



## Touching is believing

**Rohan Swamy** Posted online: Sun Mar 28 2010, 21:56 hrs

Anup Tapadia was so inspired by Minority Report, where Tom Cruise flips through large amounts of data on a digital wall, that he launched a next-generation digital technology company aimed at converting ordinary surfaces, like floors, table tops and walls, into three-dimensional interactive environments.

“The idea behind Touchmagix was to bring the interactive experience a step closer to reality,” says 23-year-old Tapadia, adding, “The first technology we developed was called MotionMagix, and it allows any projection screen to be made interactive. Imagine walking up to a real wall, projecting a picture on it, and interacting with the objects in the picture.”

TouchMagix had humble beginnings. “We started out in a small room in my uncle’s office, with two engineers besides myself, and a computer. The first prototype was tested in the Mariplex Mall in Pune, where we got an overwhelming response. We have been at work developing interactive technology ever since.”

While the company was officially formed last year, it began as a part of TechnoKarma Labs, founded in 2002 by Tapadia. “I was also inspired by origami in many ways. It taught me the importance of scaling designs in 3-D,” he says. Tapadia was 16 when he founded his first company, and he received his Masters degree in networks and telecom from the International Institute of Information Technology, Pune, at the age of 19. “After that I worked for a year with Qualcomm in San Diego, USA, where I developed two products in distributed mobile computing, which were patented. Then I joined the University of California, San Diego (UCSD) to pursue a Ph D in communication theory and systems,” he says.

Tapadia says that the latest version of the MotionMagix system allows surfaces like LCD and plasma screens, LED floors and walls to be made interactive—so you can project a football field on the floor of a mall and start chasing the ball. “It has extensive applications in retail, malls, advertising, events, promotions and gaming,” he says. At a cost of Rs 3.5 lakh upwards, the technology is limited to installations in shopping malls and multiplexes, but Tapadia says it is only a matter of time before people start using the walls, tables and floors in their homes as convenient surfaces for entertainment.

The company has also developed a three-dimensional marker tracking technology. “When users flash a tag in front of a PC connected to an ordinary camera, the PC will track the tag in real-time and replace the real-life elements with 3D animations or objects which the user can interact with on a screen,” Tapadia explains.