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A smart mockup for an innovative interior yacht design approach

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The design of the environment of a yacht or a ship must consider, among the many variables, the guest's experience and focus on its optimization; this means observing the modalities of interaction with the space and the objects that occupy it, acquiring the necessary information and, when possible, building a model capable of predicting, within a reasonable limit, the modalities of the interaction of different users.

An intelligent mock-up is a structure designed to monitor the user experience through a network of sensors integrated into the environment that reproduces the space to be designed. It also introduces the furniture elements and whatever else characterizes it in reality.

A dense network of optical, acoustic and piezoelectric sensors can return valuable information concerning both the visitor's interactions with the surrounding space and the perception of the environment itself by the occupants.

One of the central elements is represented by a network of high-resolution video cameras, which acquires, among other variables, the pupil diameter (mydriasis is, in fact, and some precise circumstances, a critical neuro-cognitive indicator) of the visitor by including it in a data set that, as a whole, contributes to the definition of a model of interaction between visitor and environment, built on a neuro-scientific basis.

Once validated, the model data can represent an essential aid for designing any interior space on ships and yachts without excluding different environments, smaller or located in extreme contexts.

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