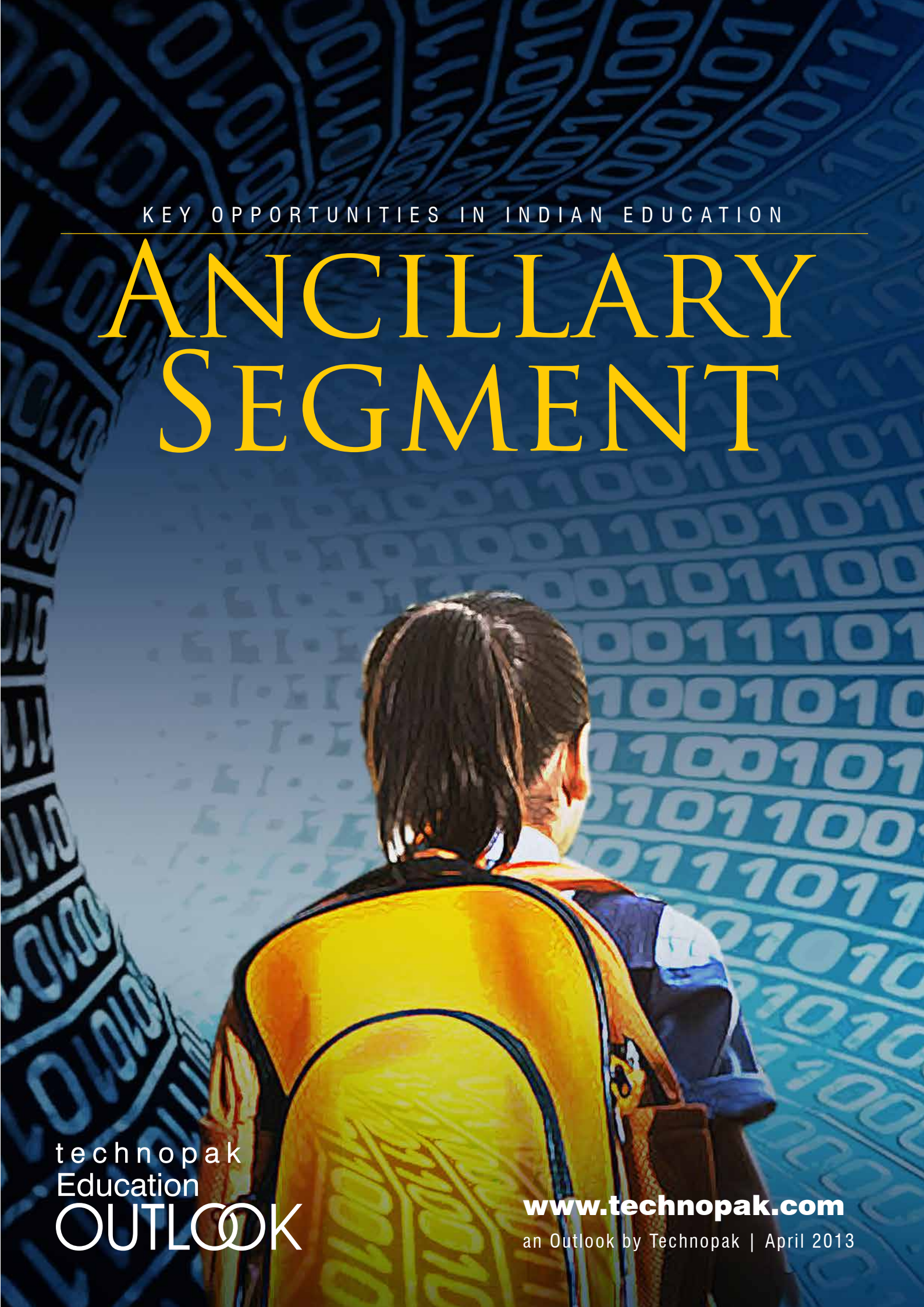
KEY OPPORTUNITIES IN INDIAN EDUCATION

Ancillary Segment



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About the Outlook

Education world over is on the cusp of change; on the one hand there are questions of sustainability and access, and on the other are the unprecedented innovations centered on technology, delivery models, and services. While, as a country, we grapple with the key concerns of affordability, quality and access, there is an unmistakable widening of awareness about, as well as increasing spending on, quality education across both urban and rural populations. Today's large and growing population of parents aspires for quality education as it is seen to be an investment rather than an expense. These parents understand the elements that make for quality education. The key stakeholders today also appreciate that children need to prepare themselves for an uncertain future in which traditional pedagogic models may not be of much utility. Against this backdrop, ancillary or peripheral services in education gain a whole new dimension. The various products and services, whose objective is to improve the learning experience and advance academic outcomes, are becoming increasingly important and valuable. The wide canvas of the ancillary segment makes it ripe for innovation and investment. In this Outlook, we make a case for innovation and value added services, and the increasingly deeper role of technology in education.

Education Division Services

Business Strategy
Assistance in developing value creating strategies based on consumer insights, competition mapping, international benchmarking, and client capabilities

- Corporate strategy
- Organic and inorganic growth strategy
- Financial and operational modelling
- Marketing strategy

Implementation
Leveraging operations and industry expertise to 'commission' the 'concept' on a turnkey Project Management basis

- Project Management & program co-ordination
- Support for setting up the infrastructure
- Support for kick-starting business operations

Partnerships
Identification & creation of national and international partnerships across segments of Education

- Partnership structuring
- Due diligence of partners
- Negotiations for JVs and management contracts

Capital Advisory
Supporting business strategy and execution with comprehensive capital advisory services

- Due Diligence – Commercial & Financial
- Mergers & Acquisitions
- Fund Raising

Impact Assessment
Assessment & audit of running programs

- Assessment of schemes and policies
- Audit of projects. Advisory on course to meet objectives

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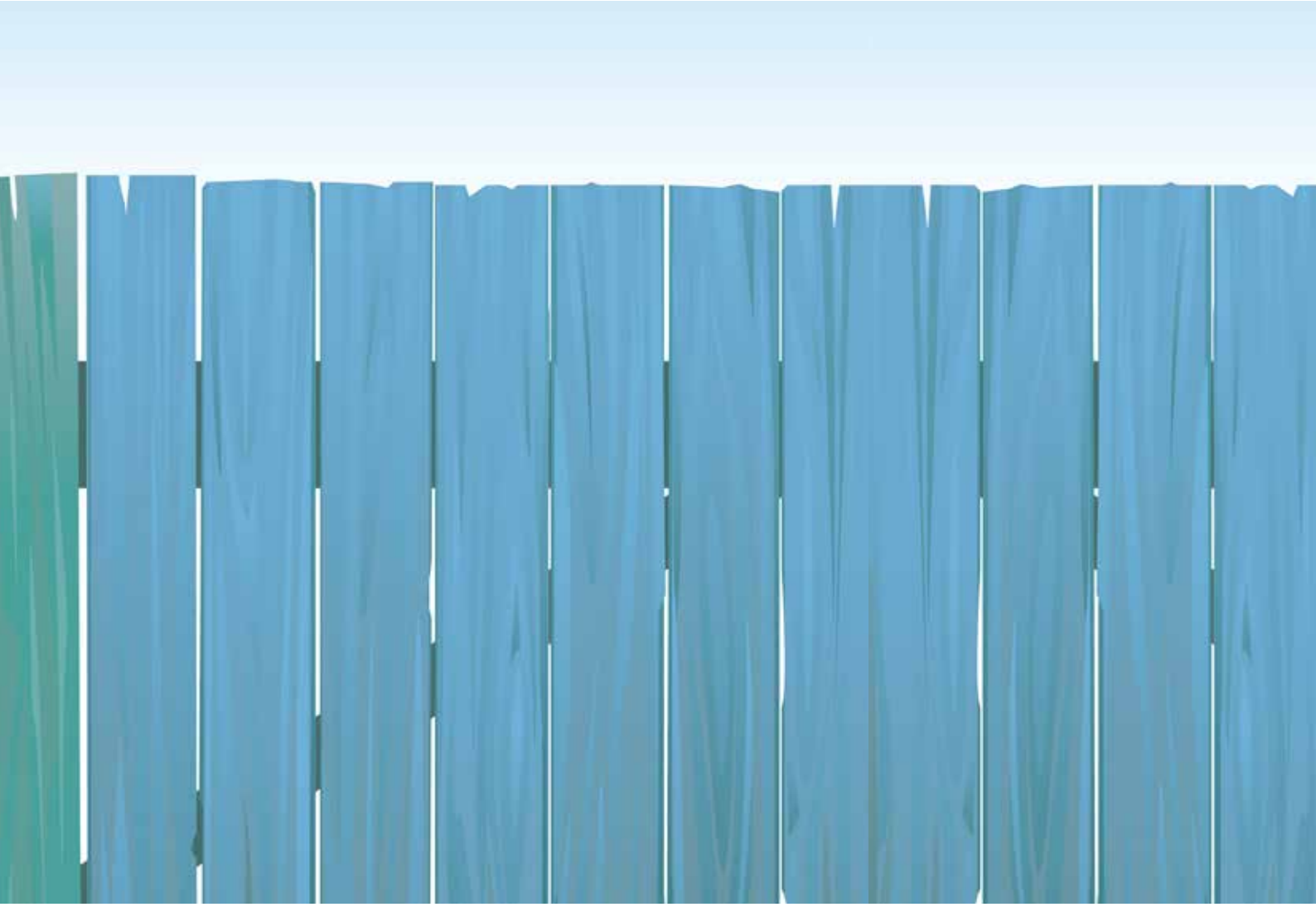
Introduction

An Overview of the Ancillary Segment

The ancillary segment of India's Education sector is currently estimated to be worth around USD 15 billion, and is expected to grow at a CAGR of 15% to touch USD 40 billion by 2020. Some of its key constituents include Technology-related Products and Services, Sports Education, Facility Management, Education Travel, Educational Resources (Books, Toys, Games, etc.), Tutoring, Transport Management, Test Preps, Uniforms, Stationery, Admissions Outsourcing, Child Skill Enhancement Programs (math, personality, concentration, and language), Curriculum, Assessment & Performance Analytics, Education Events, and Psychological and Career Counseling. The segment is largely unregulated and, typically, has asset-light business models. Further, it currently comprises mostly unorganized and local players. As a result, the key challenges faced by the segment are a lack of quality and standardization in the delivery of services. However, being the second largest segment in the Education sector, and having all the growth enablers present, makes it an ideal segment for private investment.

It is believed that ancillary or peripheral services are taking on an increasingly 'central' role in education. This transition is happening in tandem with our schools' and colleges' shift in focus from knowledge to application, from academics to innovation, and from mere rote learning to 'learning to learn'. There is a realization that our children should be armed with the skills to solve tomorrow's problems, some of which may even be unknown to us today.



Fortunately, there has been much innovation with regard to solving the learning deficit experienced by our children. Education today is being made richer, equitable, and sustainable through a plethora of enablers, including new technologies, innovative services, and focus on experiential learning. While this Outlook covers some of the major trends in the ancillary segment of the Indian Education sector, some key factors influencing these trends are summarized below.

Rising Aspiration for, and Awareness About, Quality Education

The key stakeholders in the education ecosystem, viz. parents, students, teachers, institutions and curriculum providers, are increasingly aware of the various quality aspects. Parents are ready to go the extra mile for better schools. There is widespread awareness that academic performance alone may not be enough for success and that there is a need for all-round development.

Sustainability of Education

With rising input costs, sustainability is a major concern in the minds of education providers as well as governments. It is imperative that various innovative models be explored to make education sustainable for all stakeholders. For instance, it is believed by many that "on-line" (or off physical campus) education may actually become the norm within the next 10 years; at the very least, a hybrid model comprising both "on-line and off-line" methods will be the predominant model of delivery of education across various levels and vocations.

Realities of the Labor Market

It is believed that many of the jobs in the current labor market will not exist in the coming decades and many new breeds of jobs will be created. In order to meet the demands of the emerging labor market and newer and more sophisticated skills, there is a conviction that technology should play a more integral and deeper role in pedagogy and delivery mechanisms.

The following sections discuss four exciting opportunities within the Ancillary segment.

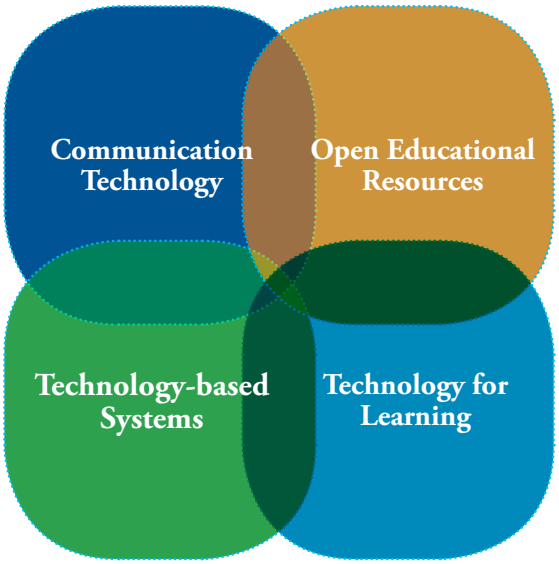
Technology in Education

The advent of technology has reduced the stature of information to that of a mere commodity. Consequently, educators today are compelled to teach children how to utilize information rather than just retrieve and retain it. Technology, in combination with globalization, is rapidly changing the way children assimilate information. Primarily, it allows students to push outwards the classroom's boundaries and discover ways of learning which are more effective than the quintessential chalk-and-talk methods. Children have to be prepared, as the cliché goes, for their future and not our present. In an era when newer professions are emerging every day, the future is changing faster and more visibly than ever. Hence, educators need to integrate emerging and traditional pedagogies, an effort in which technology is indispensable.

Types of Technological Interventions

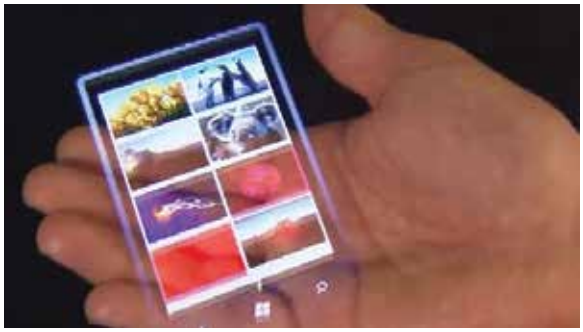
A number of schools, colleges, and universities are adopting technology at various levels. These interventions can be broadly classified into four types, viz. Communication Technology, Open Educational Resources, Technology-based systems, and Technology for Learning. These four areas are not mutually exclusive; they converge and interact in multiple ways.

Types of technological interventions *Exhibit 1*

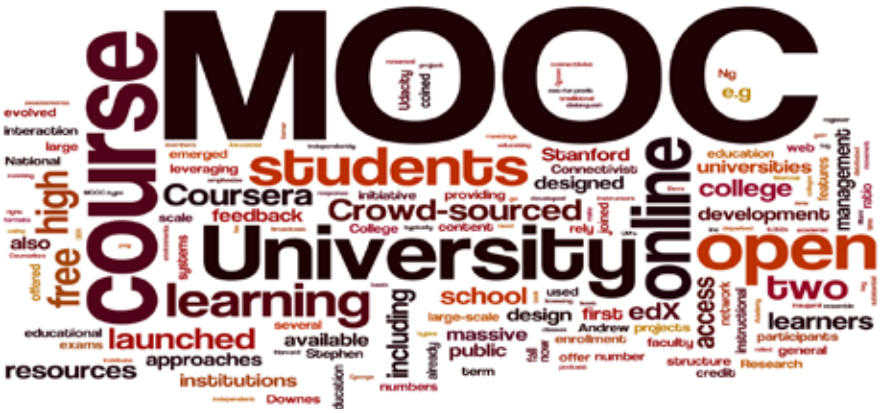


Communication Technologies

These include technologies that make education through communication possible. When it becomes a collaborative effort, education has been proven to be several times more impactful and interesting. Innovations like 3D holography and mobile technology are set to make learning more interactive than was ever imagined. While 3D Holography has the power to bring a ballet danseuse from Moscow right inside a dance class in Madurai by projecting her three-dimensional image, Mobile Technology offers multifarious methods of learning and collaboration. With superior communication platforms and standards such as WiMAX, learning through communication technologies is a growing phenomenon.



- **3D Holography** is a technique which enables three-dimensional images to be projected from a remote location. Complemented with a 3D design tool like AutoCAD and 3D printing, 3D holography can redefine how scientific and artistic models are taught and prepared. Products like zSpace and TeleHuman, for example, can produce holographic images that are tactile, or touch-sensitive, and interactive, ushering in the next level of 3D applications.
- **Mobile Technology** has evolved beyond mere sharing of content or for using the Internet to access information. Specialized apps can now be developed, even in the classroom, to achieve certain learning objectives. For instance, app design tools can be used by students to design a utility or game to illustrate a theorem. These apps can be used to enhance the curriculum, provide simulation-based experiences or be designed around specific activities like data collection, opinion polls, etc. As we migrate to higher



mobile communication technology standards like 3G and 4G, mobile technology is set to gain more traction within education.

Open Educational Resources

These are freely accessible learning resources that have an open format, open content license and, in some cases, openly sourced content.

- **Massive Open Online Courses**, or MOOCs, are a huge leap towards democratizing education. MOOCs combine the concept of open educational resources, or OERs, and distance education, to provide resources and support by which anyone with access to the Internet can gain the benefits of rich content in any desired discipline. The availability of high quality, easily accessible, and free online courses has gone up in a huge way, as the concept of MOOCs has also garnered enormous attention from Ivy League institutions, as well as the Silicon Valley. Coursera, one of the leading MOOCs companies founded by professors at the Stanford University, had more than 2.7 million registered users within just eleven months of its launch affirming the spiraling interest in MOOCs. This format is less teaching-centered and more about learning and requires self-discipline, which is evident from the fact that only 7-8% of the 'students' end up with a certification. However, providers of MOOCs have included features such as peer reviews, group collaborations, automated feedback, rich content, and online testing methods that make learning rigorous as well as engaging.

  The advantages are tremendous: the low investment required by students, flexibility, translation of content, and scalability are the most significant ones. The monetization of this impending revolution is, however, still a question. While the most apparent answer is to charge for programs which are affiliated with a coveted university or institute, other possible solutions include licensing and customizing content for students, having paid-for discussions and mentor assessments, and mining student data for business customers. What also remains to be seen is how non-academic business entities can become partners in this revolution.

Other Examples of Open Educational Resources:

- It is now possible for students to create virtual labs (called 'class wiki') through Wikispaces which enables the entire class to edit models and figures in collaboration.
- Peer 2 Peer University (P2PU) is an open education project in which anyone can participate. Volunteers facilitate the courses, but the learners are responsible for their schedules and learning outcomes.
- OpenStudy is a social learning network whereby learners can come together in a massive multiplayer study group. Learners can find others working in similar fields and support each other in their learning pursuits.
- OER Commons is a great online avenue that brings together more than 40,000 OER tools for sharing content.

Technology-based Systems

This includes technology for breakthrough platforms of collaboration that can revolutionize learning outcomes and remarkably improve the management of educational institutions.

- **Cloud Computing** provides great performance and security without significant investment on infrastructure by the school/institute. Multiple dashboards and plugins for several purposes make cloud-based school management systems a compelling option. Companies delivering cloud applications provide unified governance, security management, and accessibility to multiple private and public clouds and virtual environments.

  Moreover, remarkable innovations are taking place every day in all types of education technologies. One example is the recently announced Cisco Education Enabled Development (CEED 2700) solution, which is a collaborative, cloud-based video interaction

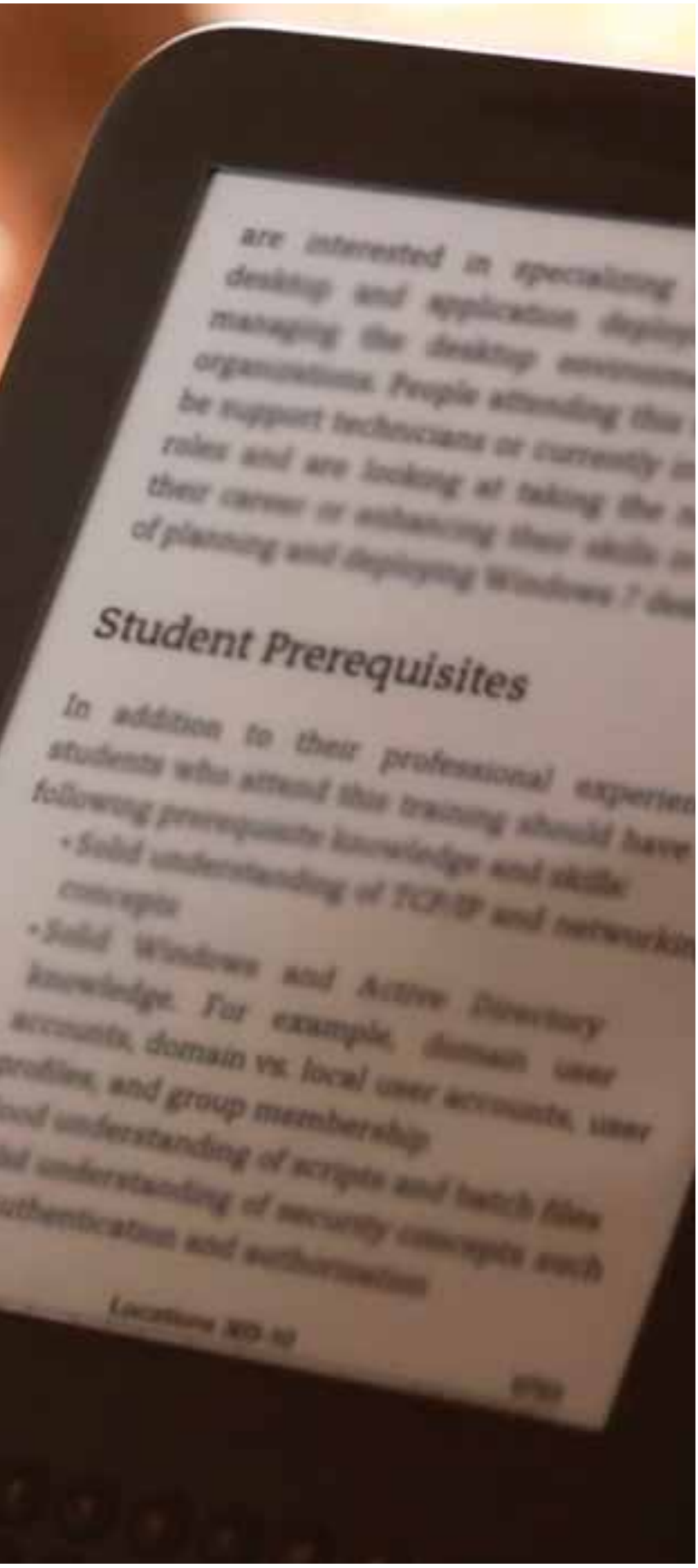
solution for the delivery of education and skills development courses across the country.

- **Enterprise Resource Planning**, or ERP, software for automating academic, financial, and administrative procedures and practices, from attendance and registration to inventory and alumni management, help streamline work processes, shorten business process cycles, and increase productivity. In the near future, we will see rapid growth in several ERP trends. ERP apps light enough to be accessible through mobile phones will gain popularity with parents and staff alike. ERP systems will increasingly integrate vendors, parents and alumni with school management. ERP systems will be integrated with cloud computing servers along with on-premise installs in schools.
- **Intelligent Tutoring Systems** attempt to overcome one of the inherent barriers in any learning process. More often than not, learning from a person or from a technology-based system does not take into consideration the learner's goals, interest, abilities and level of proficiency. Intelligent Tutoring Systems, or ITS, use cognitive sciences, along with predictive methods, to detect an individual's learning preferences and abilities. Designers of digital content, MOOCs and games are now adapting their learning systems to include the capabilities of an ITS.
- **Learning Management Systems** are software frameworks that assist in every step of learning including administration, content delivery, analytics, skill-gap analysis, feedback, and learner collaboration. Some of the most popular Learning Management Systems, or LMS, include Moodle, Blackboard, and Skillsoft. These systems use a web-based platform to share content and provide learning support. They often have the capabilities of an ITS. A Learning Content Management System, or LCMS, goes a step further and makes the LMS open source in nature.

Technology for Learning

With the conspicuous incursion of technology into education, educators have a multitude of ways to enhance the richness quotient in academics and, consequently, make learning an active rather than a passive process. These technologies are usually a combination of the following aspects.

- **Learning Networks**: Several new ideas are coming up that allow students to collaborate, ideate, and learn by connecting over networks and not just in physical spaces. For instance:
  - » Students can create a digital poster by combining videos, music, sound, pictures, animations, etc. (called 'glog') through an online educational system, Glogster
  - » Children can also fashion playful experiments and create video games, stories, interactive art, and



creative projects in a group with the help of Scratch, a programming language developed at MIT

» Podcasting is set to challenge the live lecture format as students are increasingly using podcasting for ideas such as archiving class lectures, peer tutoring and publishing/ presenting their work

» Edmodo, a startup that provides a social network for teachers and students is making waves with more than 400 apps that empower the process of collaborative learning

- **Personal Learning Environments**, or PLEs, which are a rapidly growing concept, are the result of evolution of Web 2.0 technologies like blogs, wikis, RSS feeds, Twitter, and Facebook. They are conceptual frameworks that an individual constructs based on how, and from what sources, he plans to learn. A PLE is thus simply a self-conceived model of using web-based information and communities which may or may not be aligned with an institute-prescribed learning plan. A student can include in his PLE a set of blogs, online communities that critique his work, relevant apps, and websites. The University of Mary Washington in Virginia has institutionalized this concept by use of UMW Blogs, a WordPress multiuser publishing platform that lets students present their work, discuss each other's creations, and even cooperate on projects. CLIX is a SaaS (Software as a Service) example of a PLE system that allows students to select the apps they require in the form of widgets on an intuitive platform.
- **Digital Content**: Myriad technology companies, Ivy League institutes, and business conglomerates have established their businesses in this domain. These products span various concepts, like digital language labs, specialized programs for children with learning disabilities, and subject-specific content. These companies are developing innovative, fun and functionally rich content by including such features as simulation, storytelling, and 'virtual manipulatives'.
- **Games and Apps**: There are many games and mobile applications that can help sharpen the artistic, mathematical, linguistic, creative, and scientific ability of students. Whether it is an online stock market game, simulating the controls of a virtual sky diver to impart the principles of aerodynamics, or a projectile-based game, games and simulations have a way of bringing about learning outcomes in an active and fun manner. Learning is best experienced when the outcome becomes the clue in a game and the simulation is immersive.
- **Learning Devices**: Tablets, interactive white boards, and projectors have established their ground in most premium, urban schools. The market is quickly evolving to accommodate new software platforms to enhance the learning experience from the devices.

Digital probes, sensors, and 3D printing are going to gain more popularity as they complement scientific and practical learning. As classrooms become increasingly device-driven, 'ambient intelligence' will further fortify the devices by helping them integrate with each other in a seamless and unobtrusive manner. Wearable technology is poised to become the next wave of change in technology in education with inventions like brain-sensing headbands and robotic suits finding their way into the market.

Feasibility Analysis – Indian Market

Nine of the most promising technologies in Education have been rated on seven important parameters in order to assess their future potential in the Indian market (*Exhibit 2*). While the factors 'Size of Market Opportunity' and 'Market Readiness' are the most explicit factors assessing business feasibility, 'Ease of Operations', 'Scalability', and 'Infrastructural Feasibility' are also crucial to the success of a technology. 'Adaptability to different users' has a variety of contexts. It represents the flexibility of a system to train a person notwithstanding his age, linguistic proficiency, and computer literacy. It also represents the versatility of the system to different stages of Education. 'Social Impact' and 'Adaptability to different users' are especially important in India's sociocultural context.

Feasibility Analysis of Different Educational Technologies *Exhibit 2*

Parameter	Weigh-tages	Mobile Technology	Digital Content	Learning Devices	Games	Cloud Computing applications	MOOCs	ERP Systems	Personal Learning Environment	3D Holography
Size of Market Opportunity	20%	●	◔	◔	◔	◐	◐	◐	◐	◔
Ease of Operations	15%	●	◐	◔	◔	◐	◐	◐	◐	◔
Market Readiness	15%	●	◔	◔	◔	◔	◐	◔	◐	◔
Scalability	15%	●	◔	◔	◔	●	●	◔	◔	◔
Infrastructural Feasibility	15%	●	◔	◔	◔	◐	◐	◐	◐	◔
Adaptability to different users	10%	◐	◔	◔	◐	◔	◐	◔	●	◔
Social Impact	10%	●	◔	◐	◔	◔	◔	◐	◐	◔

Low ◔ Medium ◐ High ◔ Very High ●

Role of the Government

It can be concluded that Mobile Technology, Digital Content, and Learning Devices are, in that order, among the most promising technologies in the Indian context. Cost concerns are also likely to reduce tremendously as technologies and devices become ubiquitous with the growing commitment of the government to democratize ICT. One of the key objectives of the National Telecom Policy 2012 is to achieve 175 million broadband connections by the year 2017 and 600 million by the year 2020 at a minimum download speed of 2 megabytes per second, or Mbps. The conceptualization of 'Aakash', the low cost tablet for the delivery of e-content to higher education Institutions and universities is another step towards making learning devices omnipresent.

While all indications suggest a steep growth in Education Technology products and services, some hard realities must be examined. According to the latest reports of the District Information System for Education, only 47.5% schools in urban India have access to computers; the number is 16.1% for rural India. Further, a majority of the schools having computers are private schools, pointing to a scenario wherein the digitization of learning is skewed towards urban areas and private schools. The challenge is to help administrators and teachers understand how ICT can coexist with their curricula and traditional pedagogies. Enhancing teachers' literacy in ICT is another impending long term goal to ensure that technology in education becomes a sure success. The large scale adoption of technology in education is also a challenge due to an erratic power supply and the constant need to upgrade the necessary infrastructure. In addition, most of the educational technologies implemented in India have been passively adopted from other countries and there have been few significant innovations. However, the government's commitment to the National Mission on Education through ICT (NMEICT), the resolve of private schools and universities to embrace ICT, and the growth of numerous companies imparting education through technology augur well for this growing phenomenon.

Travel Education

Experiential Learning

In the past decade, the top Indian schools and K-12 curricula have been consciously shifting their focus from pure academics to the holistic development of children. In addition, today we acknowledge that learning can be visual, auditory, tactile, oratory- in short, experiential. Traditional classroom settings have an elevation or dais for a teacher to act as the lead in classroom sessions and students are expected to learn in only one way: oratory.

This has now been acknowledged as a regressive style of learning and has paved the way for 'Experiential Learning'. To facilitate this, schools are increasingly remodeling their pedagogy, teaching modalities and even their design attributes. Learning outside the class is becoming increasingly important as a modality of experiential learning.

The basic premise of experiential learning is that students must take active part in the learning process by experiencing the subject matter being taught to them. This compliments classroom teaching and helps in making the traditional teaching methodology more effective by inducing the greater involvement of the student.

Educational Tours

Educational tours are one of the fastest developing experiential learning methods. Students may travel to a specific location for a unique experience that the destination can offer. Globally, travel education is a widely accepted method of outdoor learning. Companies such as EF Tours, Global Education Travel, and Global Travel Alliance offer destinations and experiences that manifest a far more evolved travel education scenario in USA, Canada and Western Europe.

With educational tours students can apply classroom concepts, learn life skills, participate in adventure-based activities, grasp ecological concepts, or even undertake community-based initiatives. An educational tour can be customized to provide for any pedagogic requirement. For instance, a tour intended to elevate the linguistic skills of students could be a visit to the Mattur, the only Sanskrit speaking village in the world to enlighten students about the many endangered languages.

Evolution

Prior to the 1990s, the concept of travel education or outdoor learning was not widely accepted. The trips were largely leisure-based and the needs of schools were entirely catered to by small, local vendors or by retail offices of large travel companies that assisted schools in ticketing and reservations. There were few new entrants which provided adventure-based or specialized school trips. Between 1990 and 2000, new players began emerging in the leisure and adventure category. However, the industry was still largely unorganized. The type of travel was typically limited to:

- **Daylong trips** within the city or visits to nearby picnic spots, museums, planetariums, or historical monuments. The main objectives were recreation, enjoyment, encouragement of team spirit, and exposure to places of academic interest.
- **5-8 day trips** were organized for older students (Grade 7 and above) to nearby tourist locations such as beaches or hill stations. These trips were mostly organized during vacations with the objective of providing recreation and helping students develop life skills such as money management, discipline, and living independently.

However, this landscape has changed since the arrival of International Baccalaureate, or IB, and Cambridge International Examinations, or CIE, schools, which brought with them the global phenomenon of travel education. They started organizing international trips and taking their students to such landmark destinations as centers of the National Aeronautics and Space Administration, or NASA, the Euro Space Center, Broadway Theatre, or even the sites of Holocaust-era concentration camps. These trends were subsequently adopted by the crème-de-la-crème ICSE and CBSE schools in India.

Today, IB and CIE schools are the major consumers in the high-value segment of travel education. Among the ICSE and CBSE institutions, nationally acclaimed schools in educational clusters such as Dehradun, Mussoorie, and Kodaikanal, along with premier schools in the metropolitan cities, form another set of customers in the high value segment.

The types of trips with respect to the core objective of organizing can be classified as follows:

- Leisure Travel
- Travel Education
  - » For Curriculum Needs
  - » For Educational Events
  - » For Adventure and Life Skills Learning

Though schools aim to organize trips that fulfill more than one type of objective, each trip has some predominant characteristics that help us classify them in the above types. The explanations of each type along with examples are detailed in *Exhibit 3*.

Types of travel education

Exhibit 3

Travel Type	Main Motive	Additional Motives	Activities	Example
Leisure	Recreation, relaxation and enjoyment for students	• Learning life skills like money management, emotional balance etc. • Developing Team spirit / social skills / leadership qualities etc.	• Day trips or picnics • Sight Seeing • Visiting Theme Parks • Mild activity like treks or nature walk	• Visiting nearby hill stations • Visiting popular foreign destinations
Curriculum	Specific learning objectives outlined by curriculum, e.g. • Increase aptitude or interest in a discipline/ subject • Complement classroom teaching	• Recreation and fun on the trips • Team spirit / life skills etc.	• Field Visits • Visits to areas of special interest for certain subjects	• Visits to NASA Space Centers • Students of commerce visiting the New York Stock Exchange • Language trips to Spain and France
Educational Events	Participation in Interschool activities / competitions	• Learning soft skills • Personality development	• Exchange Programs • Conferences • Competitive Events	• Cultural exchange programs with Max Mueller Bhawan and British Council • Programs by the International Schools Theatre Association for various schools • Model United Nations, Round Square Conference and conferences by NPSC
Adventure	• Adventure activities that challenge students and help build a host of soft skills	Fulfilling curriculum objectives and social, physical and emotional development of students	• White Water Rafting • Scuba & Marine sports • Wildlife safari • Adventure Camps	Camping and adventure activities in Rishikesh that may be combined with social welfare activities for nearby villages. Such a trip can be used for evaluating IB students on CAS (Creativity Activity Service), an essential component of the IB curriculum

Popular and emerging destinations for student travel *Exhibit 4*

Travel Type	Popular	Emerging
Domestic	Rishikesh, Mussoorie, Goa, Kerala backwaters, Lonavala, Jaipur, Agra	Ladakh, Andaman & Nicobar Islands, Thar Desert, Hampi (Karnataka), Yercaud (Tamil Nadu), Sattal (Uttarakhand), Orchha (Madhya Pradesh), Wayanad (Kerala)
International	USA, Singapore, Thailand, China, Dubai, Egypt	South Africa, Kenya, France, Italy, Germany

NASA's Johnson Space Center, Houston Space Center, and Kennedy Space Center are gaining widespread popularity among schools. Travel operators are also looking at other such centers of scientific pre-eminence such as CERN (Switzerland). While Kenya and South Africa are emerging hotspots for student adventures, France and Italy are gaining popularity given the enormous scope for history and language lessons there. Germany is being explored as a destination for trips that can enhance scientific and manufacturing studies, especially in the automotive domain.

Service Providers

There is a range of travel service providers with respect to the size and scope of their activities. *Exhibit 5* presents the spectrum of travel services providers based on the level of integration.

Classification of travel service providers as per level of integration *Exhibit 5a*

Pre Trip Requisites	Destination Requisites	Activity Requisites	Company Type
Internal	Outsourced	Outsourced	Booking agents
Outsourced	Outsourced	Internal	Activity-based companies
Internal	Outsourced	Internal	Partially Integrated Activity-based companies
Outsourced	Internal	Internal	Destination management companies
Internal	Internal	Internal	Fully integrated travel company

Exhibit 5b

Pre Trip Requisites	Booking of travel, accommodation	Booking sightseeing and other tickets	Insurance filing
Destination Requisites	Accommodation	Catering	Security and chaperones
Activity Requisites	Educational activities	Adventure activities & equipment	Trainers, mentors, guides, speakers

The market is largely unorganized and fragmented, and not very evolved in terms of size, scale, and business models. A few players have now begun to be acknowledged as distinguished brands in specific locations and types of travel education, and there are few all-rounders. Thus, schools have to deal with multiple vendors for various travel requirements. However, companies are experimenting with myriad ways of engaging students and school administrations while packaging tours. Schools, on the other hand, are far more concerned about practical aspects like the level of integration of the vendors, hygiene and safety at destination, and the versatility of a vendor to cater to the needs of all age-groups. In almost all cases, vendors customize their offerings to a large extent to accommodate specific requests by schools.

Challenges and Opportunities

Technopak estimates the current market potential of the K-12 travel education market at around USD 2 billion. There is a huge untapped opportunity in Tier II and lower rung cities. Moreover, Travel Education has thus far been limited to private schools and large scale adoption by Central and State Government schools is a future possibility. IB and CIE schools and premier ICSE and CBSE schools still constitute the majority of the services consumed in this segment, suggesting a large opportunity in the value segment.

Our discussions with several schools across the country suggest a growing enthusiasm for travel education. There are multiple reasons for this: competition with peer schools, evolved expectations and aspirations of parents, and the need to augment classroom learning. With the change in the paradigm of K-12 education in India, even government-run schools are slated to include travel education as a part of their curricula. However, the biggest hurdle at present is the non-availability of travel packages and services in the mass / value segment; most of what the market offers today is affordable only to the premier schools in the country. Therefore, the need of the hour is for travel companies to come up with innovative business models to cater to the mass / value segment of the K-12 travel education market. These could include cheaper travel packages, new locations, and more standardization of services, so that tours meet educational needs.

Facility Management Services

Introduction

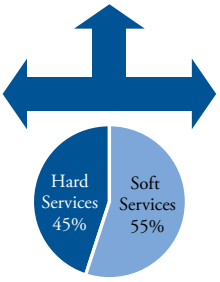
Facility Management services imply the enlisting of a third-party service provider to maintain a part of the building, or outsourcing the management to an organization that executes this service professionally. This includes hard services as well as soft services, and finds application in retail and shopping malls, hotels, hospitals, banks, corporate houses, IT and ITeS companies, manufacturing firms, etc. The outlook for facility management services in India is shaping up to be highly optimistic, mainly due to the growing maturity of end-users and the need for improved safety, comfort, and professional maintenance of assets. The expansion of business activities in Tier II and Tier III cities by the end-user segments are considered to be boosting the regional growth for facility management services in India. In the education sector, however, facility management has only recently found support from various quarters, being traditionally perceived as an unorganized function.

The types of facility management services in the education domain can be understood by defining the stake of the service provider in the physical facility:

Asset-Light
In this type, the maintenance of part or whole of the building or institution premises is outsourced to a third-party service provider, with the aim of receiving professional and specialized services. The areas for which facility management services are sought can be educational, administrative, residential, or sports facilities within the campus. This kind of facility management service can be further classified as illustrated in *Exhibit 6*.

Classification of Facility Management Services *Exhibit 6*

Hard Services	Facility Management Services	Soft Services
Electrical Services		Housekeeping
Mechanical Services		Safety & Security
Cooling and HVAC Services		Horticulture and Landscaping Services
Water Management & Plumbing		Pantry and Catering Services
Energy Management		Office Support Services



Asset-Heavy

A major emerging market within the facility management space, for educational institutions, is Student Housing Facility Management, which comprises the construction and/or maintenance of both existing and new student housing facilities.

Globally, the student housing market is valued in excess of USD 200 billion. This has been fuelled by the active rise in the number of students, along with the increase in student mobility worldwide. This upsurge can further be traced to Asia and its countries' growing GDPs. In 2000-2011, global tertiary student enrolments rose rapidly, from 98 million to around 165 million.

A similar kind of explosion in the need gap of student accommodation is being witnessed in the Indian market in the past five years. The number of higher education institutions, as well as the student enrolment capacity in existing institutions, has risen, but the student accommodation infrastructure has not expanded in the same proportion, thus creating a wide gap. Currently, this need gap is being mainly catered to by domestic households, who provide accommodation to students through what is called "paying guest" accommodation.
A few small scale private players have come into action, by building private, off-campus hostels / dorms for students in institutional areas. It is observed that educational institutions are keen on building up on-campus capacity besides being open to tie-ups or outsourcing. The need gap is set to increase in the future as the landscape of higher education in India represents a huge demand for more institutes and, consequently, more accommodation facilities.

Student housing facility management companies can provide end-to-end services, starting from financing, site selection, construction, and project management, to facility management. These companies can implement their expertise or use their network of partnerships to provide student-centric accommodation and facilities.

Companies like Campus Crest Communities and American Campus Communities manifest the potential scale of this business format. Both the companies are listed on American stock exchanges and offer an extensive portfolio of services and properties.

Market Potential and Opportunity

Currently, the market for facility management in education is at a nascent stage. In the education domain, only 10% of services are being outsourced, and the rest are being managed internally. A big opportunity is waiting to be tapped – both in the asset-light and asset-heavy models of facility management. Technopak estimates the market potential of facility management in education at USD 2.5 billion. This includes higher education, K-12, and test preparation domains.

Sports Education

Introduction

The importance of Sports and Physical Education in the life of an individual was aptly described by the Indian Education Commission (1964-66) in the following words:

"Physical education contributes not only to physical fitness but also to physical efficiency, mental alertness and the development of qualities like perseverance, team spirit, leadership, obedience to rules, moderation in victory, and balance in defeat"

This importance has been given due cognizance by international organizations like the UNICEF and UNESCO through constitution of inter-governmental establishments to help promote the role of sports in public policy. The global sports market is valued at over USD 150 billion.

In India, the interest in sports education surged after the formation of bodies like the Indian Olympic Association, National Cadet Corps, and Boys Scout Association of India. Investments were made in institutions like Nehru Yuva Kendra Sangathan and the Sports Authority of India that sought to democratize sports education through scholarships, infrastructure, and training programs.

However, despite all these interventions, a nation with a billion-plus population like India is lagging in producing top quality sportspersons. While many attribute this to the apathy of the government and corporate sector in providing the right amount of support required, we believe that the problems are far more fundamental. In a nation grappling with literacy and school enrollment challenges, physical education, at the school level, often does not get the importance it deserves. Physical education is only offered only as an elective in 11th Standard in both the national curricula, viz. ICSE and CBSE. The Sarva Siksha Abhiyaan has only recently acknowledged the need for health and physical education at the elementary stage of schooling. Physical education also needs to be taught in a more practical context and aspects like Holistic Health, Sports Nutrition, Sports

Medicine, and Sports Psychology need to be included. Schooling establishments must also realize the need for providing professional training and grooming for high performers. The lack of qualified trainers and coaches is yet another fundamental challenge.

The Emerging Need for Sports Education

The good news is that, of late, educationists are talking about the importance of sports with renewed vigor. With Howard Gardner's theory of multiple intelligences gaining popularity and acceptance, educationists now realize the importance of 'Kinesthetic intelligence' and its possible application to various professions besides Sports. For example, hand-eye coordination is a major strength for a sportsperson and a huge asset to a surgeon.

Further, Sachin Tendulkar's suggestion in the Rajya Sabha to integrate sports into the education system is likely to make bodies like the CBSE and NCERT reconsider the content and pedagogy of sports education. With India's success at the Commonwealth Games, the 2011 Cricket World Cup, the 2008 Beijing Olympics (where Abhinav Bindra won India its first individual gold medal) and the 2012 London Olympics (where India got a total of 6 medals), many role models have emerged in other sports than cricket, viz. Saina Nehwal, Abhinav Bindra, Sushil Kumar, Mary Kom, to name a few. As a result, sports are being taken more seriously nationwide and are even being accepted as a career option.

While, globally, companies like Global Sports Ltd. have business models that have evolved enough to include a range of consultative services, India has seen sports education companies set up operations only in the past couple of years. The startups KOOH Sports and Sportsmentor have an especially interesting genesis. While the former is promoted by TATA Consultancy Services and HDFC, the latter is supported by the Indian cricketers Sachin Tendulkar and Virender Sehwag.

Most such companies operate via an asset-light model wherein they form collaborations with schools and use the school's infrastructure to develop sports facilities, manage them with expertise and provide specialized training programs. In return for a monthly management fee, these sports companies take charge of almost all sports-related activities, from training instructors to organizing sports events to ensuring safe and structured sports curricula. The companies currently involved in this business are registering growth rates in excess of 100%.

Modes of Operation

Sports education services can exist in broadly two modes, as shown in *Exhibit 7*.

Types of Sports Education Services *Exhibit 7*

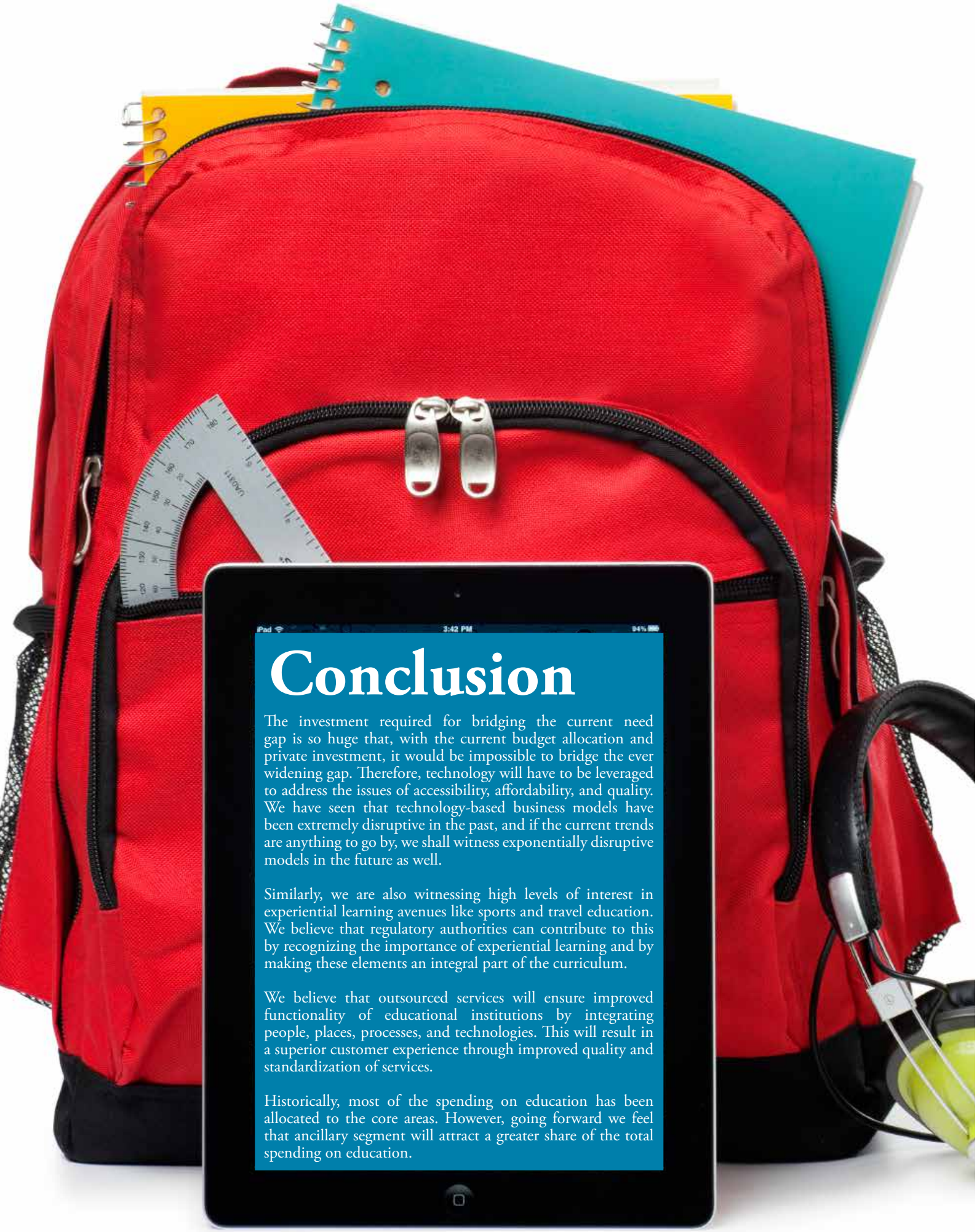
Training Focused	Infrastructure Focused
Features • Key focus area is training, mentoring, designing and applying specialized curricula • Key objectives are fitness, physical awareness and Sports training **Services** • In-school and after-school programs for children • Training the trainers • Performance Assessment and Analytics • High performer Mentoring • Counselling and Workshops • Career Management **Advantages** • Asset-light • Programs appropriate for different classes • Helps schools having less qualified PE teachers • Provides access to world-class curricula and techniques • Helps train in sports in which expertise is not easily available **Challenges** • Tailoring programs that can coexist with Academics	**Features** • Key focus area is equipment and infrastructure **Services** • Infrastructure Consulting • Equipment Manufacturing • Equipment Installation • Maintenance and Management **Advantages** • Assistance in optimally managing space and monetary constraints for Sports Infrastructure • Safe and adequate management of valuable equipment • Adherence to safety standards for usage by children • Potential source of revenue **Challenges** • Land acquisition costs can be prohibitively high for outdoor sports

Market Potential and the Road Ahead

Although the focus is primarily on school children, often the sports infrastructure at schools is also put to use after school hours, adding a new revenue stream. Sports Education companies are also creating centers of excellence for high performers with world-class infrastructure to create talent for aspirational international forums like the Olympics. Most sports education companies are steadily revising their curriculum to include activities like yoga and dance. Companies are also diversifying to incorporate age-appropriate curriculum and equipment. Sports education companies are now considering new models of delivery in the sports education segment, some of which can be:

- Sports events
- Sports camps and sports tourism
- Extra-curricular activity consulting for schools
- Sports exchange programs through international forums and alliances

In the present scenario, sports education companies have been successful in tapping the interest of the mid-premium to premium segment of schools in the metropolitan, Tier I and select Tier II cities. There is a vast untapped potential across the country, including the rural hinterland, and government-aided schools. The Sports Ministry's 'Come and Play' scheme, which allows access to about 80 facilities operated by the Sports Authority of India is but a modest effort to enhance young people's capabilities in sports. There are some noteworthy steps too, as the government has earmarked INR 250 crore to set up a National Institute for Coaches. A possible solution is that the various sports federations of India, in consultation with sports education companies, pool their resources and capabilities for the future of sports education. The greater inclusion of sports education in school curricula is an imminent move that the central and state education boards must consider and implement at the earliest.



Conclusion

The investment required for bridging the current need gap is so huge that, with the current budget allocation and private investment, it would be impossible to bridge the ever widening gap. Therefore, technology will have to be leveraged to address the issues of accessibility, affordability, and quality. We have seen that technology-based business models have been extremely disruptive in the past, and if the current trends are anything to go by, we shall witness exponentially disruptive models in the future as well.

Similarly, we are also witnessing high levels of interest in experiential learning avenues like sports and travel education. We believe that regulatory authorities can contribute to this by recognizing the importance of experiential learning and by making these elements an integral part of the curriculum.

We believe that outsourced services will ensure improved functionality of educational institutions by integrating people, places, processes, and technologies. This will result in a superior customer experience through improved quality and standardization of services.

Historically, most of the spending on education has been allocated to the core areas. However, going forward we feel that ancillary segment will attract a greater share of the total spending on education.

About Technopak

India's leading management consulting firm with more than 20 years of experience in working with organizations across consumer goods and services.

Founded on the principle of "concept to commissioning", we partner our clients to identify their maximum-value opportunities, provide solutions to their key challenges and help them create a robust and high growth business models.

We have the ability to be the strategic advisors with customized solution during the ideation phase, implementation guide through start-up and a trusted advisor overall.

Drawing from the extensive experience of more than 150 professionals, Technopak focuses on four major divisions, which are Fashion (Textile & Apparel), Retail, Consumer Products & E-tailing, Education and Food & Agriculture.

Our key services are:

Business Strategy: Assistance in developing value creating strategies based on consumer insights, competition mapping, international benchmarking and client capabilities.

Start-Up Assistance: Leveraging operations and industry expertise to 'commission the concept' on turnkey basis.

Performance Enhancement: Operations, industry & management of change expertise to enhance the performance and value of client operations and businesses.

Capital Advisory: Supporting business strategy and execution with comprehensive capital advisory in our industries of focus.

Consumer Insights: Holistic consumer & shopper understanding applied to offer implementable business solutions.

Our Other Divisions

Retail, Consumer Products & E-tailing

Technopak aids retailers and consumer product companies in formulating growth strategy and performance enhancement mandates. Over the past two decades, we have worked on various facets such as entry into the Indian market, development of new category, activation of new retail formats, channel development, product extension, region expansion etc. One key reason why Technopak is considered the industry leader is the relentless focus on the Indian Market. We help clients understand the market dynamics in India and help them arrive at the best method to grow business in India. Our Retail and Consumer product expertise helps gain a competitive edge by providing execution capabilities and corporate strategies.

Fashion (Textile & Apparel)

With almost 20 years of experience in delivering end-to-end solutions to the entire gamut of the textile industry, right from fibre to retailing, the Fashion& Textile division at Technopak assists the textile and apparel organizations in optimizing their profits through enhancement and expansion. Many leading Indian and international Textile manufacturers and Apparel brands have benefited from our offerings in the areas of business planning and strategy, apparel operations, supply chain management and strategic alliances. Our team consists of top calibre advisors who have worked closely with a diverse group of clients comprising textile manufacturers, apparel retailers, garment manufacturers and exporters, apparel sourcing organizations, trade promotion councils, industry associations, international development bodies, and financial institutions as well as central and state governments.

Food & Agriculture

Technopak's Food Services & Agriculture team comprises of established domain experts who build and enhance the business performance of organizations which are either working in the segment or are willing to enter it. Our end-to-end solutions are customized as per the business's requirements and capabilities. We continuously strive to create strong industry relationships and work for a global footprint by delivering a wide range of services to organizations that operate or wish to operate in the Food and Agriculture sector, in India as well as internationally.

Technopak Advisors prides itself
in the depth and range of knowledge and insights garnered
by our consultants across our divisions, viz.
Fashion (Textiles & Apparel), Retail,
Consumer Products & E-tailing, Education,
and Food & Agriculture.
While a large chunk of this "body of knowledge" is a tailored
response to client demands, we are also
able to bring out keen analyses of the various trends observed by
our consultants in the respective divisions. This has
empowered our attempts to periodically
bring out thought pieces which may be useful to policymakers,
the media, and any agency keeping a finger on the
pulse of the various sectors and industries.
Outlooks, such as this one,
are one outcome of this effort, and we strive to bring out
an edition every quarter per division.
We invite readers to contact the authors, at the address provided,
for any queries or further discussion regarding the subject
matter of this document.

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