## Improving the experience of using a stroller in the dark

For families with a toddler, the stroller can be a real lifesaver. Holding groceries, making the baby sleep, carrying the family's necessities etc. Therefore, it should be easy and safe to use it. But when it's getting dark outside and the visibility degrades, it can be difficult to see and more importantly it's getting difficult to be seen.

When it's getting dark outside it can be hard to see the road ahead and find things in the storage, especially if there are no streetlights. In addition to this it becomes harder to detect the stroller which increases the risk of an accident to occur. Forty percent of all accidents where a pedestrian is involved happens when its dark outside, even though less people are out walking during this time. To make sure the most innocent citizens of the community will be safe and make it easy for their parents to care for them, a project to improve the visibility of the stroller in the dark from the inside and out was conducted.

According to the users, there are four main areas that could be improved in order to get a better experience. These are; being able to see the baby, see inside the basket, see the road in front of the stroller and be sure the stroller is visible in the dark. To fulfill these needs, a solution was created with high focus on safety, user friendliness and aesthetics. It enables the user to easily attach lightguides in the canopy and the basket, not only making the visibility on the inside and outside better (figure 1 and 2), but also giving the stroller an aesthetic glow and the canopy a warm, welcoming look.



Figure 1 Light guide in canopy



Figure 1 Light guide in basket

It might appear as superficial to lay big focus on the looks of the stroller, but research shows that the visual aspect is more important than expected. Several users buy pricy strollers not only because of its functions, but also by the looks and status that comes with it. Therefore, it is important to combine the safety aspect with visual design making the usage of it more likely to happen.

The human population is constantly growing, and the birth rate keeps increasing. This means the market for strollers and baby care accessories have a sustainable growth for many years to come. Companies are constantly developing new, fascinating features to facilitate the use of the stroller but even so, the visibility is almost an undiscovered area. A few companies focus on the safety aspect of walking in the dark by integrating small reflectors, but most leave the

responsibility to the user. This often results in glued-on reflectors or pins which leave ugly marks on the stroller.

By developing a smart, user-friendly accessory, which makes the stroller look cozy in a stylish way, the safety will improve and the simplicity of taking care of the baby will give people a better experience of walking in the dark. See complete picture of the solution in figure 3.



Figure 3 Final solution