

eco-deluxe hotels for a timeless experience

LUXURY TOURISM



TECHNOLOGY IN FAVOR OF SUSTAINABILITY

Teoria e Tecnologia della Comunicazione A.A 2021-2022

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THE MEANING OF LUXURY IN TOURISM



XVII-XVIII century: In Europe, bourgeois families begin to make training trips.

1980: The transition to organized holidays.

1990: Tourism becomes a mass phenomenon.

2000: A growing share of population starts to access to luxury sector, thanks to the improvement of economic conditions

"Luxury is, and will increasingly be, linked to the dimensions of space, time and silence. Not to ostentation."

LUXURY TOURISM: CLIENTS



There is a wealthy client segment, with great financial means, that is willing to pay colossal amounts of money for a trip due to a desire to outshine others in their social circle and to spend their hard-earned money on relaxation and pampering.

Such people are generally:

- Between 25 and 55 years old
- Have a medium or superior level of education
- Own their own business or occupy middle or upper management positions in large companies.

TECHNOLOGIES IN LUXURY HOTEL INDUSTRY



01

Hotel automation

Smart app control of lights, TV, fans, blinds, A/C, heating, all in-stay technology. These technologies empower guest personalization while keeping energy costs low.

02

Solar panels

The hospitality industry has grown fond of solar technologies during the last few years. Nowadays solar is more cost-effective and affordable than ever.



SOLAR PANELS

From luxury hotels, resorts, and everything in-between, hospitality businesses see a great opportunity in installing solar panels to reduce their operating costs and avoid grid disconnection.

Hotels are one of the top industries where the installation of solar products and plants can initiate a significant change in the condition of the environment.



ADVANTAGES

- Solar energy helps hotels improve the customer experience;
- The quiet and clean operation has a positive impact on hotel guest experience;
- The venue can achieve a great reduction in CO2 emissions;
- Solar panels improve the hotel's media and public perception;
- Solar energy frees up money to re-invest in the hotel.

SUSTAINABILITY IN HOTEL INDUSTRY



Sustainability and social responsibility is fast becoming a prime concern for public and private sectors like hotel industry.

According to the Cambridge Institute for Sustainability Leadership, tourism contributes about 5% of global greenhouse gas emissions.

A large section of the hospitality industry is joining the mobilization in mitigating negative environmental impacts and facing societal challenges.

One of the most important trend in sustainable hospitality is:

"three-zero-concept" approach: using local construction materials and skills (zero kilometers), prioritizing energy management and lower emissions and introducing life-cycle management into the building process (zero waste).

MARRIOTT HOTELS



CONTEXT



Marriott International is an American multinational hotel company. Currently it is the largest hotel company internationally, with more than 6700 structures between hotels and resorts.

Marriott has signed an agreement with **Samsung** and **Legrand** to use the technology to improve guest experience and create smarter and more efficient rooms in construction and design. Marriott aims to optimize all the operations that are done in the hotel.

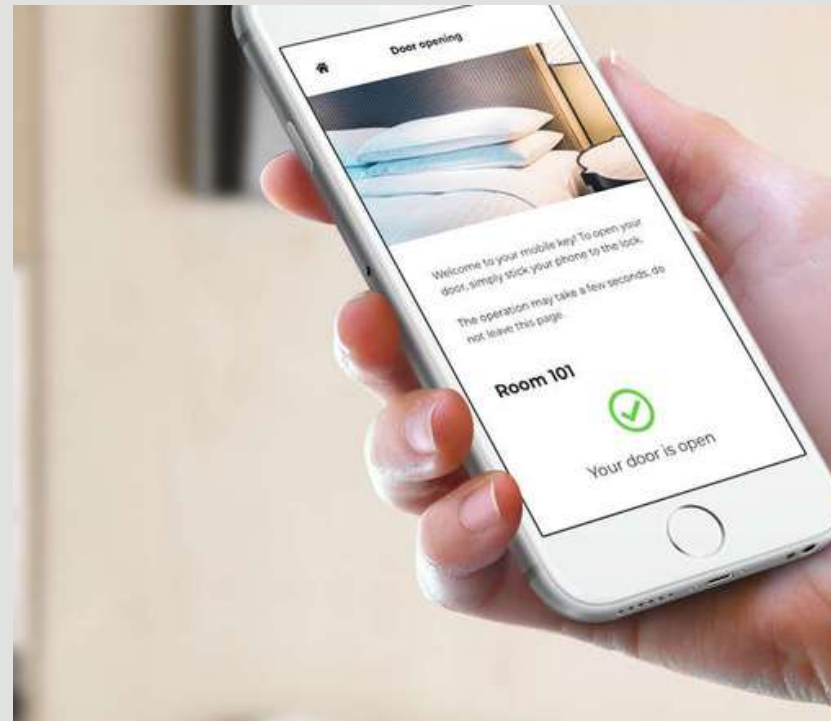
This hotels engages to minimize environmental footprint by sustainably managing hotel energy and water use, reducing waste and carbon emissions and increasing the use of renewable energy.

UBIQUITY



Virtual reality

VR postcards
The 4-D Teleporter



Mobile app

Through the app guests will be able to personalize their travel experience



Shower-inspiration technology

Allows guests to seize on moments of inspiration in the shower. They can doodle their ideas on the steamed-up shower screen and then have the results sent to their devices.



Robots for Room Deliveries

MARRIOTT VR POSTCARDS



<https://www.youtube.com/watch?v=fT2p4EBXYSg&t=1s>



Marriott Hotels has introduced the first ever **In-Room Virtual Reality Travel Experience**. With the **VR postcards**, which are realized in cooperation with Samsung, customers can visit with virtual reality from where they sit in their rooms:

- China
- Rwanda
- Chile

VR Postcards are intimate and immersive travel stories that users experience in 360° 3D through a virtual reality headset. Each story follows a real traveler on a journey to a unique destination; viewers are immersed in the destination and hear the travelers' personal stories.

MARRIOTT 4-D TELEPORTER



<https://www.youtube.com/watch?v=i6yMqXLnpN4>

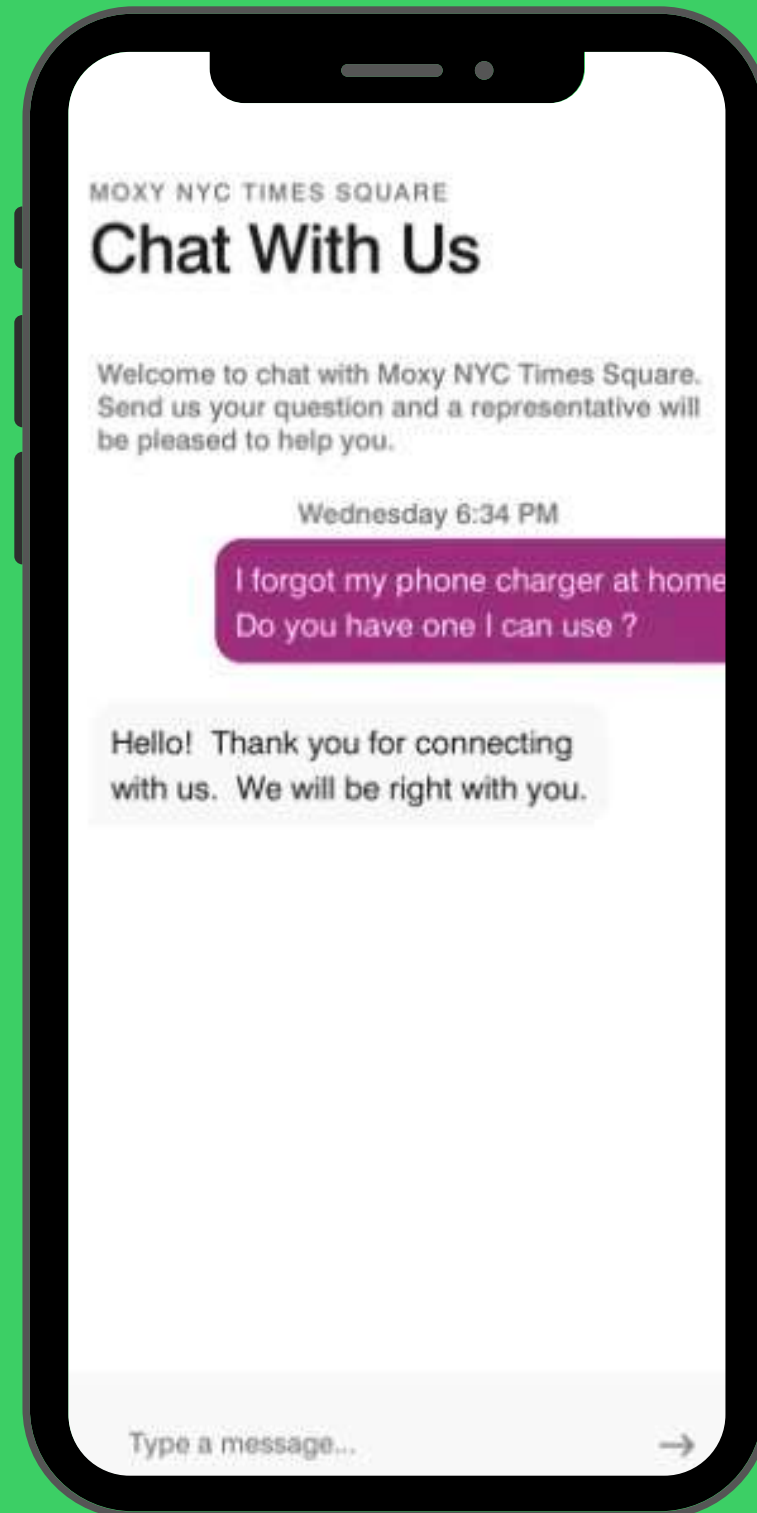
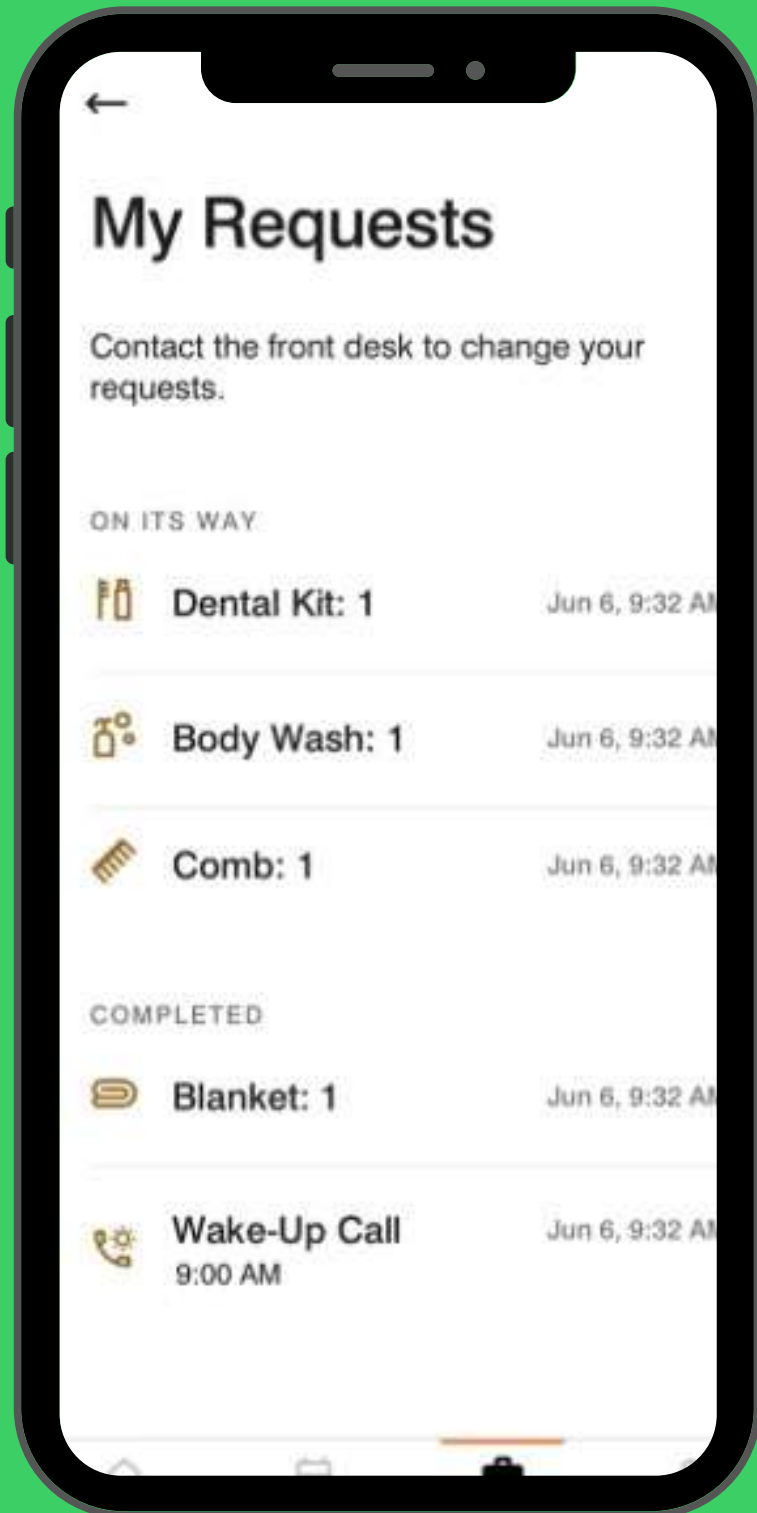


The 4-D Teleporter gives a fully immersive, 4-D sensory experience with Oculus Rift technology. In seconds guests can see, hear and feel what it's like to be in destinations halfway across the globe.

To create a virtual travel experience that truly feels like "being there," Marriott have pioneered new virtual reality innovations mixing videos with 4-D elements such as heat, wind and mist.

During the Marriott Virtual Travel Experience, guests enter the **Teleporter**, a phone booth-like structure, where they will put on Oculus Rift DK2 headset and a wireless pair of headphones.

MARRIOTT MOBILE APP



Marriott mobile app offers an intuitive and personalized experience, with booking options and customizations for guests.

- By using this app guests can request the Samsung virtual reality headset and accompanying headphones;
- Before, during and after their stay, guests can activate a chat with hotel staff for special requests that require personal attention;
- It is possible to request a room upgrade and receive confirmation of it before arrival at the hotel;
- It is possible to request check-out directly from the app, without going to the reception.

Marriott was the first in 2015 to offer a service such as Mobile Requests, which is currently available in more than 4 000 hotels around the world.

HEN-NA HOTEL

Nagasaki, Japan



THE STORY OF THE HOTEL

Henn-na Hotel in Nagasaki, Japan,
is the first hotel to have working robots.

Opened in July 2015, the hotel finds 186 robots, including a luggage-carrying arm robot, transport robots, a female robot and a dinosaur robot at the reception desk, desktop robots for indoor customer service, and robotic cleaners.

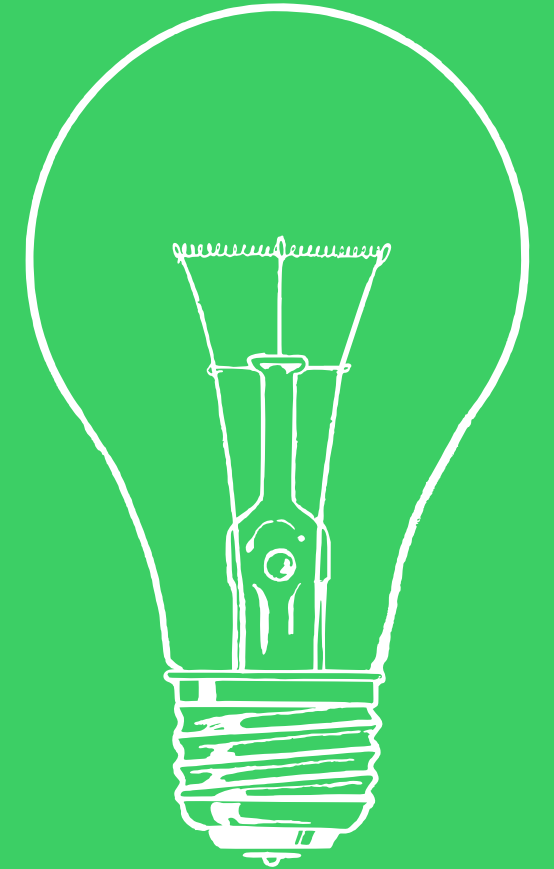


CONCEPT



One of the definitions of the Japanese word “Henn” is “**to change**”, which represents the commitment for evolution in striving for the extraordinary sensation and comfort that lies beyond the ordinary.

REDUCE ELECTRICITY AND WASTE



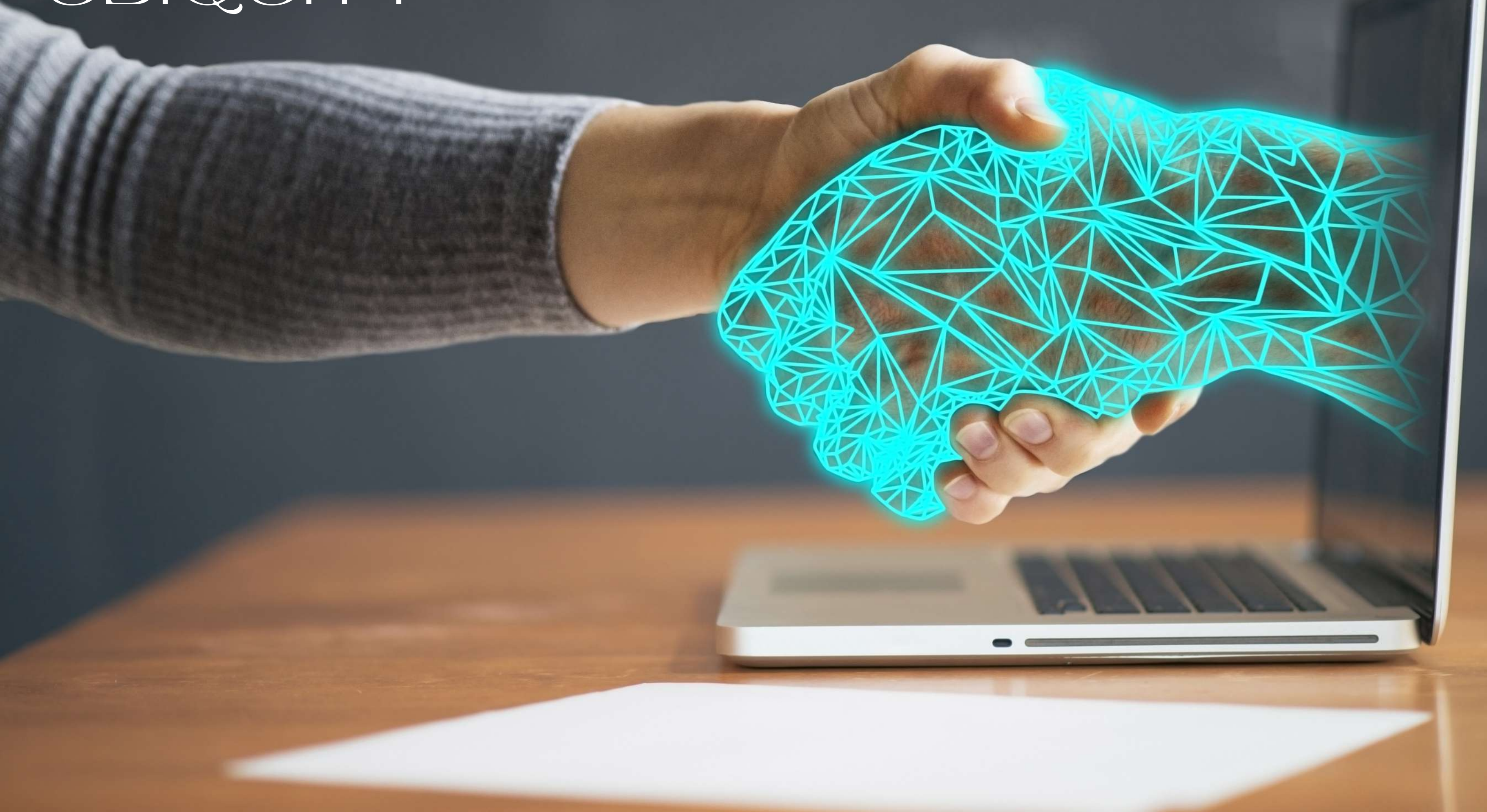
Thanks to a motion sensor, lighting turns off automatically when no one is in the room.

Air conditioning is the latest radiant panel technology.

This system uses electromagnetic waves to transfer heat directly from one object to another without affecting the air in between. When it is hot, this radiating-type heating/cooling system draws heat away from your body to make you feel cool. When it is cold, it makes you feel warm by keeping heat from escaping your body. It also creates a lower temperature differential than conventional heating/cooling systems and is less affected by air currents.

The hotel provides only what is required and has removed unnecessary amenities.

UBIQUITY



ROBOTS

Service robots are defined as “system-based autonomous and adaptable interfaces that interact, communicate and deliver service to an organization’s customers”

Mechanoids are robots that do not resemble human beings, and whose physical appearance is similar to a machine;

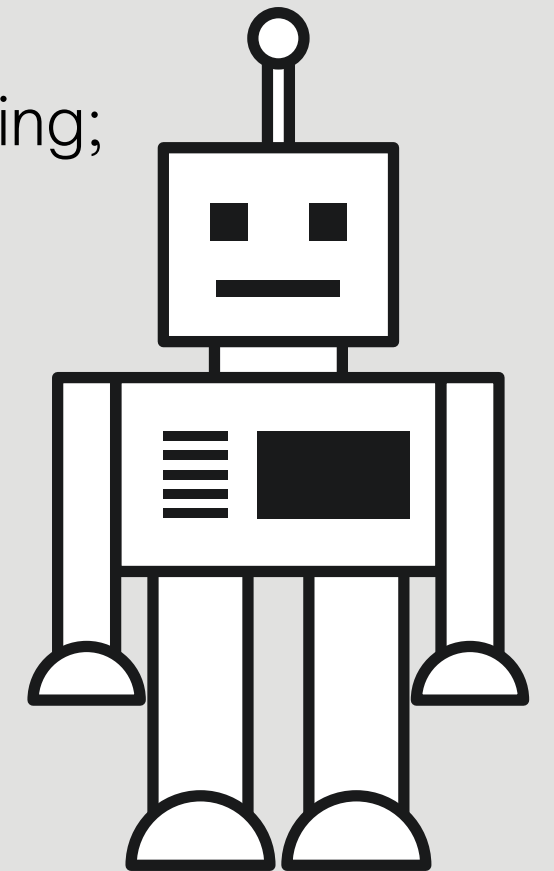
Humanoid robots, although perceivable as robots, have human-like appearance features;

Androids are robots whose appearance, behavior and attitude are the closest to the real human being;

Zoomorphic is a robot that takes the form of an animal;

Caricatured is a robot that takes the form of a representational object;

Functional is a robot that takes the form of a functional object.



A grayscale image showing a robotic hand on the left and a human hand on the right. The robotic hand is reaching towards the human hand, which has a tattoo on the forearm. The background is a light, neutral color.

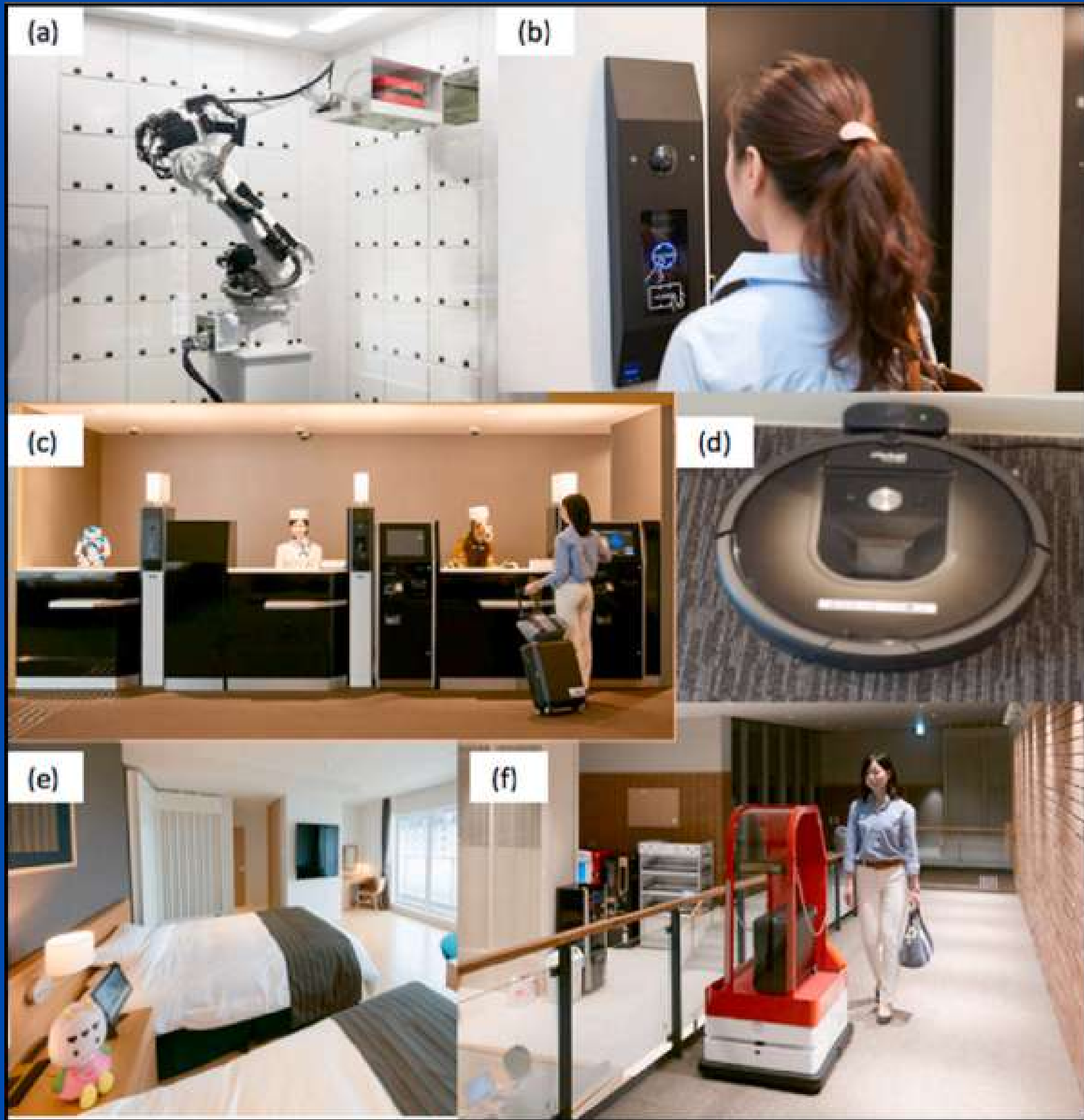
3 DIMENSIONS

The **functional dimension** is linked to the service robots' perceived functionality, such as perceived ease-of-use, perceived usefulness and their congruency with subjective social norms;

The **socio-emotional dimension** is affected by the perception of:

- the humanness that robots transmit to others (human-like robots) which is reflected in the robots' level of anthropomorphism or in their nonverbal social signs;
- social interactivity, i.e., the robots' human-like behavior that will improve human acceptance;
- social presence, which refers to human-robot interaction (HRI) where robots are perceived as social elements during the service encounter.

The **relational dimension** is associated to the feeling of confidence, comfort and trust that robots convey to human beings.



a

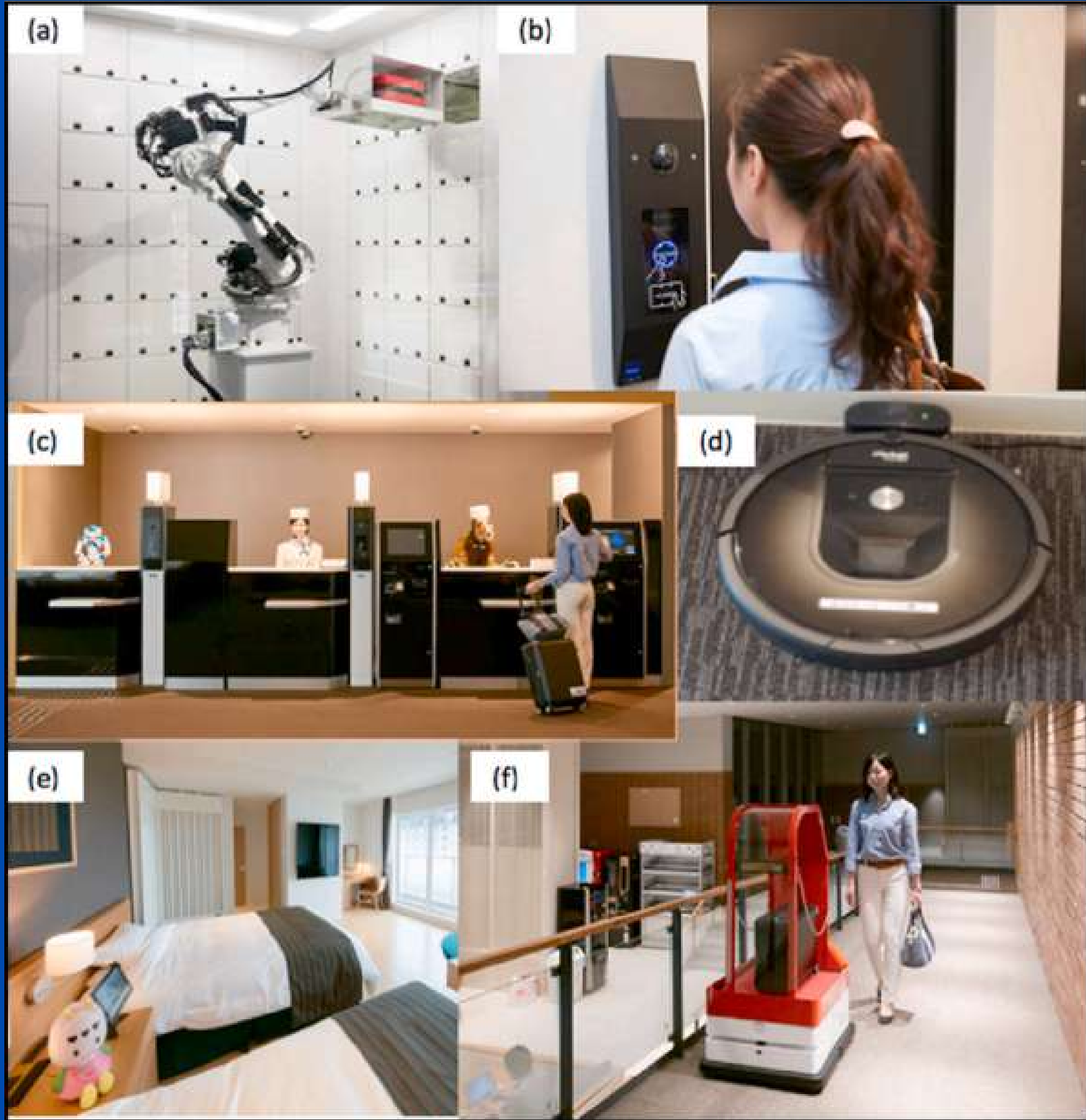
In the cloakroom, a stationary robot arm works to carry and store the luggage.

b

Outside the rooms, the access is granted using facial recognition and the registration is carried out at the reception hall.

c

In the reception, we can find receptionist robots that serve guests. These robots perform actions by reacting as the guests push a certain button, so AI technologies, such as speech recognition, are not used at all.



d
Cleaning robot Roomba.

e
In-room robot companion Tulie operates on voice command and reacts to the guests' requests through AI technology, i.e. speech recognition, to control the television, lights, temperature, etc.

f
The porter robot moves from the entrance through the whole building and its function is to carry the guests' bags to their rooms.

THE ZONE

Super sense of near-future game & karaoke with 360 degree screen

1 play: 300~400 Yen



<https://www.youtube.com/watch?v=1ode3ymeDvs&t=4s>

ECOCAPSULE

The new self-sustainable microhome



WHAT IS ECOCAPSULE?

Ecocapsule is a mobile, self-sustainable, smart micro-home. It functions only on clean power, using solar and wind energy. Intended for one or two persons, it allows guests to stay off-grid, while retaining a high level of comfort.

Ecocapsule offers:

- a luxurious attractive space for clients, both local and from abroad
- completely unique sleeping experience
- a 100% eye-catcher, even from a distance
- eco-green philosophy and values



HOW IS IT MADE?

From the first photo, we can see that the Ecocapsule's body is made from insulated fiberglass shells overlaid on a steel framework

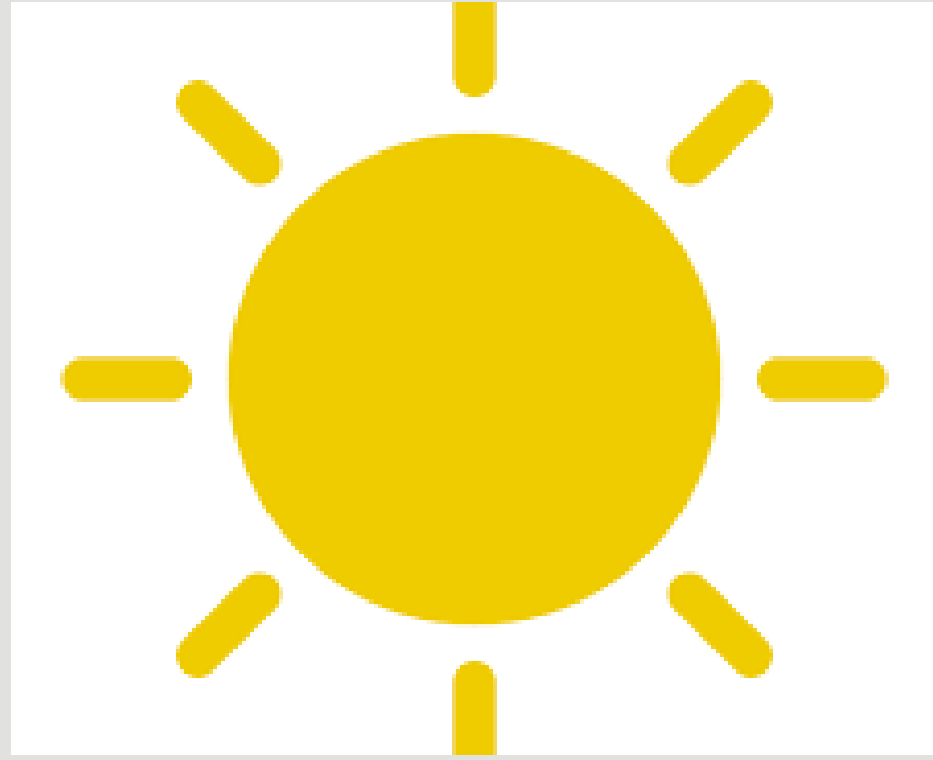


The inside furniture is made from lightweight honeycomb panels with a wood veneer finish. The furniture includes a desk, cabinets, racks, folding bed with mattress, kitchenette cabinets and baggage cabinet.

The Ecocapsule bathroom works like any other bathroom and is equipped with a water saving faucet and shower head.



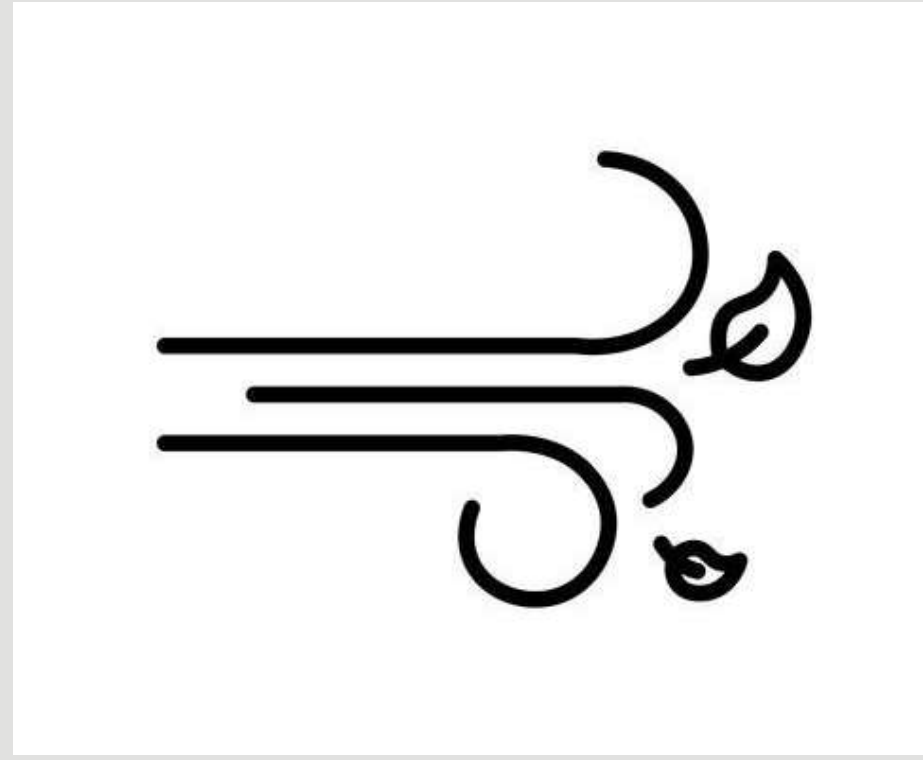
ENERGY SOURCES



Solar Cells

Ecocapsule consists of efficient solar cells with a solar power of 880 W.

They have chosen high-efficiency solar cells in order to maximize energy production.



Wind Turbine

Low-noise wind turbine with a power of 750W during day and night. The wind turbine is silent and can produce electricity for 24 hours a day.



Rainwater collection

The unique shape of Ecocapsule not only minimizes heat loss, but also provides water. Rainwater is collected on the surface, where it's collected to water tank and filtered for your convenience.

UBIQUITY



Smart home system and sensors



Home system interface: smart-phone application



Ecocapsule AR (augmented reality) app

SMART HOME SYSTEM AND SENSORS

Smart home is defined as a home that has programmable electronic controls and sensors that regulate heating, cooling, ventilation, lighting, and appliance and equipment operation in a way that responds to interior climate conditions in order to conserve energy.

There are already various implementations of smart homes. Most of the implementations use wireless technologies for communication between home appliances and main unit .

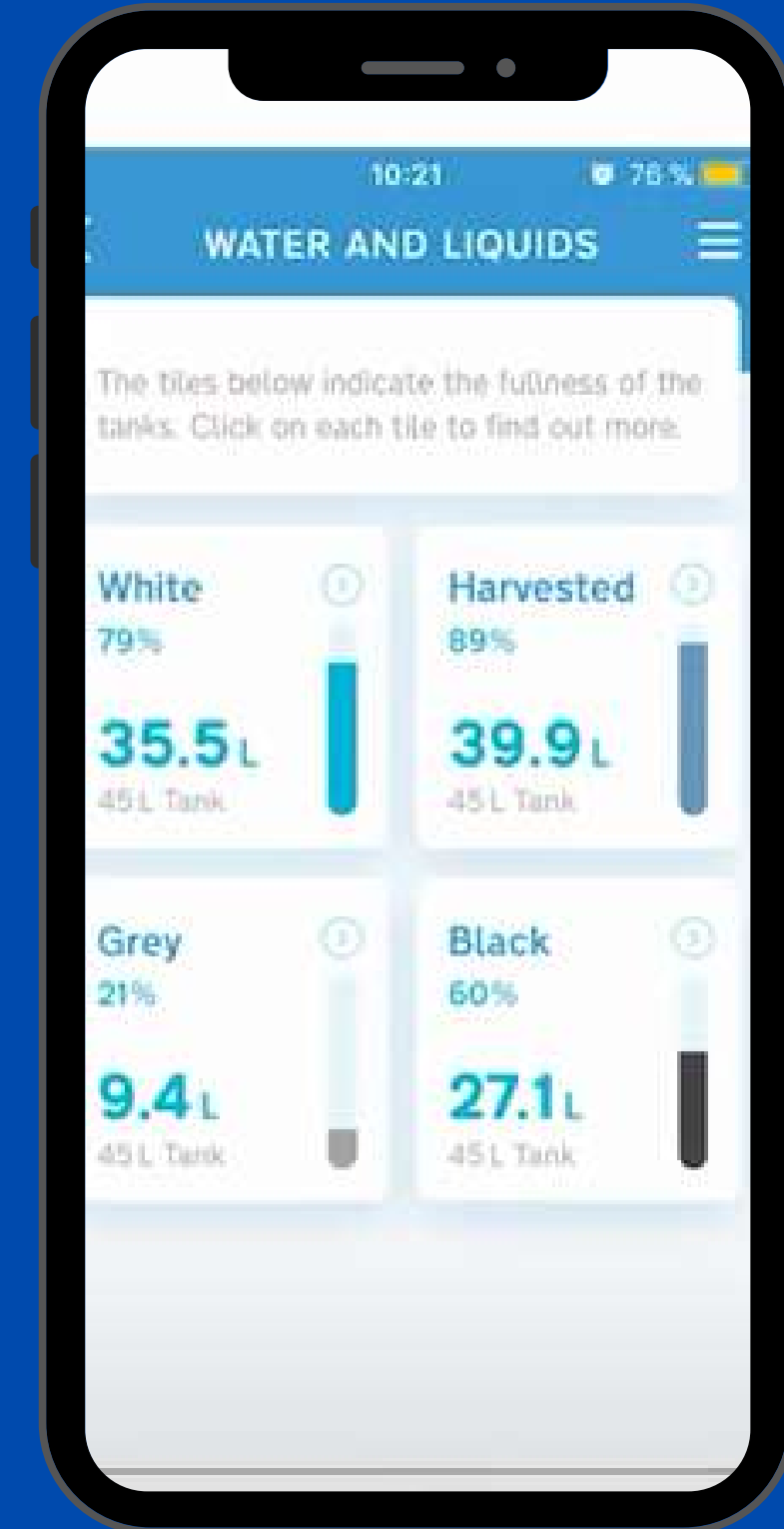
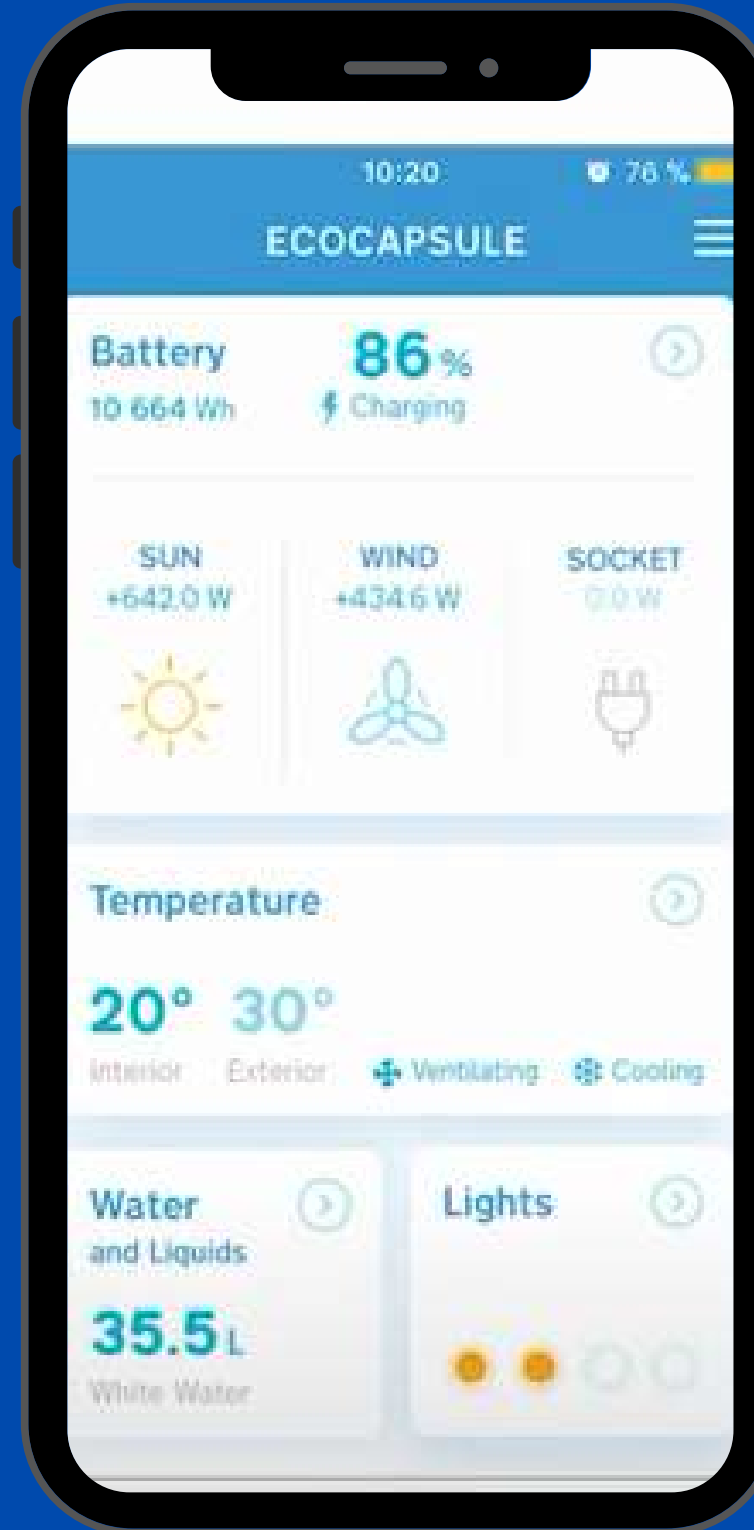


SMART HOME APP

For Ecocapsules, the smart home app is divided in two parts:

- The first part of this app is analytical. It tells us how much water we have, how much energy we have, how much energy the batteries have, how much solar power and wind power we harvest.

<https://www.youtube.com/watch?v=U2VVDfBvr9o>

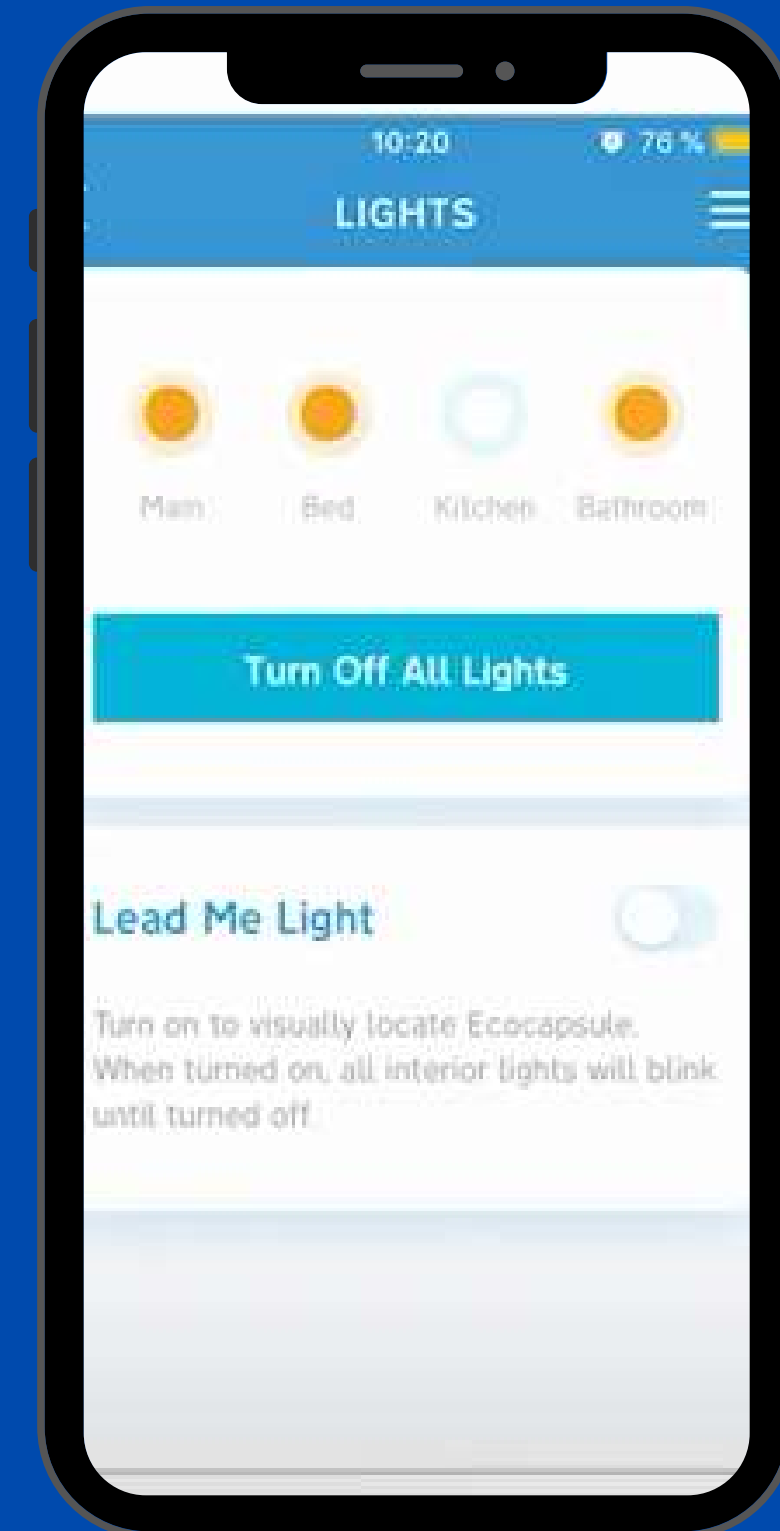


SMART HOME APP

For Ecocapsules, the smart home app is divided in two parts:

- The second part of the app is the controlling part: we can control heating, cooling, lights, and many other functions

<https://www.youtube.com/watch?v=U2VVDfBvr9o>



SMART HOME APP

The app also features a function that helps to level ecocapsule into horizontal position. This helps in uneven terrain.

A part of the app is internet access. Ecocapsule has its own network and can join an external network too.

Another important function is the shower scheduler, where we can preset an exact time for heating water. This has many advantages, mainly it's energy efficient: we can save energy without the need to keep the water heated at all times.

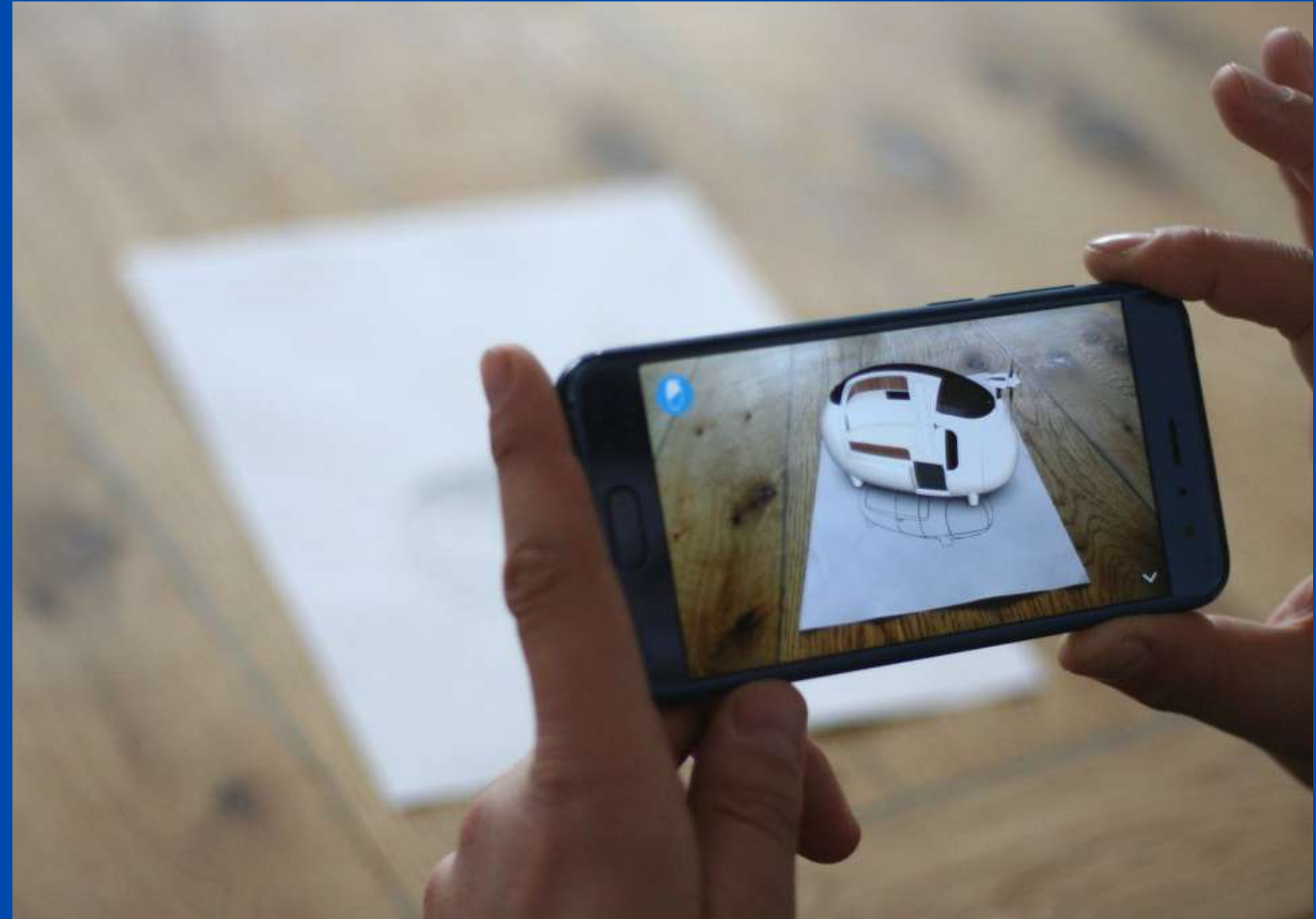


ECOCAPSULE AR APP

Ecocapsule AR is an augmented reality app that lets you place and explore Ecocapsule anywhere you choose.

The app offers two modes:

- The **marker-based mode** lets you place a small virtual 3D Ecocapsule model anywhere you want and explore it. You can turn the model around and look inside.
- The **markerless mode** lets you place a life-sized virtual 3D Ecocapsule model in any real place of your choice and explore it from the inside. This way you can try out different environments and ways of placement, whether in nature or in the city, in your garden, in an eco-resort or glamping site.



ECO-CAPSULE AR APP



<https://www.youtube.com/watch?v=4bIXMmfWoLc>

COSTS AND RENTAL

We can have two different types of models:

- Space by Ecocapsule is sold from a price of 49,000 euros.
- Ecocapsule Original is sold from the price of 79000 euros.

Besides the development, production, and sale of Ecocapsules, there is also a completely new rental project for placing Ecocapsules in attractive locations all around Europe to be available for rent via their business partners and their booking systems.



ANTHENEIA

The smart floating space



CONTEXT

With 5* pending hotel constructions pending worldwide, the luxury tourism industry is soaring. Nowadays, the **immersive experience** and the journey benefit is the answer to meet the needs of travelers looking for the Unusual.

Tourism industry needs a new and differentiating offer, both in terms of **exclusive** and ethical **experiences**.



Anthenea brings a solution to hotels worldwide with a deluxe floating suite, eco-friendly, autonomous and fully equipped. 100% made in France.

INSPIRATION



The project was born from the idea of **Jean-Michel Ducancelle**, naval architect, inspired by the James Bond floating pod in "The Spy Who Loved Me", 1977.

Jean-Michel, 25 years has been wondering about how humans inhabit the Earth. He passionately cultivates the idea that tomorrow's habitat should be at the heart of natural environment in order to offer to all, a life in an immersive marine & submarine world.



His decisive meeting with the visionary industrial **Jacques-Antoine Cesbron**, enabled the culmination of such years of patented research and innovation.

AN ECO-FRIENDLY CONCEPT

Anthénea is a new kind of tourism, but also a new way of life in the face of many environmental challenges: rising sea levels, the effects of climate change. The overdensity of the seashore and places congested by tourism.

The pod is designed to **live in harmony** with Nature anywhere in the world for a lifetime.

It is just **set on the water**. **Sand-screw** anchoring allows Antheneia to be anchored with no damage nor impact on the underwater ecosystem and environment.

Eco-responsible, Antheneia is **100% recyclable**



Antheneia only uses **solar power (two versions, 3 or 6 days autonomy)**. The home is equipped with certified **black and gray water stations**. Antheneia produces what it consumes and releases clean water only.

Its **spherical shape** is based on the principle of « surface tension » observed in the nature. This is the optimal form of resistance to extreme conditions on water.

ADAPTED OFFER

In order to fit with various uses, different interior design models are possible.

Anthenea's team thus meet aesthetic requirements (colors, materials, etc.) to offer you personalized interior design solutions.

The **village** is a range of hotel suites that offers the possibility to gather several pods, all linked to a round floating pontoon. According to your hotel needs, one of those pods can be set up as an additional service center such as a diving station, a bar, a Spa or many others...

Anthenea suite



- Motorized and reclining sunshade roof able to automatically switch to the wind direction, natural ventilation of the living-room and bedroom, removable Solarium windshield in order to create an additional room.
- Equipment and design choices are inspired by natural elements.
- 360° glass surfaceade of polished concrete, 360° panoramic view, underwater observatory, and a kitchenette.
- The bedroom includes a round XL bed and an overflow round bathtub with sea or fresh water.

ADAPTED OFFER

Anihenea Wellness

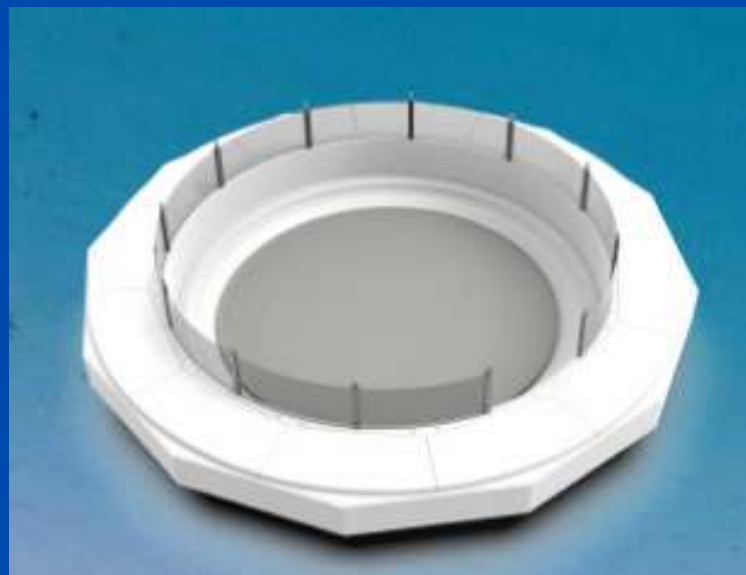


Fully dedicated to Hotel Groups and Thalassotherapy Centers willing to welcome their guests in an eco-friendly context.

Anywhere, Anthenea offers an original alternative to traditional Spas.

Two relaxation areas with panoramic & underwater vision fully dedicated to body care and mental escape.

Anihenea Open



Dedicated to hotel groups, event agencies, companies or private owners, this version invites you to reverie.

With a capacity of 50 people on board, Anthenea Open can become the ideal location for exceptional events.

Anihenea Business

Floating office, extraordinary coworking or special events. Anthenea offers a technological, contemporary and timeless space of Zen inspiration promoting well-being, productivity and creativity.

Anthenea Business is able to welcome more than 15 travelers with high speed Wi-Fi on board and visual presentation with wall projection.

COMPOSITION

Anthenea is divided into 3 components and 5 living spaces:

Motorized and reclining sunshade **roof**

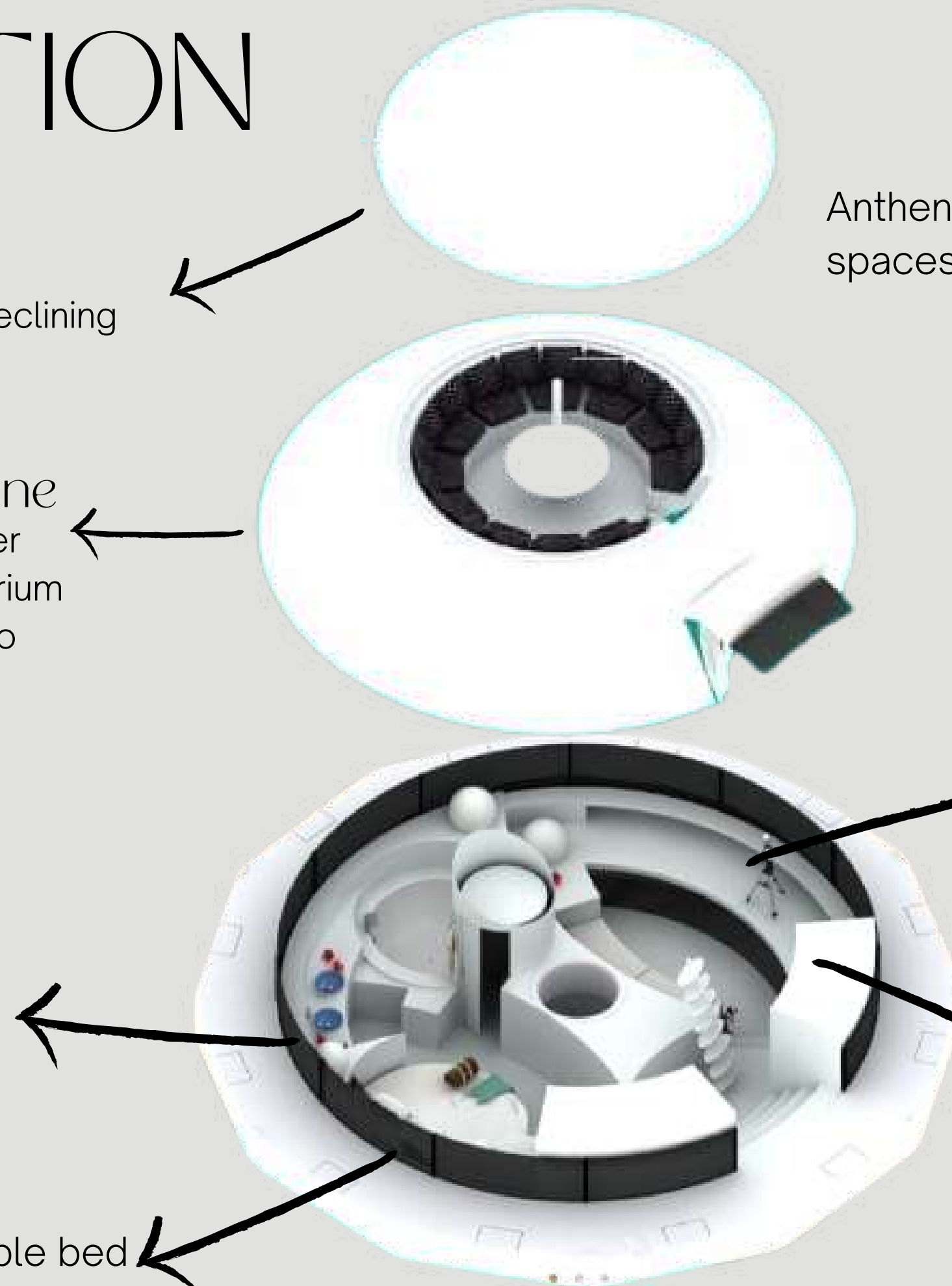
Relax Zone
On the upper floor a Solarium that can also be used as Terrace

Living room
daytime space where are located a sofa, a minibar, curved furniture that adapts to the structure and underwater observatory

Bathroom
With double basin and round bath with fresh or sea water

Kitchen
equipped and panoramic

Bedroom
With its round double bed and panoramic bathtub



COMPOSITION



https://www.youtube.com/watch?v=DTOG4OsXYC8&t=94s&ab_channel=Anth%C3%A9nea

TECHNICAL SUMMARY AND PRICE



More stable than a boat (weight empty 7t, ballasted 18t) .
The mass stability is added to the form stability.

- Hull diameter 9,40 m
- Inside surface 50 m²
- Including Solarium 14 m²
- Peripheral deck 30 m
- Height open 4,76 m
- Height closed: 3,85 m
- Weight empty 7,00 t
- Weight ballasted 18,00 t
- Sleeping capacity 2 persons

Costs

People can rent an Anthenea but the price depends on the offer.

The **price** for the purchase to the public is approximately \$ 535,000.

UBIQUITY



Home automation



Lighting and opening control from your smartphone



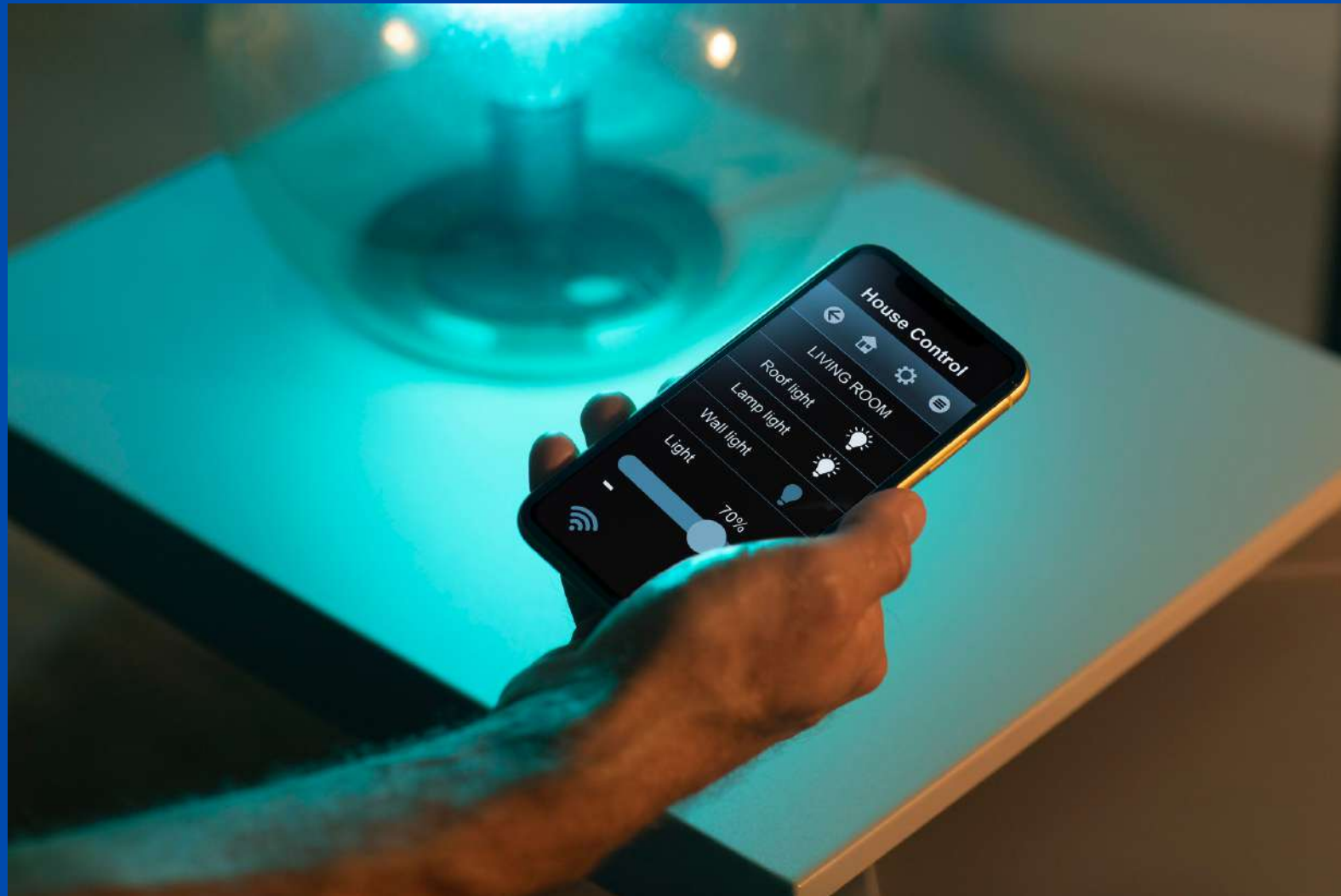
Automatic butterfly door opening



Solar Panels
An energy sensor dome meets the electrical and hot water needs.

HOME AUTOMATION AND CONTROL FROM SMARTPHONE

Home automation makes lives more comfortable, helps the environment, and in the long run provides significant savings reflecting the decrease of energy consumption.



Home automation presents challenges as it requires a set of technological elements to be orchestrated together.

With a digital tablet you can manage all the on-board automation thanks to panel connected to a router, and the router connects to the device.

The connection is done wirelessly from the panel, and the other devices are wired to a digital actuator. From the panel you can control:

- Lights and Temperature
- Door opening
- Bath (fresh or sea water)
- Motorized and reclining sunshade roof

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THANKS FOR THE
ATTENTION