

..What, Where, Who, Why, How?..

Why?



Around 2000 babies are born every day. As these babies grow, they need a variety of products such as car seats, prams, pushchairs, strollers, back carriers and tricycles.

These products have short life cycles as they are often not re-used, take up a lot of space, use a lot of material and cost the consumer a lot of money.

By combining many of these products into one, a huge saving on materials can be made to help the environment.

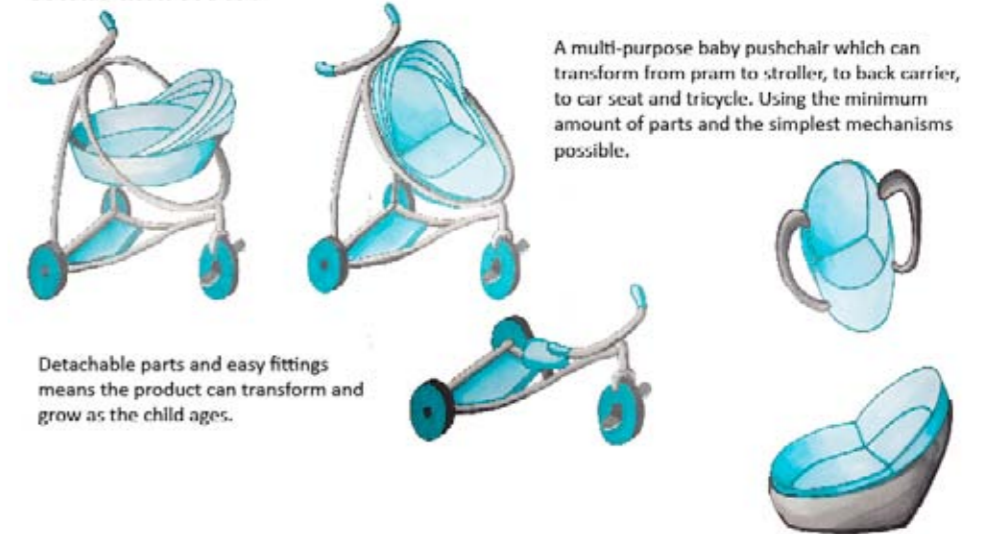
The product will grow to fit as the child grows.

Who and Where?



Already a thriving market - plenty of profit potential. These products are necessities for any baby and mothers will always be eager to save money and space when it comes to bulky products. Used outdoors in many environments with varying size/age of child.

What and How?



A multi-purpose baby pushchair which can transform from pram to stroller, to back carrier, to car seat and tricycle. Using the minimum amount of parts and the simplest mechanisms possible.

Detachable parts and easy fittings means the product can transform and grow as the child ages.

..User requirements specific to product..

- Easy to assemble and disassemble
- Save user space and money
- Suitable for public transport and car boot
- Comfortable to push and correct height and grip position
- Good manoeuvrability
- Necessary back support
- Comfortable for baby
- Good suspension for smoother ride
- Sturdy enough for outdoor locations
- Suitable for summer and winter use

..Optional user requirements..

- Basket to hold baby things
- Rain cover
- Baby can face both towards and away from you
- Able to transport up and down stairs
- Weather durable - side protection
- Braking system or lockable wheels
- Easy to maintain - washable covers
- Tyres not go flat
- Sun canopy/storm cover
- Accessories

..Sustainable Design Criteria..

- Minimal materials
- Lightweight materials
- Effective mechanisms
- Hard-wearing to last for years
- Recyclable materials
- Easy manufacture
- Minimal number of parts

For the interim presentation, I looked at the reasons for the product, the context, what it does and how it does it. This allowed me to think of the product in use and so I could establish user requirements. By looking at existing products, I could create optional user requirements which I should try to include but which are not essential. I then looked at sustainable design criteria to keep in mind while developing my product.

By constantly re-evaluating my user requirements and design criteria I kept them specific to my concept and developed them further each time. I think this benefited me by always having a 'checklist' in mind, and helped me not to digress from the brief.



..Next steps..

The interim presentation forced me to evaluate what my next steps would be. I was ready to research but there were many areas I realised I should look at as it is such a complex product. I was eager to get down to the workshop but knew I should get some research behind my design first.

..Research..

- Age range of child for each different product
- Survey mothers
- Materials and mechanisms
- Existing products - how to make better and different
- Specify target market - cannot target entire market

I should have looked into average child measurements here. I also lost track of trying to specify a target market, I should have researched this more.



..Development..

- Make models in workshop
- Testing different concepts
- Making mechanisms
- Size and weight calculations
- Solidworks

I found the practical development helped me move further with the project, more quickly, and was very advantageous for me.

