Implication of evolving Educational Technologies (Ed-Tech) on the Indian market - A PE/VC perspective

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                          Jatin Detwani                      Ashish Chawla

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Section 1: Global Ed-Tech Trends and Segments
Global Ed-Tech Overview

**DEFINITION / SCOPE**

Ed-tech broadly refers to the use of novel technologies in education. Ed-tech could lead to **pedagogical benefits** or a **more efficient** backend.

Among other areas, we understand Ed-tech\(^1\) to include education related hardware, digital delivery and content, online and mobile platforms and enablers such as Learning Management Systems and assessment tools.

See detailed classification on slide 3.

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**MARKET SIZE AND GROWTH**

23% growth in e-Learning from $91 bn in 2012 to $255 bn in 2017 (Comparable total education CAGR of 7.4% for same period) Source: IBIS Capital

- Within e-Learning, K12 with 2012-2017 CAGR of 33%, Higher education CAGR 25%, Corporate training CAGR 8%
- Other fast growing markets: Social/Communities (41% CAGR), Serious Gaming (30%), Language learning (20%)

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**GEOGRAPHICAL TRENDS**

Wide variances across the globe

- Bulk of innovation in Ed-tech and Ed-tech revenues attributable to US companies, driven by pedagogical benefits but also to mitigate effects of rising costs of “regular” education
- Emerging APAC market only 16.6% of global education market, ed-tech with potential to address key issues in the emerging world. Low Internet penetration in these markets drive the need for specific solutions

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**TRANSACTIONS**

High levels of M&A / investment activity in space

- $8.5 bn in M&A transaction value in 2012. Case in point: Since 2007, Pearson has acquired 15 companies, since 2010, 11 of these are digital/tech plays
- $1 bn raised through fundraisings in 2012 by start-ups

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\(^1\) We do not include eBooks and Rentals sites of physical text books such as Chegg in this study. Chegg's pivot from a text book rental platform to becoming a central hub for students with information of courses, reviews etc. could be of interest in the Indian context.
Ed-Tech Classification

**LEARNER FACING / FRONT END**

1. **Hardware**
   - Special Education related HW
   - General (iPad, smart phones, consoles)

2. **Digital Content**
   - Digital / Interactive Content
   - Serious Educational Games
   - Learning Apps

3. **Platforms / content aggregators**
   - MOOCs\(^2\) and variants
   - Focused communities / offerings

4. **Enablers**
   - LMS
   - Social / Collaborative LMS
   - Classroom management tools
   - Adaptive Learning Technologies
   - Education data related
   - Assessment / Analytics

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1. Can be further sub-divided into administrator focused and educator focused offerings
2. Massive online open course
## Global Ed-Tech

<table>
<thead>
<tr>
<th>Description</th>
<th>Hardware</th>
<th>Digital / Interactive Content</th>
<th>Apps¹</th>
<th>Serious / Education Gaming</th>
</tr>
</thead>
</table>
|             | • Smartphones, tablets and gaming consoles such as Wii  
             • Smart blackboards  
             • Increasing adoption of smart phone and tablets, reducing prices  
             • Pedagogical benefits | • Digitized textbooks, interactive learning with adaptability / personalization and features such as search and sharing  
             • Need for enhanced material including videos and 3D models  
             • Solution to traditional “one-size-fits-all” approach | • Apps for learning and education targeted at audiences of all ages  
             • Increasing mobile and tablet (iPad) penetration among learners  
             • Intuitive interfaces | • Games / simulations with learning objectives  
             • Growth from $2bn in 2012 to $7.4bn in 2015 (McKinsey)  
             • Often to reinforce learning or for supplementary learning |

### Example Players
- iPad
- Amplify
- Nook
- Wii
- Kno
- Inkling
- Tareas Plus
- Flatworld
- DuckyDuck Moose
- Mindshapes
- FingerPrin'
- Serious Games Interactive

### Trends
- Larger players with multi-purpose hardware vendors dominate (e.g. Apple iPad)  
- Larger players (Pearson) as well as upstarts such as Kno dominate, digital players often partner with traditional publishers  
- Limited # firms with scale much like app developers in general  
- Focus on cognitive learning

### Implications for India
- Low cost innovation possible but with challenges (Akash fiasco)  
- Major opportunity for Indian players  
- Major opp but challenging to achieve scale in app development  
- Development for feature phone market  
- Potential for Indian players to emerge, as games are often custom-made (low development cost)

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1. mEd market to grow from $3.4bn in 2011 to $37.8bn in 2020
### Global Ed-Tech

#### Massive open online courses (MOOC) + Variants

**Description**
- Online video lectures and related assessment tools to monitor learning, generally with a community angle
- Used for stand-alone or classroom blended learning

**Key Drivers**
- Rising Internet penetration
- Rising cost of higher education in developed economies
- Quality, affordable (often free) education

**Example Players**
- Udacity
- edX
- 2tor
- Udemy
- lynda.com
- Coursera
- WizIQ
- Khan Academy
- iTunes U
- Straighterline
- Open English
- Codecademy
- Global English

**Trends**
- Trend towards accreditation
- Blended learning / flipped classrooms / lifelong learning
- Emerging revenue streams include: courses for credit, verified learning, enabler fee charged to universities.

**Implications on India**
- Local plays such as Veduca (Brazil) emerging, India could follow similar course (Language and local curriculum alignment)
- High willingness to pay in India for focused offerings as education is highly valued

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1. OCW, online accredited courses, DIY degrees
## Global Ed-Tech

<table>
<thead>
<tr>
<th>Description</th>
<th>Key Drivers</th>
<th>Example Players</th>
<th>Trends</th>
<th>Implications on India</th>
<th>Social / Collaborative LMS</th>
<th>Assessment / Analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Platform used by corporate and academic institutions to manage learning and associated content</td>
<td>• Basic LMS features are commoditized</td>
<td><a href="https://www.blackboard.com">Blackboard</a>, <a href="https://www.sumtotal.com">SumTotal</a>, <a href="https://www.open-source.com">Open Source</a>, <a href="https://www.moodle.org">Moodle</a>, <a href="https://www.efront.net">eFront</a>, <a href="https://www.dokeos.com">Dokeos</a>, <a href="https://www.sakai.org">Sakai</a>, <a href="https://www.loreschoolology.com">Lore Schoolology</a>, <a href="https://www.edmodo.com">Edmodo</a>, <a href="https://www.ets.org">ETS</a>, <a href="https://www.act.org">ACT</a></td>
<td>• Noticeable trends of a shift towards OpenSource or homegrown platforms (e.g. Moodle, eFront, Dokeos, etc.), SaaS advanced analytics • New additions include Open source SIS, Assessment and analytics, Campus App store, Student retention CRM, mobile features</td>
<td>• Fragmented and commoditized market for basic LMS • Low cost open source often find favour in India</td>
<td>• Allow Facebook like environment for educators and learners to interact • Superior user experience • Social features</td>
<td>• Testing, both online and offline • Online driven by cost savings • Increased online and adaptive testing • Innovation likely driven by Silicon Valley vendors • Opportunity due to Indian context and service element</td>
</tr>
</tbody>
</table>

### LMS

- Global LMS market of nearly $2bn in 2012

### Key Drivers

- Need for management of content
- Tracking of learning programs

### Example Players

- Basic LMS features are commoditized
- Noticeable trends of a shift towards OpenSource or homegrown platforms (e.g. Moodle, eFront, Dokeos, etc.), SaaS advanced analytics
- New additions include Open source SIS, Assessment and analytics, Campus App store, Student retention CRM, mobile features

### Implications on India

- Fragmented and commoditized market for basic LMS
- Low cost open source often find favour in India
## Global Ed-Tech

<table>
<thead>
<tr>
<th>Description</th>
<th>Curation and Adaptive Learning</th>
<th>Classroom management</th>
<th>Ed-data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Key Drivers</strong></td>
<td>• Solutions that tailor content to learner, selection of relevant content</td>
<td>• Various tools for measuring real-time engagement of students, feedback management to parents, teacher effectiveness, etc.</td>
<td>• Solutions relating to management of all learner related data, standardizing metadata to facilitate transparency</td>
</tr>
<tr>
<td><strong>Example Players</strong></td>
<td>• Solution to traditional “one-size-fits-all” approach</td>
<td>• Efficiency in class room</td>
<td>• Improved pedagogy</td>
</tr>
<tr>
<td>• Content overdose – what to serve learner becomes important</td>
<td>• Increased analytics for teachers</td>
<td>• Need to integrate different applications with SIS (e.g. Clever)</td>
<td></td>
</tr>
<tr>
<td><strong>Trends</strong></td>
<td>• Trend towards advanced recommendation algorithms</td>
<td>• Fairly high-tech sector, potential for Indian firms unclear</td>
<td>• Some standardization work ongoing¹</td>
</tr>
<tr>
<td><strong>Implications on India</strong></td>
<td>• High-tech sector, potential for Indian firms unclear</td>
<td>• Currently a nice-to-have in India, not must-have</td>
<td>• Local context may be necessary, opp for Indian firms</td>
</tr>
<tr>
<td></td>
<td>• Currently a nice-to-have in India, not must-have</td>
<td></td>
<td>• Possibly not a high priority problem in India</td>
</tr>
</tbody>
</table>

1. Tin Can Project: “e-learning software specification that allows learning content and learning systems to speak to each other in a manner that records and tracks all types of learning experiences”
Section 2: Indian Education System
# Education segment: Core

## K-12

<table>
<thead>
<tr>
<th>Current size</th>
<th>Future growth – key drivers</th>
<th>Key challenges</th>
<th>Potential areas for Ed-Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>$24B (Private schools more relevant for Ed-Tech as of today)</td>
<td>$14%; largest target population globally</td>
<td>Mismanagement and teacher absenteeism, lack of quality of public schools which serve ~60% of student base</td>
<td>Transmission based infrastructure (Smartclass, tablets, laptops etc.) to facilitate teaching learning process, particularly for private schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of core expertise in areas such as pedagogy, curriculum etc</td>
<td>Adaptive assessments to test understanding and provide learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hardware leasing/selling to schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Digital content</td>
</tr>
</tbody>
</table>

## Higher education

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>$13B</td>
<td>13%; Inefficient public system; preference for private except for very reputed schools such as IIT</td>
<td>Extreme lack of supply; overall Gross Enrolment Ratio (GER) low at 12% when compared to world average of 26%</td>
<td>Educational platforms</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MOOCs and Distance Learning Programs (DLPs) through online</td>
</tr>
</tbody>
</table>

Source: Primary interviews; Kaizen Education report
## Education segment: Parallel (1/2)

<table>
<thead>
<tr>
<th></th>
<th>Pre-schools</th>
<th>Tutoring</th>
<th>Test prep</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Current size</strong></td>
<td>• $0.8B</td>
<td>• $9.6B</td>
<td>• $1.2B</td>
</tr>
<tr>
<td><strong>2. Future growth – key drivers</strong></td>
<td>• 30%; higher awareness, hectic working schedules of both parents, high willingness to pay</td>
<td>• 15%; poor teacher salaries in core segment, supplement of school education</td>
<td>• 20%; extremely competitive entrance exams with low success rates</td>
</tr>
<tr>
<td><strong>3. Key challenges</strong></td>
<td>• Relatively small market; concentrated in Metro and Tier 1 cities</td>
<td>• Success tied to a “star” teacher; difficult to scale-up and maintain similar quality</td>
<td>• Difficult to differentiate across competitors</td>
</tr>
<tr>
<td><strong>4. Potential for Ed-Tech</strong></td>
<td>• Limited applicability of Ed-Tech in this segment</td>
<td>• Online delivery platforms for lectures at multiple locations</td>
<td>• Online test simulation assessment packages accessed by users at home (beneficial as entrance exams in India go online)</td>
</tr>
</tbody>
</table>

Source: Primary interviews; Kaizen Education report
## Education segment: Parallel (2/2)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Current Size</th>
<th>Future Growth / Key Drivers</th>
<th>Key Challenges</th>
<th>Potential for Ed-Tech</th>
</tr>
</thead>
</table>
| Vocational training          | $1.1B        | 22%; only ~5% of young labour force trained vocationally                                       | Substantial portion of students graduating from rural schools and colleges lack access or means to go for vocational studies | MOOCs and DLPs to provide better and cheaper access to students  
                                 | 22%           | 22%; only ~5% of young labour force trained vocationally                                       | Increased focus on private teacher training initiatives                        | Self learning platforms for increasing business knowledge and communication skills                                                                 |
| Corporate training           | $0.05B       | 10%; increased focus on private teacher training initiatives                                 | Market dominated by captive training; limited scope exists for third-party players | Self learning platforms for increasing business knowledge and communication skills                                                                 |
| Teacher training             | $0.04B       | 15%                                                                                         | Limited focus – extremely nascent market (concept of teacher training not very popular in India) | All major Ed-Tech segments – platforms, MOOCs/DLPs etc. Can be used to provide better training to teachers |

Source: Primary interviews; Kaizen Education report
Section 3: Ed-Tech in India
Indian Ed-Tech: Hardware

Description & Drivers

- Smartboards related hardware with high growth, still with high potential for growth
- Huge market potential for cheap, easy to use devices and availability of educational software
  - Also supported by the govt grants; ~40 M kids targeted to get laptops in next 5 years, increased penetration of tablets as general purpose device

Customer need

- Low-cost hardware important for mass market adoption
- Needs to be supported by a strong ecosystem of easy to understand, child-friendly applications and content (e.g. HCL’s offering with 15,000 quizzes)

Sample players in India

Trends / Opportunities

- Lower end of market: Market attractive for any company able to provide low-cost hardware; important to source (part of) hardware locally for winning govt. contracts, players with local consumer electronics design OR reach to government could benefit
- Higher end of market: General purpose tablets likely dominate although firms bundling content with HW (e.g. Pearson) could win, classroom hardware such as smartboards will continue market penetration

Source: Secondary research; Primary interviews
Indian Ed-Tech: Digital Content (Classroom + Digital Content)

**Description & Drivers**
- Currently focuses on in-class learning platforms for improved transmission of knowledge to students
- Demand driven due to: More effective and fun delivery of education using technology/innovation, efficient performance review options and ability to achieve scale

**Customer need**
- Primarily sold to private educational institutions
- Key need is to offer a more effective learning environment; establish competitive advantage over competing institutions, justify higher fees

**Sample players in India**

**Trends / Opportunities**
- Pricing pressures from schools, but considerable headroom for expansion into more schools
- Nearly all action in private schools (K12)
- Market enthusiasm has tempered off-late with Educomp stock losing over 80% of value in recent times
- Some players e.g. Pearson integrating smart content in digital textbooks

Source: Secondary research; Primary interviews
Indian Ed-Tech: Digital Content (Games and Apps)

Description & Drivers
- Games for education and related apps on mobile/tablet platforms
- Fun delivery of education to increase engagement of students

Customer need
- B2B and (more commonly) B2C markets
- Improved and more enjoyable learning experiences

Sample players in India
- tinyToops
- Mad Rat Games
- Brain Nook
- NAYI Disha
- Funtoot

Trends / Opportunities
- Middle/upper class parents show high willingness to pay
- Market for educational games is nascent across the world, similar in India
- Potential for freemium model
- Solutions for non-smart phones with very high potential (models for voice/SMS enabled services such as search are hot)

Source: Secondary research; Primary interviews
Indian Ed-Tech: MOOCs/DLPs/Focused Learning

Description & Drivers

- Online video lectures/ languages / higher studies etc. Used for stand-alone or classroom blended learning
- Professional courses (e.g. CA) and English speaking sites most demanded focused learning sites

Customer Need

- Often customers do not have access to/ time for classroom education
- Flexibility of time and convenience of location (last mile important for DLP)

Sample players in India

- NPTEL
- LurnQ
- Sunstone Business School
- Rainmaker
- WizIQ
- uts
- Manipal University
- LanguageReef
- MindSpark
- excellere

Trends / Opportunities

- Growing potential market (Majority of populace < 40 years old), Manipal and others have proven market potential of DLP
- Blended learning / flipped classrooms / lifelong learning
- Emerging revenue streams include: fee for courses, subscription

Source: Secondary research; Primary interviews
Indian Ed-Tech: Enablers (excluding Assessments)

Description & Drivers
- Includes diverse markets such as LMS, classroom management tools, adaptive learning technologies, SIS/school ERP, Ed-data related, etc.
- In India, LMS market is fragmented with a few home grown players
- Other products have not penetrated significantly yet

Customer need
- Improved processes, higher transparency over operations
- Improved pedagogy

Sample players in India
- fedena: School management
- mangoreader: eBooks creator
- WizIQ: VLE
- UPSIDE LEARNING: LMS

Trends / Opportunities
- Governments with a preference for Open Source Software
- ERP/SIS has been a tough market to crack according to experts
- Players in this segment have already addressed international markets

Source: Secondary research; Primary interviews
Indian Ed-Tech: Assessments

Description & Drivers
- Conducts assessments for corporates / students / job seekers / preparation for highly competitive exams (JEE, CAT etc.) – as exams are moving online, online prep models are also gaining traction
- Available at an economical price for individual users – students / job seekers / Reliable and consistent results for corporates

Customer need
- Robust testing systems to identify critical development areas
- Economy and instant result

Sample players in India
- aspiring minds
- meritnation
- Assesspeople
- Vriti TV
- mettl
- eduquity

Trends / Opportunities
- With growing economy and employment opportunities market is growing
- With increasing number of students appearing in competitive exams such as CAT (approx. 200k students in 2012), IIT-JEE (approx. 550k students in 2012)

Source: Secondary research; Primary interviews
Section 4: Implications on PE/VC Investments
Several changes in India’s education landscape are promoting the use of Ed-Tech

- Major (quality) supply-side constraints: Low enrolment ratios in India, quality a major issue even when access is available
- Ed-tech platforms can enable education to the masses by ensuring both **easier** access and **consistent** quality
- High willingness to pay among Indian consumer offsets this effect somewhat, but ability of MOOCs and DLP to offer cheaper courses could become relevant
- Demand for better in-classroom experience in private schools and colleges
- Extra supplementary education outside classes; fun and interactive learning techniques
- Mobile and tablet penetration in India increasing rapidly
- Favourable govt policies promoting use of e-devices in schools (K-12)

1. Mostly applicable to middle and upper economic classes
However, Ed-Tech in India also faces multiple barriers which will reduce the pace of adoption

- Traditionally Indian education has been teacher/classroom centric often with focus on learning by rote
- Low awareness of Ed-tech amongst educators, learners and administrators, seen as a nice to have

- Need for significant investment in infrastructure to deliver education via online channels, higher Internet penetration; low smartphone penetration also a limiter
- Last mile reach often quoted as a challenge

- Digital content needs to be developed and continuously updated (esp. for higher education) for different languages
- Content may have to be approved by education agencies (CBSE, ICSE etc.) in core segments

- Institutions prefer a customized solution → economies of scale benefits are difficult to achieve
- Institutions have budgetary constraints & cannot afford premium products (i.e. customized products)
Quotes from experts about state of Ed-Tech in India and its future

“Ed-tech penetration in India today: 3/10. ”
“It will take at least another 3-5 years”

“...Noticeable surge in usage of tablets...”

“...Language is an issue, need different languages if not targeting English speaking schools...”

“...India DLP/MOOC use case different from US: People wanting replacement of institutions; cannot be physically present...”

“Low Internet penetration and payment infrastructure a challenge..”

“...pure play tech innovation less likely to emerge from India, some service component needed...”

“...B2C online offerings: people willing to pay, Personalized learning could be a big deal here...”

“...Online assessments a massive opportunity...”

Source: Primary interviews
Methodology for assessing potential for all combinations of Education and Ed-Tech segments

1. Size of underlying Education sector
   - 1: <$1B
   - 2: $1-$10B
   - 3: >$10B

2. Applicability of technology to sector
   - 1: High
   - 2: Mid
   - 3: Low

3. Openness of sector to technology adoption
   - 1: Unsupportive
   - 2: Neutral
   - 3: Supportive

4. Degree of govt regulations
   - 1: Strict regulations
   - 2: Limited regulations
   - 3: No regulations

Assign ratings and calculate final average rating:
- <2: Low potential
- 2-2.5: Medium potential
- >2.5: High potential

Source: Team analysis
Our research has highlighted several sub-segments within Ed-Tech that show high-medium potential.

<table>
<thead>
<tr>
<th>Education segments</th>
<th>K-12</th>
<th>Higher education</th>
<th>Preschools</th>
<th>Tutoring</th>
<th>Test prep</th>
<th>Vocational training</th>
<th>Corporate training</th>
<th>Teacher training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated Hardware</td>
<td>High potential, category unlikely to be open to smaller firms</td>
<td>High potential, category unlikely to be open to smaller firms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital content games and apps</td>
<td>Already successful in certain cats. Needs expansion.</td>
<td>Customized solutions for universities. Need for digital content</td>
<td>Limited potential for tablet content</td>
<td></td>
<td>Could prove to be differentiator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOOCs DLPs And focused learning</td>
<td>Currently Limited penetration (Metros &amp; Tier 1) Huge scope in Tier 2/3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enablers + Assessments</td>
<td>Focus on pvt schools Assessments, LMS, ERP</td>
<td>Untapped market; few focussed players. Opp in low stake semester exams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Primary interviews, team analysis
### Segments attractive for VC Investments (1/2)

<table>
<thead>
<tr>
<th>High/Mid growth potential areas</th>
<th>Examples of existing companies operating in India</th>
<th>Comments</th>
<th>Attractiveness for PE investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Datawind, OLPC, magicpencil, Mytab, HCL, Pearson, iProf, Educomp, etc.</td>
<td>• Govt. spending via tendering process – high volume low margin market. Deep pockets needed for waiting out slow government processes • Smaller players at massive disadvantage • Asset heavy</td>
<td>![Green/Red]</td>
</tr>
<tr>
<td>Digital content, games and apps</td>
<td>Educomp, Compucom, Aurus Network, Vienova, EducateMe360</td>
<td>• Need capital for development and reaching private schools (B2B) / consumers (B2C) • Still asset light</td>
<td>![Green]</td>
</tr>
<tr>
<td>K-12</td>
<td></td>
<td>• Need for capital: Reach universities &amp; colleges / technology development / learning centers (last mile), marketing for B2C</td>
<td>![Green]</td>
</tr>
<tr>
<td>Higher Education</td>
<td></td>
<td>• Need for capital: If needed then to develop customized content • Asset light</td>
<td>![Red]</td>
</tr>
<tr>
<td>Corp. training / Test prep</td>
<td></td>
<td>![Green]</td>
<td></td>
</tr>
<tr>
<td>MOOCs, DLPs &amp; focused sites</td>
<td>Universal Training Solutions (UTS), NPTEL, LurnQ, Educateme360, Manipal University, WizIQ</td>
<td>• Need capital for (i) Developing, maintaining and updating database; (ii) Marketing &amp; advertising • Reputation a key success factor</td>
<td>![Green]</td>
</tr>
</tbody>
</table>

Source: Primary interviews
### Segments attractive for VC/PE Investments (2/2)

<table>
<thead>
<tr>
<th>Assessed Areas</th>
<th>Enablers excluding assessment</th>
<th>Examples of existing companies operating in India</th>
<th>Comments</th>
<th>Attractiveness for PE investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>High/Mid growth potential areas</td>
<td>K-12, Higher Ed, Tutoring</td>
<td>Fedena, WizIQ, Upside learning</td>
<td>• Need to be assessed on a case by case basis</td>
<td>Highly Attractive</td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>K-12</td>
<td>Educational Initiatives</td>
<td>• Need for capital limited; required only if need arises in future to scale up through brick-and-mortar, or to provide equipment to schools</td>
<td>Highly Attractive</td>
</tr>
<tr>
<td>Higher education</td>
<td>No major players</td>
<td></td>
<td>• Opportunity in low-stake assessment</td>
<td>Highly Attractive</td>
</tr>
<tr>
<td>Test prep</td>
<td>Vriti, EntrancePrime, thecatonline, Eduwizards</td>
<td></td>
<td>• Might need capital for establishing testing centres/buying equipment capable of providing real simulation of IIT/CAT entrance examinations</td>
<td>Highly Attractive</td>
</tr>
<tr>
<td>Corporate training</td>
<td>Mettl, Aspiring Minds</td>
<td></td>
<td>• Limited need for capital, as market currently is nascent. However, as outsourcing of training and recruitment increases, capital will be required for scale-up</td>
<td>Highly Attractive</td>
</tr>
</tbody>
</table>

Source: Primary interviews
**Considerations while investing in Indian Ed-tech firms**

<table>
<thead>
<tr>
<th><strong>Entry valuations</strong></th>
<th>Potentially attractive entry valuations as education section has taken a hit in India off late, interest in sector lukewarm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product strategy</strong></td>
<td>Pure play tech innovation likely to be led by the US, tech plays with blended service components leveraging low cost base could be more promising</td>
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<td></td>
<td>Cloud/online/mobile delivery more promising than on-premise</td>
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<td><strong>Choice of end markets</strong></td>
<td><strong>Segments:</strong> Selling B2B to certain segments that are highly fragmented such as K12 may be a challenge for smaller players, B2C requires high brand value and/or high marketing costs</td>
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<td></td>
<td><strong>Geography:</strong> Start-ups targeting western (US) market have better shot at scale / exit, start-ups targeting India alone can expand in other price-sensitive and emerging markets</td>
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<td></td>
<td>- <strong>Two India’s:</strong> lower-middle to upper class (likely focus) and BOP (volume market)</td>
</tr>
<tr>
<td><strong>Exit considerations</strong></td>
<td>Poor environment and track record for exits in India in general at present</td>
</tr>
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<td></td>
<td>Trade sale and secondaries likeliest exit channels</td>
</tr>
<tr>
<td></td>
<td>Ed-tech start-ups have better prospects of international exits if they target international (US) market</td>
</tr>
<tr>
<td></td>
<td>Potential buyers: Large educational companies (e.g. Pearson), General/ Specialized tech firms (e.g., Blackboard), Telcos, Internet firms, PE firms</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td>Teams and talent</td>
</tr>
<tr>
<td></td>
<td>Ability to differentiate</td>
</tr>
</tbody>
</table>
Abhinav Sharma       Dhananjay Vaidyanathan Rohini       Chetan Ghurka
                         Jatin Detwani                         Ashish Chawla

Private Equity Elective, MBA Class of July 2013