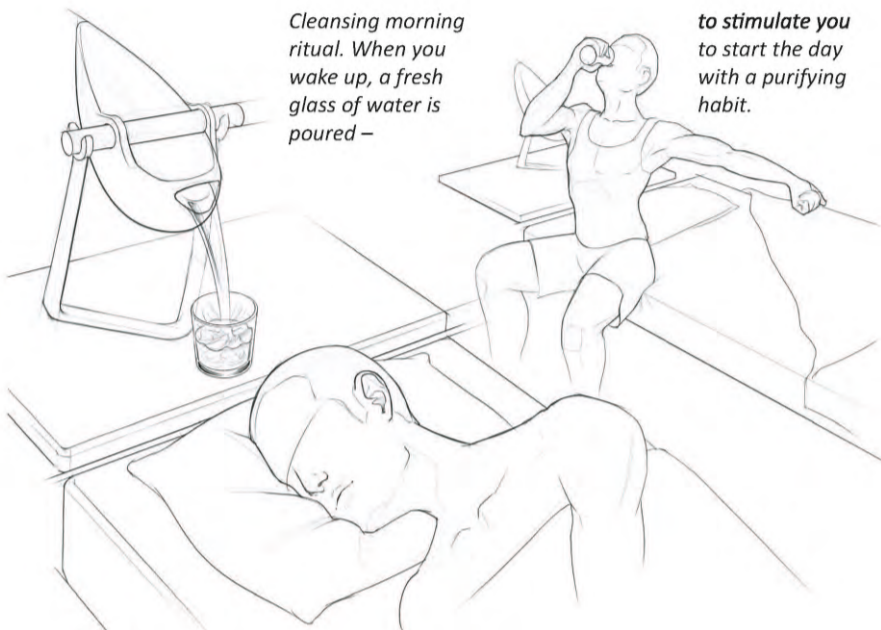


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2nd edition

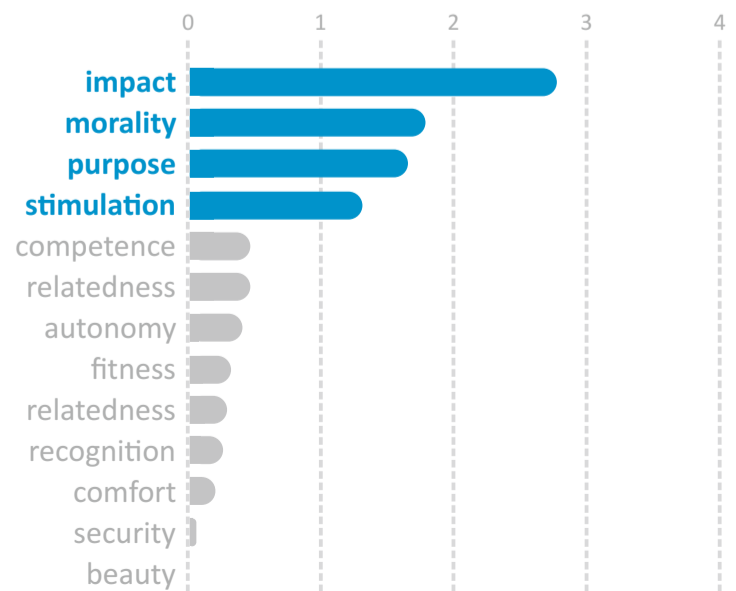
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Delft Institute of Positive Design

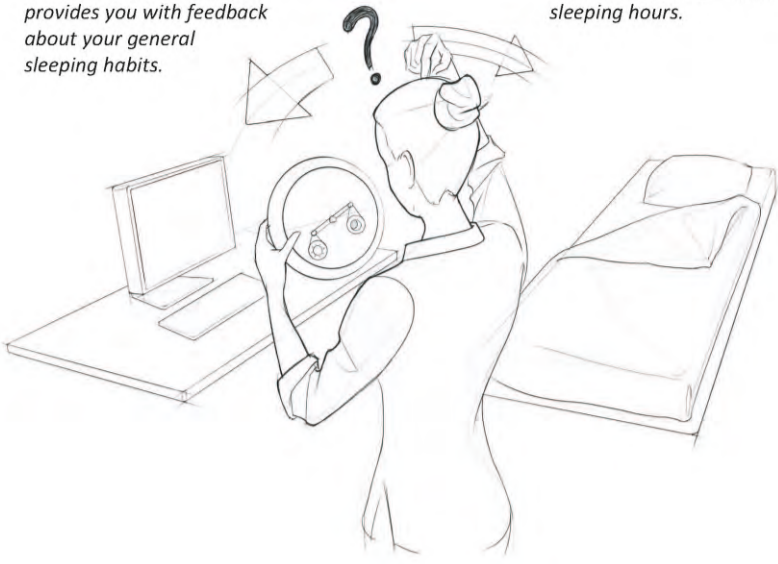
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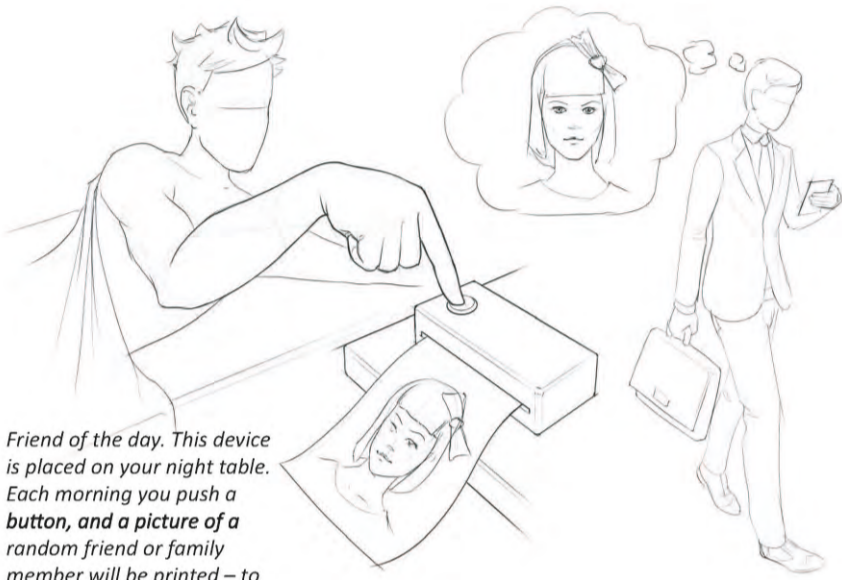
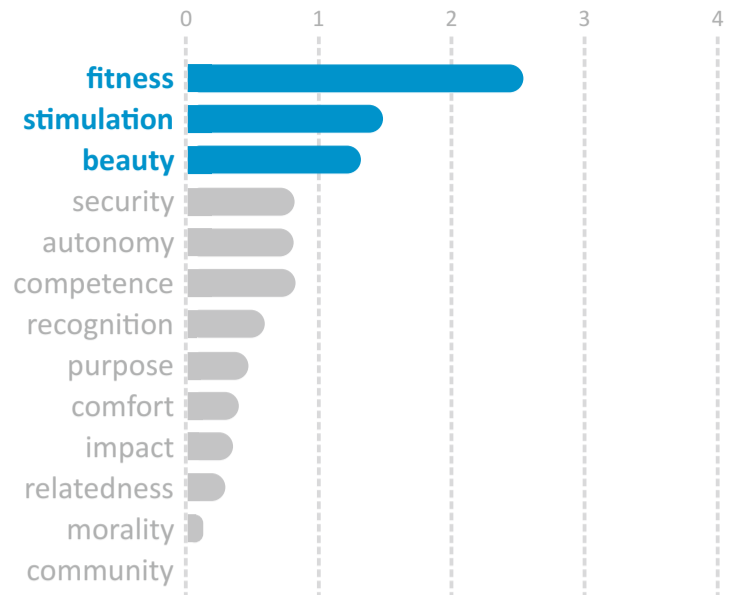
Generosity clock. Each time you snooze, the clock will automatically donate some of your money to your preferred charity.



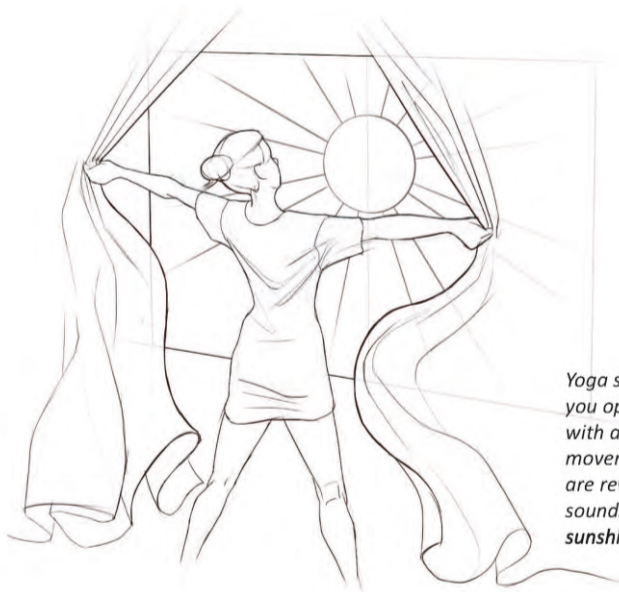
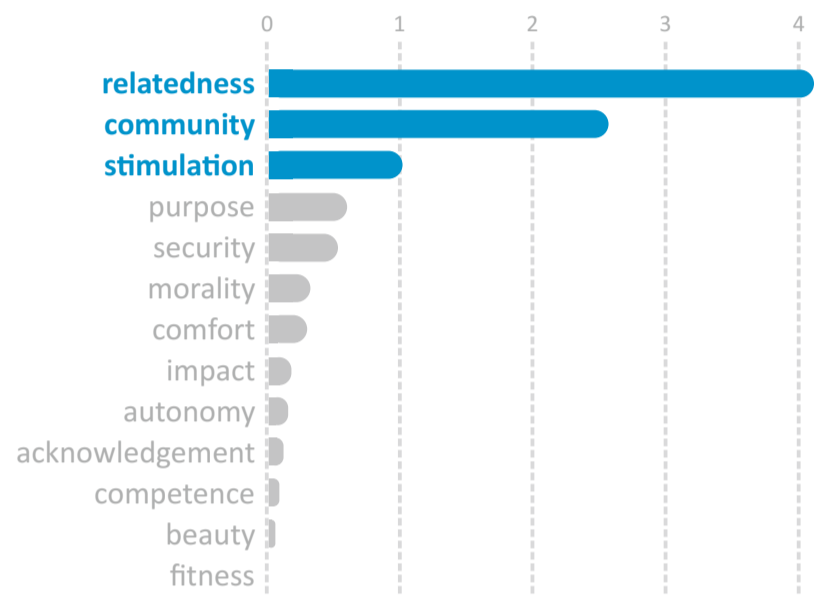
Sleeping manager. The balance on the clock face provides you with feedback about your general sleeping habits.



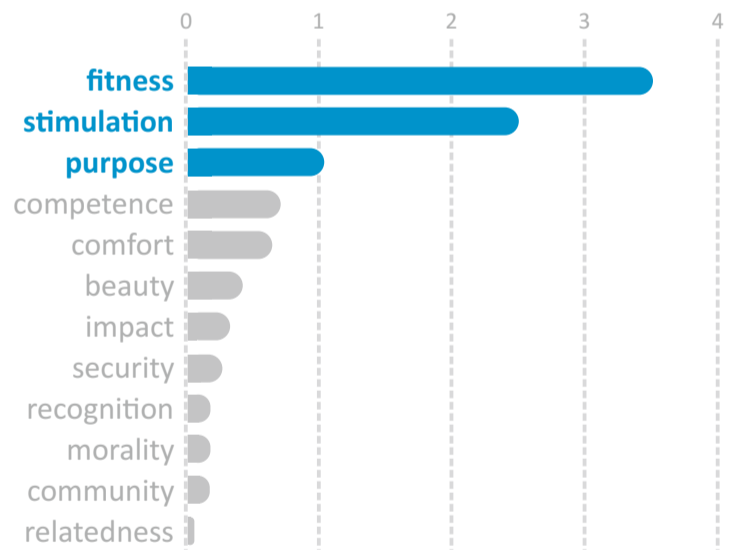
The balance will start to tilt when you keep skipping sleeping hours.



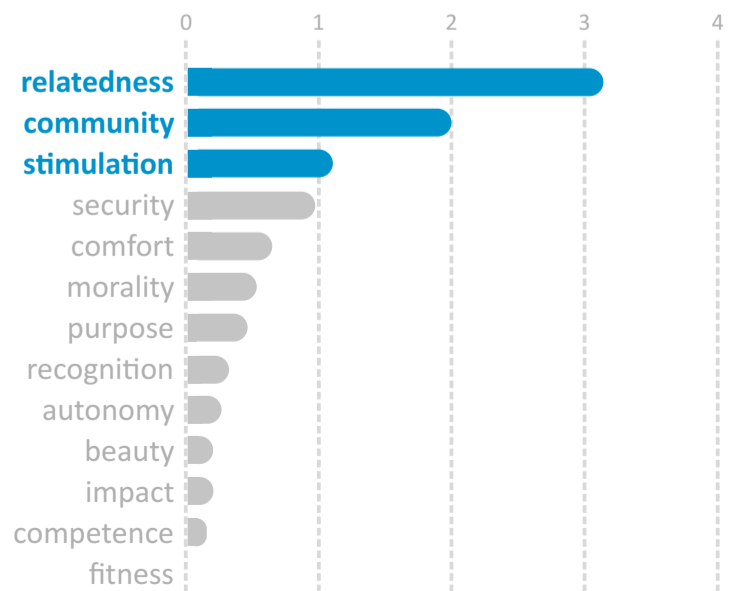
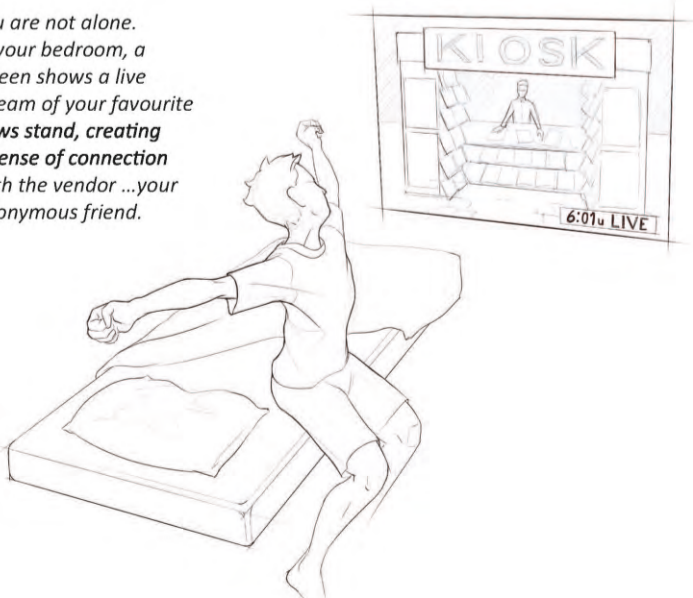
Friend of the day. This device is placed on your night table. Each morning you push a button, and a picture of a random friend or family member will be printed – to be your 'friend of the day.'



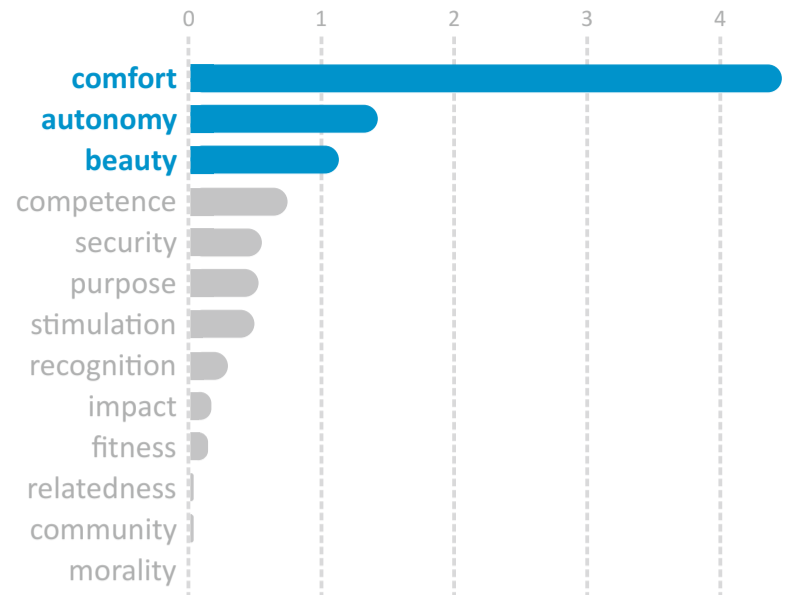
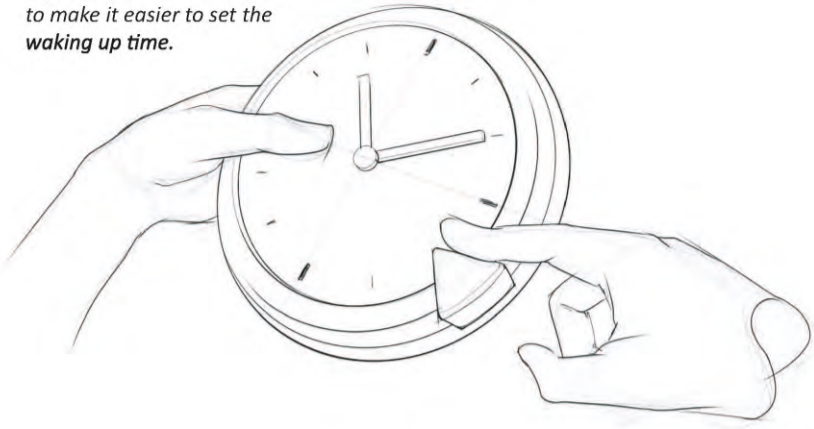
Yoga stretch. When you open the curtains with a stretching movement, you are rewarded by sounds of birds and a sunshine animation.



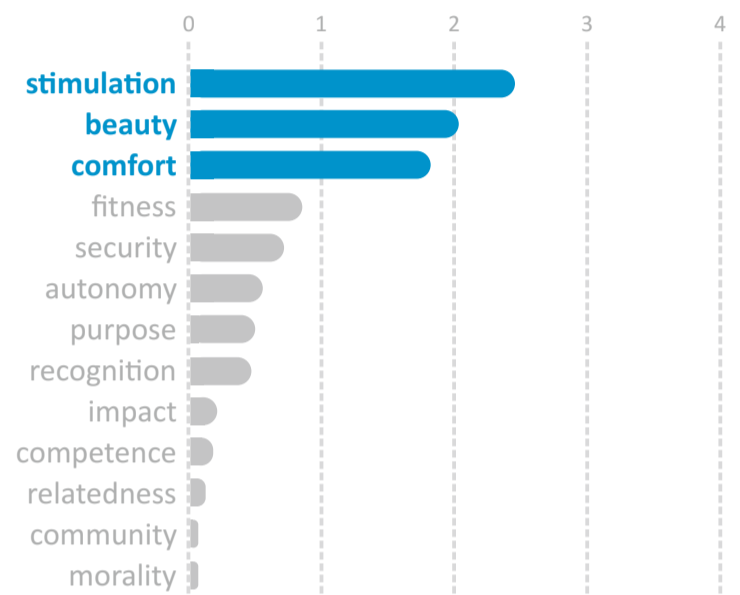
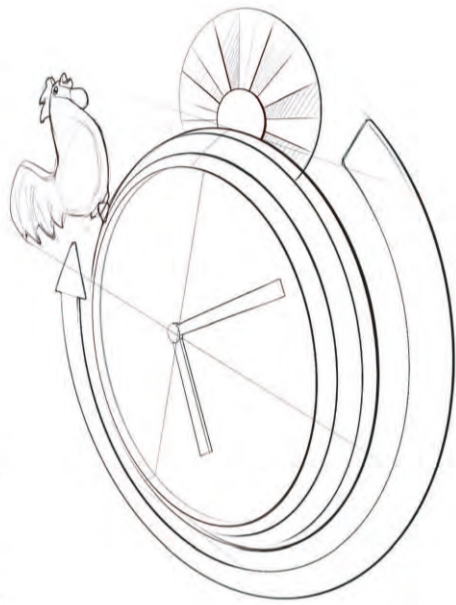
You are not alone. In your bedroom, a screen shows a live stream of your favourite news stand, creating a sense of connection with the vendor ...your anonymous friend.



Setting convenience. Instead of a small button at the clock's backside, this clock has a big sliding button at the side to make it easier to set the waking up time.

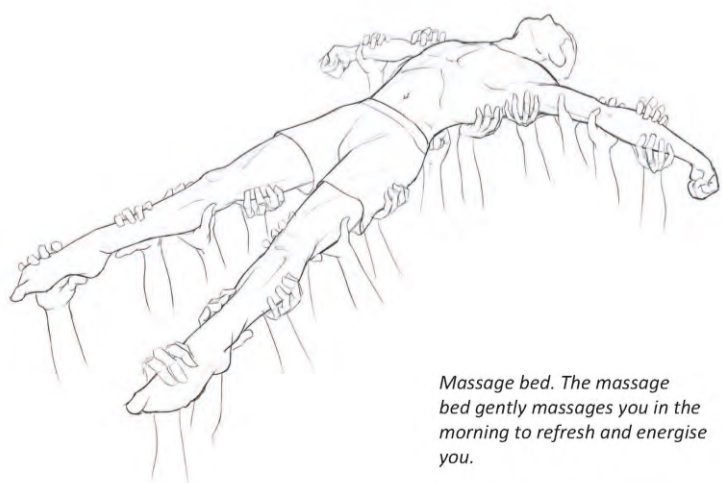
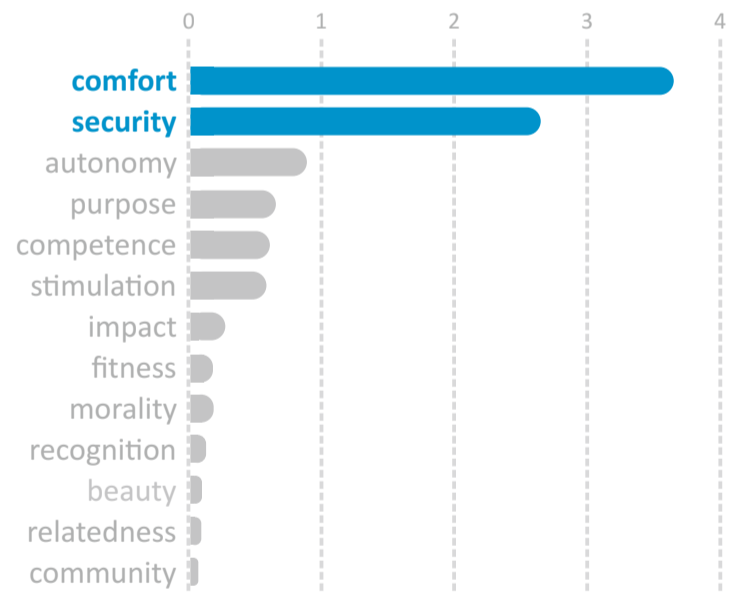
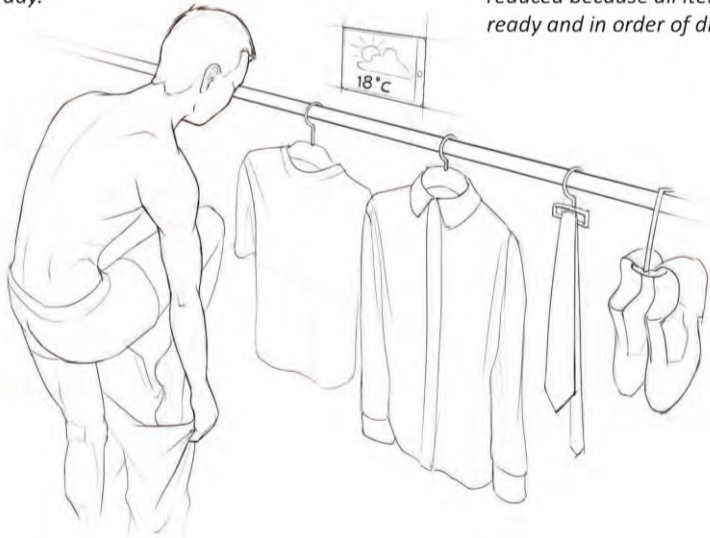


Rooster Clock. The cock circles the clock. A full circle represents your set sleeping time. The location of the cock visualises the remaining sleeping time. When the cock returns to the top, it will wake you up.

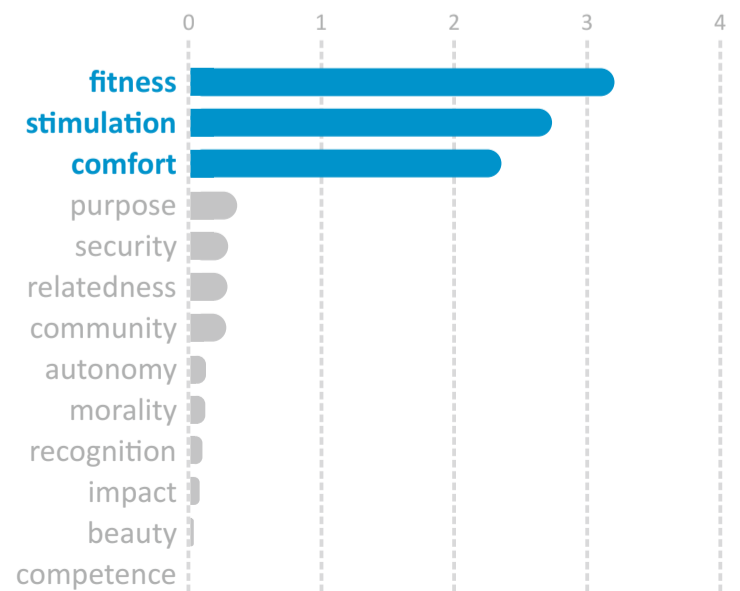


Dress manager. A display shows the weather of tomorrow helps you to select your outfit for the next day.

The inconvenience of finding your clothes in the morning is reduced because all items are ready and in order of dressing.

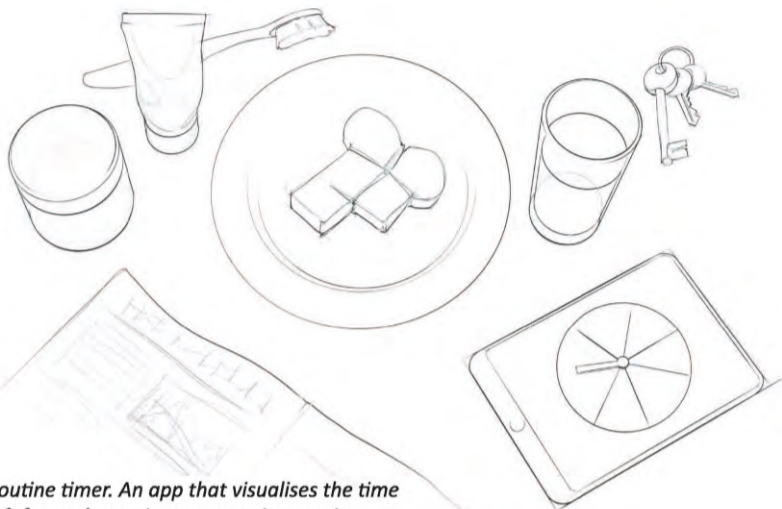
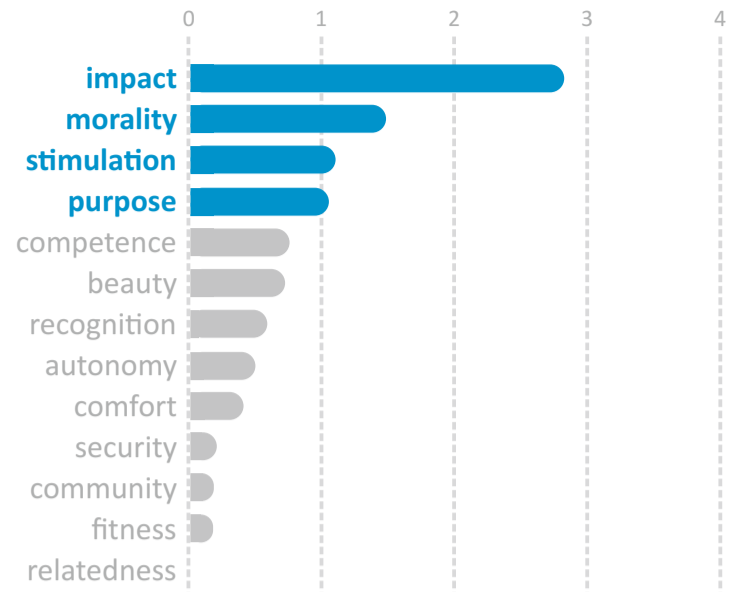


Massage bed. The massage bed gently massages you in the morning to refresh and energise you.

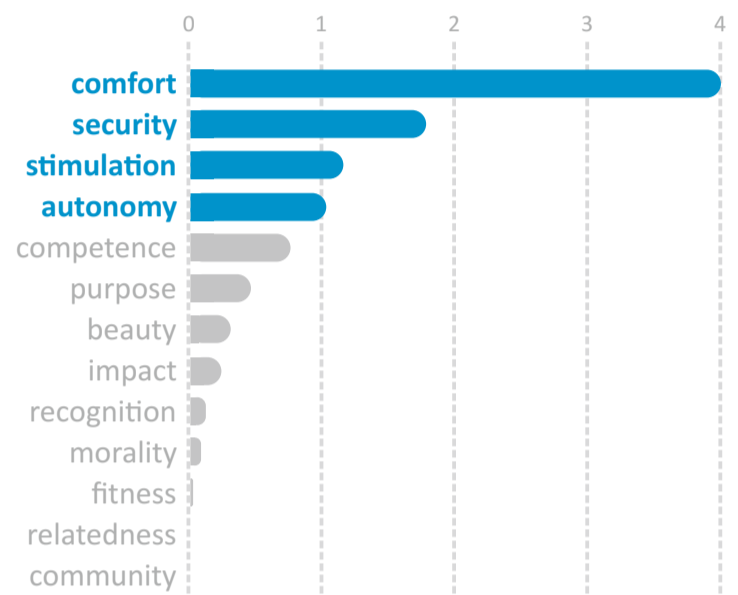


Energy management. Each morning a device visualises your morning-ritual energy footprint,

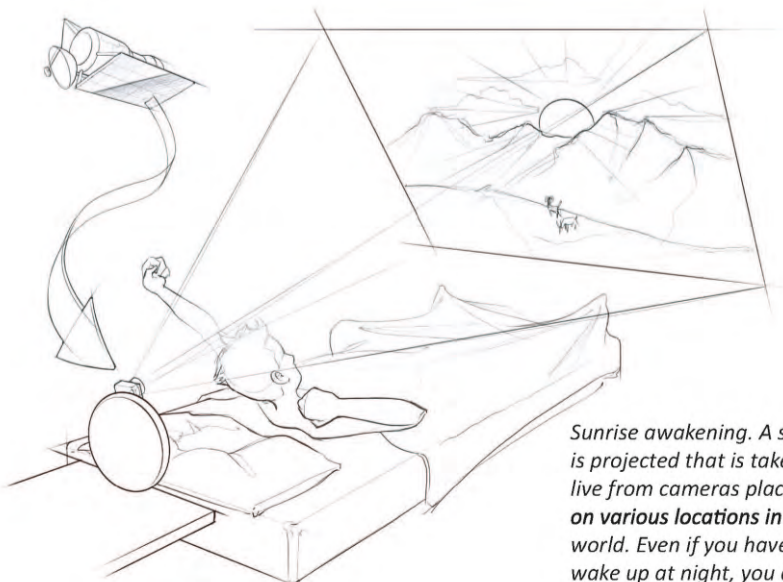
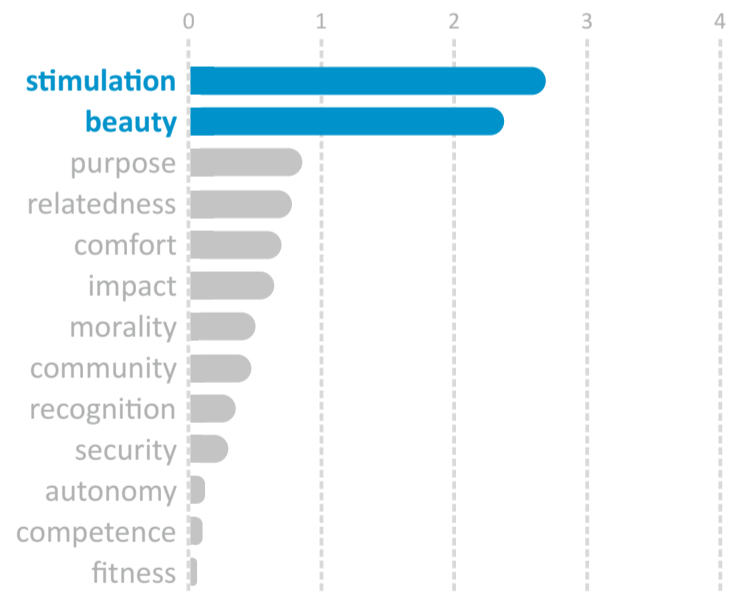
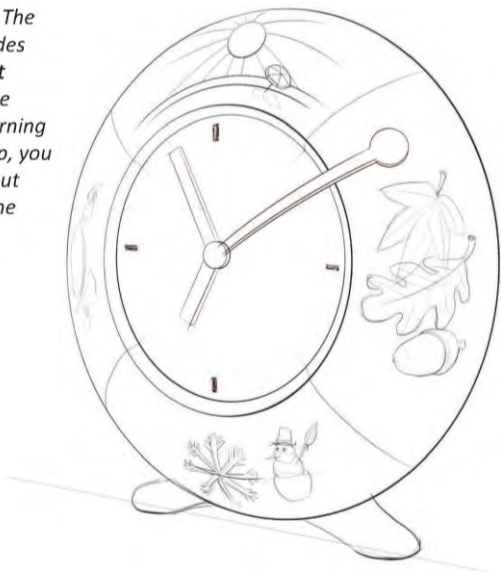
stimulating and enabling you to manage your energy consumption.



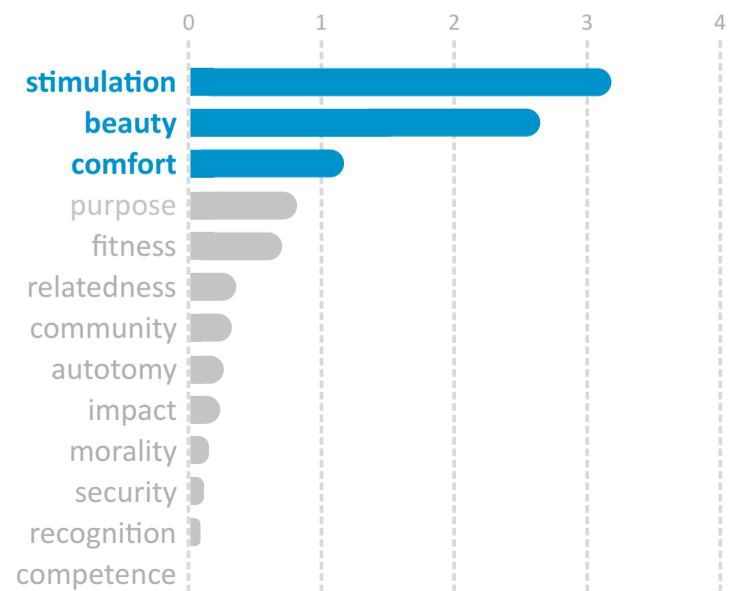
Routine timer. An app that visualises the time left for each step in your morning routine. Using this app will reduce stress because it ensures that you won't have to rush through the last steps before leaving for work.



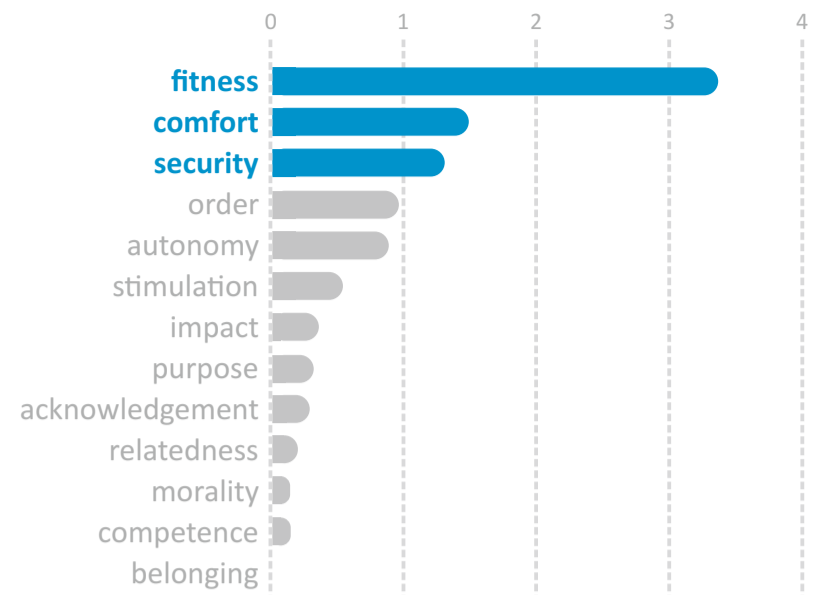
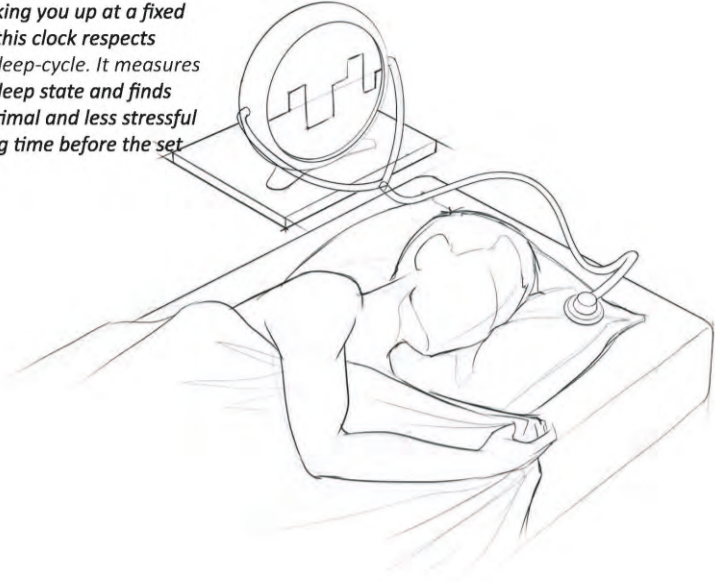
Evolving seasons. The alarm clock provides information about the progress of the seasons. Each morning when you wake up, you are reminded about the changing of the



Sunrise awakening. A sunrise is projected that is taken live from cameras placed on various locations in the world. Even if you have to wake up at night, you are welcomed by the sun.



Sleep cycle tracker. Instead of waking you up at a fixed time, this clock respects your sleep-cycle. It measures your sleep state and finds an optimal and less stressful waking time before the set time.



The need profiles in this card-set include the following thirteen fundamental psychological needs:

- Competence** Having control over your environment and being able to exercise your skills to master challenges. Rather than feeling incompetent or ineffective.
- Autonomy** Being the cause of your own actions and feeling that you can do things your own way. Rather than feeling that external conditions and other people are the cause of your actions.
- Purpose** Having a clear sense of what makes life meaningful and valuable. Rather than lacking direction, purpose, or meaning in your life.
- Impact** Seeing that your actions or ideas have an impact on the world and contribute something. Rather than seeing that you do not influence or contribute anything.
- Relatedness** Having warm, mutual, and trusting relationships with people that you care about. Rather than feeling isolated or unable to make personal connections
- Community** Being part of and accepted by a social group or entity that is important to you. Rather than not belonging anywhere and having no social structure to rely on.

- Recognition** Getting appreciation for what you do and respect for who you are. Rather than feeling disrespected, underappreciated, or ignored.
- Security** Feeling that your conditions and environment keep you safe from harm and threats. Rather than feeling unsafe, at risk, or uncertain.
- Beauty** Feeling that the world is a place of elegance, coherence and harmony. Rather than feeling that the world is disharmonious, unappealing or ugly.
- Morality** Feeling that the world is a moral place and being able to act in line with your personal values. Rather than feeling that the world is immoral and your actions conflict with your values.
- Fitness** Having and using a body that is strong, healthy, and full of energy. Rather than having a body that feels ill, weak, or restless.
- Stimulation** Being mentally and physically stimulated by novel, varied, and relevant impulses. Rather than feeling bored, indifferent, or apathetic.
- Comfort** Having an easy, simple, and relaxing life. Rather than experiencing strain, difficulty, or overstimulation.

Creating the alarm clock designs

The sixteen alarm clock designs were generated in a workshop with design students at IDE Delft, which is part of a 'design for subjective well-being' design course.

The design brief was to redesign an alarm clock, or to design an 'intervention' in the activity of waking up and preparing to go to work. Eight different design strategies were used; the card-set includes two designs for each strategy. The strategies combined three variables:

- (1) Product focus versus Activity focus** (redesign the product or redesign the activity).
- (2) Pleasure focus versus Meaning focus** (focus on the pleasure or on the meaning of the experience).
- (3) Problem versus Opportunity focus** (reduce displeasure or negative meaning, or add pleasure or positive meaning).

Study details are reported here:
Desmet, P.M.A. (2021). *Pleasure and meaning: Four opportunities for happiness-driven design*. Manuscript submitted for publication.

Developing the need profiles

The need profiles were generated with a questionnaire study in which 34 participants rated the degree to which each alarm clock design fulfils each of the 13 fundamental needs.

Questionnaire

The study used 16 short questionnaires, one for each alarm clock design. Participants were shown an alarm clock design with a short description and asked to allocate 10 points among the 13 needs. By allocating points, they expressed which needs are most fulfilled by the target design.

Results

For each alarm clock design, sum scores and mean ratings were computed for all 13 needs. The bar graphs on the cards show the mean ratings. Ratings of 1.0 or higher are shown in blue; ratings lower than 1.0 are shown in grey.

Study details are reported here:
Desmet, P.M.A. (2020). *Need profiles of 16 alarm clocks*. Internal report. Delft: Delft University of Technology.

Colophon

This card-set was created by researchers at the Delft Institute of Positive Design. It was based on a typology of 13 fundamental human needs: Desmet, P.M.A., & Fokkinga, S.F. (2020). Inspired by Maslow: Introducing a typology of 13 fundamental needs for human-centered design. *Multimodal Technologies and Interaction*.

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Reference

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Design researchers at the Delft Institute of Positive Design (TU Delft) seek to advance our understanding of the ways products and services can be designed to foster human happiness. We develop tools that designers and organizations can use to tap into the vast potential of lasting well-being. On our website, you will find more tools and a rich library of open-access research. See www.diopd.org.

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