India’s Vocational Education and Training Segment
About the Outlook

India’s much touted demographic dividend can well prove to be a curse if the nation’s millions do not become skilled and employable. With roughly 600 million of India’s population below the age of 25 years, there is a definite need for large scale employment generation. While social biases and systemic issues are a dampener, the heartening news is that there are concerted efforts from the government as well as the industry towards making a large-scale impact in society through vocational education. In this Outlook, we start the discussion by focusing on the low productivity with which India’s labor force is grappling, and the systemic issues that create barriers to vocational training. We also discuss the enabling conditions which the government is trying to create for private participation. As the challenges and the opportunities are both huge, the encouragement from the government, for the creation of for-profit sustainable business models, presents an attractive opportunity for private players. Needless to say, vocational education is one of the most important areas in India today. This Outlook makes a case for large, scalable, and sustainable vocational education business models.

Education Division Services

Business Strategy
Assisting in developing value-creating strategies based on consumer insights, competition mapping, international benchmarking
• Entry Strategy
• Organic and Inorganic Growth Strategy
• Financial and Operational Modeling
• Marketing Strategy
• Innovation Strategy

Implementation
Leveraging operations and industry expertise to ‘commission’ the ‘concept’ on a turnkey basis
• Project Management and Program Coordination
• Support for setting up Infrastructure
• Product Conceptualization and Development
• Support in Hiring Leadership Team

Partnerships
Identifying and creating 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 -Business
• Fundraising

Impact Assessment
Assessing and Auditing running programs
• Assessment of Schemes and Policies
• Audit of Projects
• Advisory on course to meet objectives
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Overview

The Education sector in India is presently at a point of inflection. There are rapid and defining changes occurring across the various educational segments, whether K-12, Higher Education, or Vocational Training. The government is also supporting many initiatives even as private investors seek to resolve issues of access and formats. This in turn has given rise to challenges associated with affordability and accountability which have to be dealt with in order to redress the capacity gap. Again, there is an appetite for education, fostered by the following key factors.

**Demographic Advantage**
Over 50% of India’s population is under the age of 25, leading to an increased demand for quality higher education and a skilled workforce.

**Increasing Affordability**
Households with total incomes in excess of USD 10,500 are expected to increase from 5 million to 14 million, by 2018, resulting in higher affordability of, and boosting awareness about, education, as an essential tool for career growth.

**Knowledge-led Economy**
India, which was once considered an agrarian economy, is now dominated by the services sector, whose share has increased from 31%, in 1991, to 56.8% in 2012-13. This expansion of the services sector has led to a steady increase in the demand for an educated and skilled workforce.

**Increased Participation of Women in the Workforce**
The large, young, working population, which has a median age of 25 years, as well as the rise in number of nuclear families in urban areas, and the emergence of job opportunities in the services sector-driven economy, is concomitant with an increase in the number of working women in India. The percentage of working women is estimated to exceed 25%, by 2015.

**New Employment Avenues**
Globalization has led to the increase in newer employment avenues. Such industries as outsourcing (e.g. KPO, LPO), legal, retail, aviation, animation, healthcare, alternative medicine and well-being, and supply chain & logistics have generated employment opportunities, and demand for highly skilled manpower.

### Exhibit 1
**India’s Literacy Profile**

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>2011 Percentage (%)</th>
<th>Estimated Population (mn)</th>
<th>2015 Normal Course Percentage (%)</th>
<th>Estimated Population (mn)</th>
<th>2015 Accelerated Course Percentage (%)</th>
<th>Estimated Population (mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>21</td>
<td>267</td>
<td>19</td>
<td>251</td>
<td>17</td>
<td>224</td>
</tr>
<tr>
<td>Eligible Illiterate</td>
<td>8</td>
<td>103</td>
<td>7</td>
<td>93</td>
<td>5</td>
<td>66</td>
</tr>
<tr>
<td>Children in age group 0-6 years</td>
<td>13</td>
<td>164</td>
<td>12</td>
<td>158</td>
<td>12</td>
<td>158</td>
</tr>
<tr>
<td>Literate</td>
<td>79</td>
<td>1003</td>
<td>81</td>
<td>1069</td>
<td>83</td>
<td>1096</td>
</tr>
<tr>
<td>Literate but no formal schooling</td>
<td>2</td>
<td>24</td>
<td>1</td>
<td>13</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Schooling up to 5th standard</td>
<td>35</td>
<td>399</td>
<td>36</td>
<td>475</td>
<td>37</td>
<td>488</td>
</tr>
<tr>
<td>Schooling up to 10th standard</td>
<td>17</td>
<td>182</td>
<td>18</td>
<td>238</td>
<td>18</td>
<td>238</td>
</tr>
<tr>
<td>Schooling up to 12th standard</td>
<td>10</td>
<td>85</td>
<td>10</td>
<td>132</td>
<td>10</td>
<td>132</td>
</tr>
<tr>
<td>Entered college but did not graduate</td>
<td>5</td>
<td>24</td>
<td>5</td>
<td>66</td>
<td>5</td>
<td>66</td>
</tr>
<tr>
<td>Graduate</td>
<td>8</td>
<td>102</td>
<td>9</td>
<td>119</td>
<td>10</td>
<td>132</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>2</td>
<td>25</td>
<td>2</td>
<td>26</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>1270</td>
<td>100</td>
<td>1320</td>
<td>100</td>
<td>1320</td>
</tr>
</tbody>
</table>

Source: Technopak Analysis
Since the ushering in of liberalization, capacity in the education sector has largely been expanded in the higher education and K-12 segments, resulting in marginally improved literacy levels, although the exercise has not made a significant impact on employability.

If the current momentum continues, there will soon be a shift towards higher levels of education. Some impetus from the government, along with increased private sector participation, can take it further; however, the population capable of contributing at the knowledge level will remain relatively low. Therefore, a large part of the employable and willing population is likely to be engaged in skill-intensive areas. However, it will require a breakthrough-like involvement by the government, as well as the private sector, to ensure that these masses are adequately skilled to meet the requirements of the employing sectors.

The Union Budget 2013 allocated INR 65,867 crore for the education sector which is 17% higher than the previous year’s allocation. In addition, the government has been fairly liberal in allowing the private sector to invest in Education within the existing regulatory framework, which has added to the sector’s lucrative appeal.

While there is emphasis is on all segments within Education, viz. K-12, higher education, and ancillary services, vocational training is by far the most pressing area, deserving the attention of all stakeholders. The biggest challenge for the for-profit vocational education and training sector is making Indian youth employable and productive. This revised issue of Technopak’s Education Outlook refocuses on Vocational Education and Training, which will assuredly see tremendous growth in the next few years, provided the participants in the sector are able to address the challenges documented herein.
Chapter 1

The Vocational Education and Training Landscape in India

In the recent past, the outlook on India has been one of cautious optimism. However, it is widely believed that India will be on track for growth if reforms are continued and issues relating to governance are tackled. In recent months, the government has taken some positive steps including the introduction of reforms in the retail sector, in insurance and in pensions, and the issuance of guidelines in higher education, which allow foreign universities to offer programs in India. We believe these reforms are steps in the right direction, although much needs to be done to take India to a mid-income level as a country.

This idea of a prosperous India is based on a favorable population demographic. Given the ageing populations in most other developed economies, and the median age here of 25 years, India is looking to become an exporter of skilled manpower. Even within the country, about 11-13 million people are expected to seek employment opportunities every year, for the next decade.

However, the employability of this population is an issue. A quick look at Exhibit 2 gives an insight into the challenge – or the opportunity, depending on how one chooses to see it – in making this population productive and employable.

Exhibit 2

<table>
<thead>
<tr>
<th>India's Population: Age and Employability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>India’s Population (2013)</strong></td>
</tr>
<tr>
<td>0-14 yrs</td>
</tr>
<tr>
<td>15-60 yrs</td>
</tr>
<tr>
<td>&gt;60 yrs</td>
</tr>
<tr>
<td><strong>Employed</strong></td>
</tr>
<tr>
<td><strong>Unemployed/ Not willing to work</strong></td>
</tr>
<tr>
<td><strong>Need Training</strong></td>
</tr>
<tr>
<td><strong>Need Retraining</strong></td>
</tr>
<tr>
<td><strong>90% need VET</strong></td>
</tr>
</tbody>
</table>

| **India’s Population (2015)** | **1.32 bn** |
|--------------------------------|
| 0-14 yrs | 370 mn |
| 15-60 yrs | 840 mn |
| >60 yrs | 110 mn |
| **Employed** | 625 mn |
| **Unemployed/ Not willing to work** | 215 mn |
| **Need Training** | 85 mn |
| **Need Retraining** | 475 mn |
| **90% need VET** |

*Source: Technopak Analysis*

Over 80 mn people will need Vocational Training in the next 5 years, while 460 mn need retraining.

This huge demand for vocational education and the enormous gap in capacity makes the situation precarious for India. Exhibit 3 details the gap in capacity on a yearly basis.

Exhibit 3

<table>
<thead>
<tr>
<th>Current VET Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocational Training Centers</strong></td>
</tr>
<tr>
<td><strong>Govt. ITI:</strong> ~2,271</td>
</tr>
<tr>
<td><strong>Polytechnics:</strong> ~8,350</td>
</tr>
<tr>
<td><strong>Private ITI:</strong> ~8,073</td>
</tr>
<tr>
<td><strong>Private Training Centers:</strong> ~1,600</td>
</tr>
<tr>
<td><strong>No. of Students:</strong> 3 mn</td>
</tr>
<tr>
<td><strong>Total Demand for VET:</strong> 10 mn</td>
</tr>
<tr>
<td><strong>Annual Supply</strong></td>
</tr>
<tr>
<td><strong>Annual Demand</strong></td>
</tr>
<tr>
<td><strong>Annual Need-gap</strong></td>
</tr>
<tr>
<td><strong>Additional requirement:</strong> 7 mn</td>
</tr>
</tbody>
</table>

*Source: Technopak Analysis*
The enormity of the challenge is well-recognized; the government has taken a slew of measures including the setting-up and funding of new ITIs, studying the sustainability of vocational models, establishing payee mechanisms, vocational standards, creation of sector skill councils, modular employability schemes, etc. Recently, the government has set up the National Skill Development Agency (NSDA) with a mandate to coordinate all skill development initiatives which have resulted in an increase in capacity in recent years.

Exhibit 4

**Increase in Number and Capacity of ITIs**

<table>
<thead>
<tr>
<th>Year</th>
<th>Govt. ITIs</th>
<th>Private ITIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1905</td>
<td>3786</td>
</tr>
<tr>
<td>2010</td>
<td>5906</td>
<td>2133</td>
</tr>
<tr>
<td>2013</td>
<td>8073</td>
<td>2271</td>
</tr>
</tbody>
</table>

Source: National Skill Development Corporation

The manpower demand across various key industries over the next decade will help us put the challenges into perspective. Exhibit 5 and 6, read in conjunction, give insights into the requirement across various industries and skill levels.

Exhibit 5

**Sector-wise Skilling Targets (mn)**

<table>
<thead>
<tr>
<th>Industry</th>
<th>2007</th>
<th>2010</th>
<th>2013</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unorganized Sector</td>
<td>102</td>
<td>48.7</td>
<td>41.1</td>
<td>43.7</td>
</tr>
<tr>
<td>Building, Construction, and Real Estate</td>
<td>35.1</td>
<td>17.7</td>
<td>17.3</td>
<td>17.5</td>
</tr>
<tr>
<td>Auto &amp; Auto Components</td>
<td>16.8</td>
<td>9.7</td>
<td>8.7</td>
<td>9.4</td>
</tr>
<tr>
<td>Tourism</td>
<td>5.3</td>
<td>4.6</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Organized Retail</td>
<td>1.9</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Others</td>
<td>1.9</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Food Processing</td>
<td>1.9</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
</tr>
<tr>
<td>Education and Skill</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>IT and ITES Industry</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Gems and Jewellery</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Leather</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Banking, Financial</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Textiles and Spinning</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Furniture and Finishing</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Electronics and IT Software</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Media and Entertainment</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>Chemicals and Pharmaceuticals</td>
<td>3.2</td>
<td>3.4</td>
<td>3.2</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Source: NSDC
Exhibit 6

Increase in Skilled Workforce Requirement in Key Industries, Fiscal 2008-2022 (E)

<table>
<thead>
<tr>
<th>Industry/Service</th>
<th>Proportion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto &amp; Auto Components</td>
<td></td>
</tr>
<tr>
<td>Banking, Financial Services, and Insurance</td>
<td></td>
</tr>
<tr>
<td>Building, Construction, and Real Estate</td>
<td></td>
</tr>
<tr>
<td>Chemicals and Pharmaceuticals</td>
<td></td>
</tr>
<tr>
<td>Education and Skill Development</td>
<td></td>
</tr>
<tr>
<td>Electronics and IT Software</td>
<td></td>
</tr>
<tr>
<td>Food Processing</td>
<td></td>
</tr>
<tr>
<td>Furniture and Furnishings</td>
<td></td>
</tr>
<tr>
<td>Gems and Jewellery</td>
<td></td>
</tr>
<tr>
<td>IT and ITES</td>
<td></td>
</tr>
<tr>
<td>Leather</td>
<td></td>
</tr>
<tr>
<td>Media and Entertainment</td>
<td></td>
</tr>
<tr>
<td>Organized Retail</td>
<td></td>
</tr>
<tr>
<td>Textiles and Spinning</td>
<td></td>
</tr>
<tr>
<td>Tourism</td>
<td></td>
</tr>
<tr>
<td>Transportation, Logistics, Warehousing…</td>
<td></td>
</tr>
<tr>
<td>Unorganized Sector</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
<tr>
<td>Total/Average</td>
<td></td>
</tr>
</tbody>
</table>

Source: National Skill Development Corporation
Chapter 2

Productivity: The Biggest Driver

With lower wages and the liberty to add more employees in order to complete a job faster without incurring a huge additional cost, Indian employers did not focus on productivity at the lowest level. Today, rising wages and the increasing pressure on resources - including the space occupied by additional workers and the managerial resources needed to deal with them, has brought the productivity of each worker under scrutiny. Since the increase in mechanization, skilled labor and the productive use of time have become critical in business operations. Although India’s labor productivity has risen appreciably over the past 6-7 years, it still has much scope for improvement. As is seen in Exhibit 7, India ranks among the lowest, in terms of productivity, within the Asian cohort.

Exhibit 7

<table>
<thead>
<tr>
<th>GDP per Person per Hour (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Countries</td>
</tr>
<tr>
<td>India</td>
</tr>
<tr>
<td>Singapore</td>
</tr>
<tr>
<td>Hong Kong</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Philippines</td>
</tr>
<tr>
<td>USA</td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>UK</td>
</tr>
<tr>
<td>Germany</td>
</tr>
</tbody>
</table>

Source: Annual Report 2011, Ministry of Labor

In resolving this challenge there are some systemic issues that each participant in the sector, whether student, recruiter or trainer, faces. These include:

Students’ Considerations

The debate arises from the unwillingness of students, and their parents, to consider blue-collar vocations as credible employment. This situation is in turn fostered by several factors, viz.:

Cultural Bias: Culturally, there is a deep-rooted bias against manual labor, in favor of work that requires intellectual expertise. In modern times, the manual labor expected on shop floors is no match for the lure of a desk job in an air-conditioned environment. The result is that the job market is flooded with barely employable graduates coming out of institutes of higher education which offer an unsatisfactory academic quality.
Appreciating the Importance of Training: A learner seldom understands the value that training adds to productivity or future growth opportunities. In the near term, when he does not see his training fetching him a premium in the job market, he is not inclined to consider it.

Economics of Migration: Vocational training requires the learner to migrate to an industrial hub, usually away from native regions where his/her skills would be in greater demand. The economics of such a move, given the cost of living in an industrial hub, are not favorable.

Paying for Training: Historically, the training for vocational streams has been through apprenticeships or on-the-job training, wherein the learner also earns a stipend. Therefore, the learner is generally averse to the idea of paying for training which might only fetch him similar employment opportunities. In most cases, the learner comes from an economic background which makes it hard to afford the cost of training.

Distrust: Most training organizations, especially in the private sector, are not local and therefore not recognized by potential trainees. Based on past experiences with institutes that have made possibly similar, empty promises of employment, the learner views even genuine organizations with suspicion. The absence of trustworthy, nationally-known training providers does not help matters.

Recruiters’ Considerations

The industry, on its part, also has its own issues to consider, such as:

Little Value or Premium for Trained Persons: The industry does not differentiate whether an employee has undergone formal training or has picked up skills on the job. A superior knowledge of tools, techniques, or even better productivity does not fetch a premium. Due to this lack of financial incentive, individuals do not wish to undertake formal training.

Concerns Regarding the Relevance of Prior Training: The skills that a person brings in may not perfectly match the organization’s requirements. In such a scenario, the organization has to invest time in teaching the necessary skills.

Just-in-time Hiring: Most organizations do not maintain bench strength in terms of vocationally-trained manpower. Hiring is generally done just in time, and even then usually on a contract basis. The industry therefore does not have much incentive to invest in prior training, and the kneejerk reaction is to hire anyone, whether trained or not.

In-house Training Setup: Given the insufficient infrastructure for industry-relevant vocational training, most organizations invested in their in-house training setup solely on an as-needed basis. Any gaps in training are thus filled in-house.
**Importing Manpower:** For immediate or critical requirements, organizations are open to importing experienced manpower from countries like China and the Gulf. Although such manpower costs more, it saves organizations the long gestation period and commitment required to train manpower within the country.

**High Attrition:** Companies often find that investing in workforce training causes attrition as up-skilled workers leave the company after gaining expertise. This phenomenon has resulted in the belief among corporates that investment in training incentivizes attrition.

**Training Providers’ Considerations**

The third party in the equation, training companies are looking for their own answers in the following areas:

**Trainers:** Quality trainers might involve the biggest cost in a training setup, but their absence directly impacts the bottom line. A person who is trained enough to do a particular job by himself chooses an occupation for better prospects rather than for training.

**Price Points:** A majority of the students opting for vocational jobs comes from the economically lower strata. Also, these jobs are of a routine nature and are therefore not economically attractive for fresh graduates. This diminishes the possibility of recovering the costs involved in hiring trainers, developing content, providing for the trainers’ travel and logistics, and other administrative expenses, and makes charging a premium impossible.

**Capital Expenditure:** Setting up an educational institute is generally capital-intensive and even more so in the case of practice-oriented training. The low price points that the training company can command compound the problem and increase the break-even period.

**Industry Linkages:** The investment coming into the sector can be better utilized if training companies, in tandem with the industry, can collaborate to provide apprenticeship to students. While efforts to facilitate this are being made at various levels, there is still a long way to go before such an arrangement becomes the norm.

That the three spokes of the wheel do not meet indicates the absence of an ecosystem wherein vocational training is intrinsic to the development of the country’s workforce.
Government Role and Initiatives

Only in recent years has the government realized the enormity of the challenge and endeavored to overcome the same through various initiatives. Under the Prime Minister’s National Skill Development Mission, the government has launched an initiative to train 500 million people by the year 2022. Further, the National Skill Development Corporation (NSDC) was created in order to streamline the identification and mapping of skills requirements, facilitate private participation through grants, gap funding, etc. The government has undertaken multiple measures to address some of the problems mentioned in the earlier chapter, through such measures as:

**NSDA:** The NSDA comprises the PM’s National Council on Skill Development (NCSD), the National Skill Development Coordination Board (NSDCB) and the NSDC. It oversees and directs the efforts taken vis-à-vis skill development by both the government and the private sector, in a bid to fulfill the skilling target set under the 12th Five Year Plan.

**Sector Skill Councils (SSC):** SSCs are initiatives born out of Public-Private Partnerships (PPPs). In addition to facilitating capacity building, the SSCs also define the structure, levels, and benchmarks of training for each industry. This will help achieve consistency in the imparted training, aside from ensuring an ease of employment, and a portability of skills.

**National Vocational Education Qualification Framework (NVEQF):** The NVEQF is a recently-launched initiative which is to be implemented in polytechnics, engineering colleges, and other institutions, across the country. A seven-level certification program, starting from 9th standard/grade, will be initiated in the various vocational training disciplines, culminating in a degree at the end of the seventh year. Since this framework is sector-specific, special focus is given to high-employment generating sectors like IT, Media and Entertainment, Automobile, Construction, Retail, Tourism, etc. The program is expected to cater to at least five million students. This model is followed by most countries which have a robust vocational training infrastructure and where vocational training skills are accepted by the masses.
**Aligning Secondary and Vocational Education:** This initiative, in conjunction with the NVEQF, provides greater mobility to students through providing multiple points of entry and exit, and flexibility in choosing modules (of vocational education), according to the students’ aptitude. For the pilot phase in 2011, Haryana was selected with the target of benefitting 4,000 students across 40 schools in the state. Since its introduction, this scheme has reached about 1 million students in 9,619 schools.

**PPP Model:** In 2007-08, the Directorate General of Employment and Training (DGET) proposed the upgrading of 1,396 Industrial Training Institutes (ITIs) through PPPs. However, the impact of the scheme is yet to be ascertained.

**The Modular Employable Scheme (MES):** It is being implemented by the Ministry of Labor and Employment as part of their Skill Development Initiative (SDI). The key objective of MES is to recognize and certify the prior learning of existing workers. MES offers short-term modular courses to school dropouts and existing wage earners and facilitates certification for skills and learning gained informally. The key features of MES include the identification of a “minimum skillset” that can ensure gainful employment, the utilization of existing infrastructure, the creation of flexible delivery mechanisms, and the certification of skills acquired informally. MES targets training 1 million people over the next five years, using around 200 modules to meet industry demand.

**National Service Scheme (NSS):** The NSS has been proposed as an agent of change which engages students in skill development projects alongside other stakeholders in the society like academia, industry, and social organizations like NGOs and foundations. The pilot is expected to cover 30,000 students over a three-year period, eventually impacting 3.2 million students across universities, colleges, and secondary schools in the country.

**National Skill Awards (NSAs):** The NSDA is proposing the launch of NSAs, or Rashtriya Kaushal Puraskar, to incentivize youth and make vocational training aspirational. These awards will also recognize skill development initiatives by such institutions as Central Ministries, State Skill Development Missions, Training Institutions, Public and Private Enterprises, and lending institutions.

**Key Highlights of the Year 2012-13:** Both the government as well as apex bodies within the vocational system have taken several positive steps in the right direction, and achieved such milestones as:

- The NSDC approved 42 project proposals worth INR 617.82 crore
- The cumulative NSDC funding stands at INR 1859.45 crore for 100 projects
- 25 SSCs were set up
- An incentive of INR 10,000 will be given to individuals who have completed their training successfully, corresponding to an annual budget allocation of INR 1,000 crore
- Advocacy was the major agenda in terms of making vocational training aspirational, and much has happened in this space. A yearlong advocacy campaign on skills will be run by the advertising agency O&M
- Vocational training has been brought into the negative list of service tax to make it more affordable
- INR 500 crore has been allotted in the budget for fiscal 2014 towards skill development
- A Special Industry initiative, Udaan, was started in Jammu and Kashmir, to train 40,000 employees within 5 years. As of September 2013, 1,850 trainees have joined the training program
- District-level skill-gap studies were commissioned in 13 states
- Third-party monitoring was introduced to ensure a reliable inflow of information from private partners
- World Skills Competition was brought into the limelight to reward people excelling in the field thereby making vocational training aspirational
- The NSDC engaged with the Asian Development Bank and the World Bank to make them participate in skilling India

The target of skilling 7.3 million people in fiscal 2013-14 was accepted by various Central Government ministries, and also by the NSDC. However, by the end of June 2013, only 10% of the target was achieved.
Chapter 4

Participation of Private Players

Some private organizations have been in the space for a long time. Among these, the more noteworthy are Nettur Technical Training Foundation which has 19 training centers, and trains over 10,000 students annually, and Gedee Technical Training Institute which offers Certificate and Diploma Courses in Coimbatore.

Of late, thanks to realizing the enormity of the opportunity, many new initiatives have been floated, including IL&FS Skill Development Corporation, IIJT, GRAS Academy, NITT-IFBI, Vidyanta Skill Institute, ICICI Manipal Academy, Apollo Med Skills Ltd., Centum Workskills, Hero Mindmine, CII-Edexcel, NIIT Yuva Jyoti, Future Sharp, etc. Certain international institutions are also looking to foray into India primarily through partnerships or JVs.

While the opportunity is undeniably attractive, the biggest challenge is to put together a financially viable and sustainable venture that can align business and social needs. Unlike a consumer products business, here, the raw material, production pipeline, and consumer are all scattered. Further, since each of them is an independent, thinking human, it is not easy to find them on common ground, especially when the output is as diverse as human skills.

The changes happening at the structural level, towards making business easier, have their own lifecycle, but the time has arrived to take advantage of this opportunity and get a head start. Although the dynamics in the current scenario are very different and will evolve rapidly, the expectation is that things will gradually get easier.
New entrants into this business will have to work to get the equation right, especially with respect to the following:

**Financial Concerns**

*Capital Expenditure*
As any educational setup requires huge investment, this is the biggest deterrent for most entrepreneurs with great ideas. The solution can be to either lease spare capacity from existing educational institutions, or franchise the business, thereby reducing not only the investment but also the operational micromanagement required in running one's own setup. This also facilitates rapid up-scaling, which is the key to participating in this business.

The decision also depends on whether the business is to be established closer to industrial hubs where, while economies of scale can be realized, recruiting learners can be a challenge. The alternative to this is going to the learner, through a spread-out model, in which case it would be easier to reach the masses but would be an uphill task to place them in suitable industry positions and get them to migrate.

*Operating Expenditure*
Education is known to be a negative working capital business, primarily because the student pays before the education provider incurs expenditure on training him. In this case though, a fair amount of preoperative work is required before the training cycle sets in. Also, given the low price points for such training, the default on training fee is unaffordable. Even if the training is funded or subsidized by the government in certain cases, the institute will need a robust process to maintain the funds flow.

**Operational Concerns**

*Recruitment*
Recruiting a student is among the biggest initial challenges. The first task would be to break through the mindset that work which requires manual skills is ordinary. Next, the student will need counseling on the utility of the training in terms of providing a prosperous and productive future. Even in the semi-urban regions of the country, we can see people waiting for years in the hope of getting a desk job. In such circumstances, it is essential for businesses to find a model which inspires credibility and trust in what the institute is delivering.
Connections with the Industry
In practice-oriented vocational training, the industry connect is the strongest pillar. It can help in not just saving capital expenditure in practical labs, via working out an apprenticeship/trainee arrangement with local industry participants, but can also be a good source of part-time trainers. However, this culture is not as prevalent in India, due to which entrepreneurs targeting this area will have to be prepared to establish such connections themselves.

Trainers
Trainers being central to a training business, sourcing a good trainer, deploying him/her at the required location, and creating an environment conducive to training is the third challenge. In traditional academics, it may be difficult to think of a trainer being paid more than his/her counterpart in the industry but, in this case, this may well be a reality. At the same time, the advantage in this stream of education is that it does not take years to create a trainer and part-time trainers, sourced from the industry, can also be deployed.

Capacity Utilization
Education is similar to manufacturing in the sense that unutilized capacity is a sunk cost. There are many factors which come into play while scheduling training sessions, e.g. the availability of trainers (especially part-timers), the employment of students while undergoing training, the parallel operation of multiple streams and batches, the optimum utilization of theory, practical infrastructure and jobs. With scarce resources, ensuring the highest churn is the key to operational efficiency.

Content
The content for vocational training is highly contextual in the sense that it varies in every country, industry, and trade. Therefore, unlike other streams of education, this content cannot be easily replicated from other sources. Even if the content is taken from an existing source, a significant amount of effort and money will have to be invested in making it relevant for the desired skills in an alternate scenario.

Assessment
In order to recruit trainees from institutes, every industry needs to know the relevance, and level, of the skills imparted. Institutes need to devise an independent, impartial skills assessment mechanism which accurately reflects learners’ skill levels. The absence of a fail-proof mechanism can prove unsuccessful in terms of inspiring the recruiting industry, making the business unsustainable in the long run.

Placements
Placements are the ultimate benchmarks of an institute’s success. It is debatable whether this should also be the case with institutes of higher education, wherein the focus needs to be on academic excellence and rigor. But in the case of vocational training, where the sole objective is to provide employability and a productive future, the relevance of placements cannot be emphasized enough. A robust and relevant placement mechanism, which succeeds in satisfying the recruiting industry as well as the student, will be the ultimate test of the business.

The many innovations occurring foster the building of successful vocational training business models. Increasingly, training companies are exploring ways of sourcing, training, and placing students in the industry, and thereby subsidize training costs through recruitment commissions. Also, gram panchayats and other locally influential organizations and NGOs are being tapped into by organizations to promote the acceptability of their training.

There are a few givens in the entire story, i.e. the scale of the opportunity is unparalleled, and there is space for several players operating simultaneously. The ecosystem will evolve over a period of time; efforts have begun in that direction already. Many different players are working on various models and it will be some time before a model proves itself. Given a sustainable business model, this can be a billion-dollar opportunity.
Chapter 5

Business Models

The diversity and the width in this field permit various methods of operations. Unlike other businesses, this business will have three broad revenue streams, viz.:

Business to Consumer (B2C): Industries which have high aspirational value and wherein the student is willing to invest in his/her own education e.g. grooming, hospitality, healthcare, and travel and tourism.

Business to Business (B2B): Industries which urgently need to recruit a large number of workforce personnel and wherein employers are willing to pay for training rather than wait for students to wake up to the opportunity. This is also true for industries wherein students do not have the ability to pay e.g. ITeS, retail, construction, and food processing.

Business to Government (B2G): Core industries which do not have a high aspiration value and wherein the labor force employed will certainly not have the ability to pay e.g. Power, mining, textiles, etc.

Considering the evolving ecosystem, there is a clear case for scalable, large, and multicenter models, which will offer standardized content, apart from appropriate industry- and location-driven programs. Businesses will leverage all existing support from the government scheme to reduce its capital and operating expenses.

We believe that the building blocks of the vocational training business are the mobilization of the students, the availability of capital expenditure and steady payment mechanisms, the development and delivery of high quality content, a strong and reliable assessment process, and placement.
**Student Sourcing:** Overcoming social barriers will be the key to ensuring student sourcing. Some key measures to ensure sourcing are as follows:

- Reaching out through NGOs and locally influential organizations
- Setting up Recruitment Fairs at the village/town level
- Using the contacts of Local Industry Bodies
- Working with SSCs
- Undertaking career counseling at schools and other centers
- Creating awareness through Panchayats
- Working with employers for “Hire-Train-Place” agreements

**Capital Expenditure and Payee Mechanisms:** The absence of payee mechanisms poses a serious challenge to most vocational training initiatives. Some key measures in mitigating this challenge are:

- Seeking support from ministries, including the Ministry of Rural Development and the Ministry for Minorities, for funding rural and BPL youth
- Approaching local banks and Micro-financing Institutions (MFIs)
- Obtaining industry sponsorship
- Availing governmental scheme for reimbursing INR 10,000 on successful completion of the training
- Making trainees pay a minimal fee (~10%) upfront or at a later stage in order to keep their commitment level high

**Content Development and Delivery:** These will be the biggest differentiators. The relevance of the content and the competency of the trainers in delivering the same will be translated into the quality of students provided to the industry. Organizations must make attempts to use technology extensively in order to bring in consistency and optimize the delivery cost. Large scale investment of human and financial resources needs to be made in Train-the-Trainer programs. The main attributes of the content development and delivery mechanism will be:

- Sourced from both Foreign and Indian partners
- Customized and developed for regional and local industry needs by content development companies
- Developed, validated, and upgraded in consultation with the industry
- Established as key IP for creating a scalable model
- Centralized Train-the-Trainer programs ensure consistency in training delivery across centers
• Assured technology-enabled delivery for resource and cost optimization as well as for learning effectiveness, reducing trainer skill needs, and increasing scalability
• Allied with the industry for apprenticeship and on-the-job training

Assessment and Certification: Rigor in the assessment process is key for earning industry acceptance. Some of the measures to ensure this rigor are:
• Creating a separate “Assessment Team” to ensure impartiality
• Aligning assessment with sector skill council mandates for recognition and industry acceptance
• Making performance in on-the-job training/apprenticeships a key part of assessment

Placements: Employability and placements are the litmus tests for a robust vocational training model. The model should focus on employment and entrepreneurship so that people can be productive by themselves even after training. Some key best practices are as follows:
• Creating employability-oriented courses
• Establishing industry linkages at the central and zonal levels, for mass requirements
• Involving local industry at each center to fulfill local requirements
• Centralizing placement mechanisms and information systems
• Connecting with alumni for better industry linkages as they move up the ranks

Besides these key building blocks, certain trends, which are clearly visible, need to be kept track of by every serious player. These trends include:
Services-oriented Trades will be more popular as they require limited investment in training setup, are likely to see robust demand from the industry, and can be replicated easily across various centers.

Training for Export will be a lucrative business expansion opportunity. With Western countries under severe strain due to issues relating to ageing manpower, other countries are expected to be liberal with the immigration of skilled personnel. There may be businesses set up solely to cater to this segment. Currently, people go to a host country, and get trained and employed there. The new model may allow for people to undergo training before they legally move to a foreign destination for employment. Globally valid certifications will aid such movements.

Manufacturing-oriented Trades are investment heavy, and therefore, training setups will be developed as large campuses close to manufacturing hubs.

Technopak believes there are multiple models by which this opportunity can be exploited; it simply needs smart management of resources and partnering with right agencies to achieve success. Some of these models focus on the short-term and can break-even in under a year, but only in one or two industries, and might not develop into a billion-dollar business. While there are a few business models which can achieve large-scale numbers, these require a longer gestation period. The key challenge is to develop a business model which transforms drop-outs and unskilled youth into skilled and employable individuals and creates a win–win situation for all stakeholders.
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 Services & Agriculture.

Our key services are:

**Business Strategy**: Assisting 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 a turnkey basis

**Performance Enhancement**: Operations, industry and 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 and 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 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 Services & 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.

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