The increase of natural and climatic disasters creates social disasters with more and more homeless and migrants. Room-room is a project with two purposes: to live and to move. Our aim is to produce the largest of the smallest berth as well as the first room of the future dwelling. Room-room is light to carry, strong and safe, affordable, mobile, ergonomic, thermically efficient, easily transportable. Room-Room wants to make people move and people think.
This bar was a result of a competition aiming to represent the Faculty of Architecture in Porto. The given implementation, the fast construction and the low budget were some of the premises which had to be considered for designing this temporary structure that should be built in just one week with the help of students. Departing from IKEA's concept “build-by-your-own”, the project is a parallelepiped made out of different depth storage boxes resulting in a modular building with a textured skin, standing as a visual reference. The dimensions of the applied storage box (300 x 420mm) are the structural module of the entire project. In addition to the fact of its evident compositional qualities, the boxes, made of a resistant polypropylene translucent plastic, serve as well as basis of the structural logic of the project, therefore assuming as structural membrane. It is a process that departs from assembling units in order to reach the whole. The project is divided in four types of modules (groups of boxes fixed to wooden structural frames) applied in workshops and then transported to the implantation site. Thus, the 420 boxes are organized in a total of 46 modules with considerably reduced weight and size: 16 modules of 4x3 boxes (168cm x 90cm); 20 modules of 3x3 boxes (126cm x 90cm); 6 modules of 2x3 boxes (84cm x 90cm) and 4 modules of 1x3 boxes (42cm x 90cm). The boxes were applied to the primary steel frame structure (302cm x 302cm x 480cm) already implanted on the site. The convex shape of the boxes and therefore of the modules, plus the aim to maintain the interior space completely empty, obliged a custom detail of the “stretched” hinges.

The LED network in the concave interior spaces results in an exterior pattern of light, dramatically changing the bar appearance: by day a white abstract and closed volume; and by night a box of changing light following the DJ set. Night over night, drinks were sold out.
1 - Storage boxes: polyethylene plastic 30/140/200mm
2 - Secondary structure: wood stud 40mm
3 - Primary structure: stainless steel square bar 80x80mm
4 - Roof: Polycarbonate sheet 100/150/20 mm
5 - Floor: wooden boards
6 - Lighting: RGB LED board
Formal and functional aspects: WheeLY is using a wheel as mobility and a city language. Its thickness of 40 cm allows the cart even to pass every door. When needed thanks to two folding tents the cart become a protected and intimate shelter with an insulated sleeping space and a collecting one where keeping staff or recovering your pet. Tents are designed to let people sleep both lying down or huddled up. WheeLY is designed to colonize and live all urban reality on its own or connected to other identities to create multiple living shelter and unexpected colored allocations. Logos show the companies who helped into the production of the cart and give the opportunity to bring messages. During the day WheeLY can even be easily converted into a seat or a stall helping homeless in basking by giving them a comfortable seat with a protection from the sun.

Problems solved by innovation: The project, following urban languages (ads, mobility, billboards) try to reintegrate the homeless into the social-economics context of the city, logits makes the cart to be less expensive or free. Its technology is designed to give a total flexibility in usage.
1. Cloth bag 750 l
2. Reflecting colored rubber rim
3. Folding polyester self weight 150 g/m²
4. Rubber rim
5. Aluminum frame
6. Pressed paper rollers
7. Sprayed insulating rubber disc
Operation and technology: WheeL.Y has to solve mobility, protection and transport problems in the same time. For this reason the aluminum frame and the 2,50 liter cloth bag does not move when the wheel is rolling, thanks to a system based on the roller bearing technology, made by pressed pore rolls. When stopping the handlebar is used to stop the rolling and let the cart be fixed on the ground. The folding polyester resin tents, stored into the frame, have little circular frame too, and can be opened to create the shelter. The sleeping space is insulated by a disc of neoprene.