

Next in Ed-

Ed-tech startups are creating mobile-first, analytics-focused and gamified learning experiences that are more engaging and fun for both teachers and students, find Ta

Let's say after a game on his mobile phone a 12-year-old boy has been able to master a little more of Calculus, or an impatient girl in fourth standard plugs into a tablet to know more about the 'bite marks' on Pluto, they wouldn't necessarily be representative of a distant future.

Education-technology startups over the past decade have been transforming how youngsters learn, mainly via visual or interactive online modules that make learning instant and complex concepts more palatable. Several of these firms, though, are tethered to the formal model of education in India that is rooted in rote-learning and focused on test scores, which has largely meant linking students to tutors online or helping them improve test scores by generating multiple practice papers.

With technology rapidly evolving and students wanting to reach beyond structured boundaries, entrepreneurs and educationalists are pushing the limits trying to engage better with them. They are creating mobile-first, cloud-headquartered, analytics-based products, with emphasis on simplification and ease of use.

The four-person team at Oust Labs wants to make preparing for exams fun by putting friends and classmates through game-like competitions on its mobile application. The startup, founded last year, encourages students to hang out with friends on Oust as they bust challenges designed

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This latest crop of startups are emblematic of a big change over the initial era of ed-tech companies, and their ingenuity is helping draw investors. From \$13.06 million invested in ed-tech startups in 2014 across 13 deals, investors pumped in \$107.5 million

provides skill-enhancing activities for children in ages 4 to 8 in a subscription-based service starting at Rs 549 a month.

CarveNiche Technologies mines and analyses data to teach maths. Its automated learning platform, beGalileo, works like a multiple-level storyboard through which a student has to progress step by step. In the background, the platform analyzes the user's learning minutely. "It will go as minute as... this child is struggling with decimals, he doesn't know fractions, etc. The system will place the child on a learning path on a knowledge graph. This is the path you need to cross to reach your goal," said CEO Avneet Makkar.

Avneet said she got feedback from students that they tend to get bored studying alone. So beGalileo, which already has an option for an online tutor, will shortly introduce social learning through 'Speed Math' for students to be able to challenge friends and other users online.

Impartus Innovations is a video-based learning platform. It captures classroom lectures that are made available to students for anytime re-learning. Amit Mahensaria, chief strategy officer, wants to take this further. "The new thing is connected classrooms... Students are not learning in a located period, they are doing it in their own pace and at their own time. In this, videos play a deep role." The platform allows students to watch lectures on an app, talk to teachers and other students, find related study material, create bookmarks and make notes.

Impartus is also for teachers. It allows teachers to make short videos on the basics of a topic that have to be viewed before a class. The teachers can then go deeper into the subject during class, which will also be video-graphed. "We are also coming out with tools for teacher improvement," said Mahensaria. "We can say when you were teaching these portions you were off the topic... or maybe x students were disinterested. In the classroom, we have cameras recording the students as well. This involves behavioral psychology that will read the students through machine learning and say if they are confused, bored, etc." Of course, some teachers initially resisted being video-graphed but now Impartus's platform is now in use at premier schools including the

The big change in education

- Zero-capex, mobile-first cloud-based technologies
- Startups figuring market segments that make sense for their technology
- Faster and easier adoption of tech
- ROI-driven approach to sales

Challenges remain for ed-tech startups

- Ed-tech needs heavy investments in marketing and brand-building
- Marketing apps lot more tougher than solutions such as ERP
- Educating customers on the movement of technology
- Monetisation is tough without a high level of customer engagement on apps



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CEO, Oust Labs

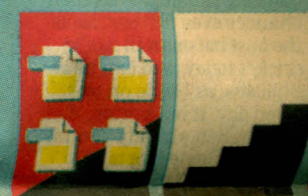
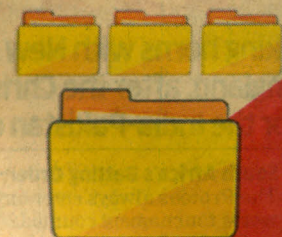
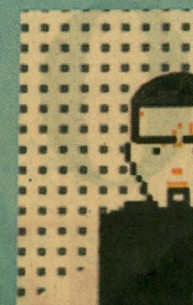
are too long and complicated with schools and direct selling to parents or students has its own complications," Sudarshan

Rise in venture funding for edtech startups
(Data from VCCEdge)

13

2014

Number of deals
Deal value in \$



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for 9th-12th standard students in science, math and social science. A leaderboard features the top scorers, just as in gaming apps. "Unlike regular test-prep solutions we are using mobile gaming as a mechanism to drive engagement with users," said CEO Shrikant Latkar, former chief marketing officer at mobile advertising firm InMobi.

This latest crop of startups are emblematic of a big change over the initial era of ed-tech companies, and their ingenuity is helping draw investors. From \$13.06 million invested in ed-tech startups in 2014 across 13 deals, investors pumped in \$107.5 million across 22 deals last year, show data from financial research firm VCCEdge.

"Mobile-first solutions and gamification technologies are the future of education, since they can scale very rapidly at low cost," said TV Mohandas Pai, chairman of Manipal Global Education and an investor in ed-tech startups including Oust Labs, Magic Crate and OnlineTyari, which, too, is a test-prep firm. Magic Crate

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"The thinking with the latest breed of ed-tech startups is totally new and their development cycles are much faster, which is anyway the nature of cloud and mobile. Also, these solutions are a lot more user-friendly," said Anand Sudarshan, director at Sylvant Advisors, which has 19 ed-tech startups in its portfolio.

The big challenge, however, is to be able to convince institutes to buy or subscribe. "Sales cycles

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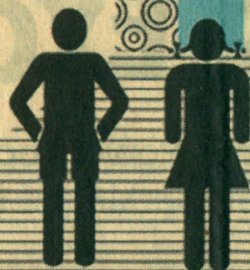
This is also because, as Mohandas Pai said, "Talking of education as a large market in this country is a joke since the addressable market is very small... Total funding on education from the government as well as private players combined makes for less than 6% of GDP."

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