

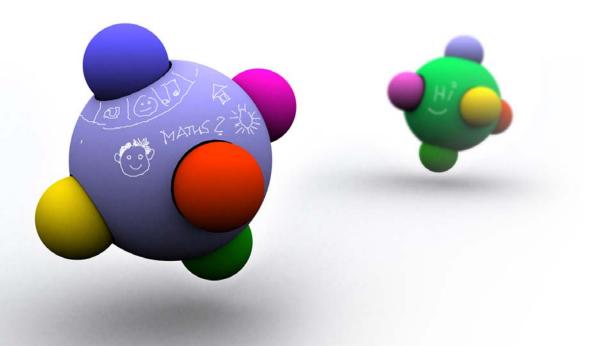
MARBO: a communication device for children

Pranav Mistry Amisha Banker IDC, IIT Bombay

MARBO A communication and knowledge-sharing device for children.

Understanding user & design for needs are the core phrases of interaction design. After a deep study & analysis, we came up with 'the' product called MARBO. User study, data collection, brainstorming, early concepts, metaphor building, prototyping, user feedback, refining, ..., after all these phases of design MARBO immerged.

MARBO is a communication device for children. With the initial goal of making the social circle larger, building trust among children, making learning interesting & fun for them, MARBO has been extended to a level that, it is 'the' device for children.



User group characteristics

Marbo mainly addresses children in the age group of 5 to 8. Some of the key attributes and characteristics of children taken into account as part of design goals were their readiness to learn new things, their ability to find use for the most unrelated of things from their environment, lack of pre-conceived notions & egocentrism. In spite of possessiveness for their personal belongings which is usually used as calling cards to establish their identity, they want to share their ideas, feelings & events.

The product's motivation came from highly time and activity structured environment to which children are presently being subject to at school as well as at home in India. In this rush to have them achieve performance milestones, children are seldom allowed to express their natural thirst for knowledge, nor pursue activities - aesthetic, intellectual and fun-driven - that could lie outside school and home routines.

Proposed solution

MARBO was inspired by the metaphor of the marble, a traditionally popular play in India. MARBO is a device through which children could communicate with each other across the course of the day in between their otherwise structured routines to freely express their emotions as well as have fun through exchange of ideas., emotions, events.

Product features

MARBO is made up of a surface that drives the interaction between the children and smaller detachable marbles attached in grooves to the main MARBO and that work as memory balls to be exchanged with the child's universe of friends. Through this process of give-and-take, MARBO allows following functions:

- Communicating with friends
- Sharing ideas, feelings, events
- Help make strategies and plans
- Have collaborative learning with fun

Design

From form of the MARBO to interaction is designed considering factors of freshness, novelty, fun..... In designing the form of MARBO we have studied & explored various factors from ergonomics to material behaviors. We also prepared a prototype model of MARBO to help understand the interaction better. On the basis of that we made a soft interaction prototype.

Team

Pranav Mistry pranavzombie@iitb.ac.in

Amisha Banker <u>amisha@iitb.ac.in</u>

Guided by Prof. Ravi Poovaiah <u>ravi@iitb.ac.in</u>

Along with the write-up some images & flash files have been submitted to help understand the concept better.

For more on MARBO www.geocities.com/marbo

