

# The numbers add up

HeyMath demystifies mathematics for students across the world with its digital model



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NIRMALA SANKARAN

**C**APTAIN Ahab's quest for a giant white whale, in the American classic *Moby Dick*, is often seen as a metaphor for man's own pursuit of elusive goals. For the publishers of school textbooks, it would probably be their attempts to bring out the ideal course material. Even for a universal subject such as mathematics, curricula among countries differ, teaching methodologies differ, and even the goals differ (in the West, the emphasis is on creativity, and in the East, it's on rigour); within a country, different states follow different syllabi; and in some cases, elite schools within a city—Singapore, for example—teach differently. The result: text books tend to have gaps and school teachers across the world have to fill in these gaps with their own passion and creativity.

But HeyMath, a company in Chennai—founded by husband and wife team of Harsh Rajan and Nirmala Sankaran, who left their high flying banking careers to follow their dream—has been working hard for the last eight years to solve this problem. And it's close to achieving it. To get a sense of how HeyMath is going about this, it might help to take a look at your child playing with lego blocks. Imagine each lego block to be a principle in math. In HeyMath's case every single block is a digitised

version of a math concept, explained visually, using examples and stories, animation and voiceovers. With lego blocks, what your child can build is limited only by her imagination. HeyMath has built a network of math teachers across the world, and its own team of software engineers and multimedia experts. And all you have to do is drag, assemble and package these blocks to suit any curricula in the world. Or a collection that would be needed to crack a GMAT, GRE or CAT. Or even a dozen concepts that eluded you during your own school days.

Walking around its development centre in the heart of Chennai, Sankaran says the idea now was to address specific needs of a student, using the best resources from across the world. "When I read about Prof Prahalad's latest book, I told myself, hey this is exactly what we are doing." In *The New Age of Innovation*, Prof Prahalad argues that the future belongs to the

**starship  
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business that can provide individualised products and services, using global resources.

The seeds of HeyMath were sown when Rajan and Sankaran were comfortably placed in London with Credit Suisse First Boston and Citibank respectively. But the successful career and trappings that came along with it weren't challenging and appealing enough for the two. "We were quite bored leading a banker's existence and wanted to do something on our own. When we started, the idea was to address the shortage of math teachers. And the answer was in technology," says Sankaran.

They were still in UK, and discov-

ered that Cambridge University was at the forefront of making maths teaching more enriching and interesting. They approached the university officials, and were soon assured help. What followed was an endless round of discussions with academic experts from Cambridge; recruitment of maths experts in India and creating an inclusive system that would cater to the prodigies and the slow learners in a classroom. "We spent the first eighteen months creating a prototype. Our first priority was to build credibility with teachers, because what we do essentially supports the work of teachers," Ms Sankaran says.

Initially, the company took 80 general concepts that students learn across the world, and started the process of weaving interesting stories around math concepts and animating them. The purpose was to make each concept appeal to and be useful to students and teachers across the world. "In India, we generally know 'the how', but don't know 'the why'. We took the best practices in teaching from some of the best teachers across the world, and built them into our digitised version." The modules have enough room for customisation—so teachers can add their own voice, for example.

HeyMath, which first started with schools in Singapore, now works with more than 200 schools across 25 countries. While it works with 200-300 teachers on a regular basis, nearly 2,500 teachers are part of the network. The business counts former IMF chief economist Raghuram Rajan and entrepreneur Jerry Rao among its board members, and is now scouting for a round of venture capital funding, with plans to extend to other subjects such as English, eventually.

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