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GAME CHANGER

THE GREAT UNSKILLED

Can we fix it?

Challenges

- Skill development
- Increasing productivity
- Replicating successes
- Building training models

Interview : S Ramadorai

Advisor to PM on Skill Development

Gamechangers

- Target right
- Train the trainers
- Certify
- Fund

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Foreword

The die is cast. Our analysis tells us 11-13 mn Indians will come onto the job market every year for the next 15 years. They herald untold potential for growth, or if not harnessed correctly, for disaster. The biggest challenges that face India's government and industry are generating employment and ensuring employability. This report looks at the latter: how do we convert our deluge of drop outs, matriculates, graduates and post graduates into employable individuals? '*The Great Unskilled*' elaborates on the theme of the inaugural issue of GameChanger, '*365 mn: Can India live up to its demographic dividend?*' There is no reaping this dividend without a focused national program aimed at equipping India's workforce with skills that are monetizable for industry and government. Each year, we believe 22 mn Indians will seek to equip themselves with skills that are marketable for specific roles in industry. They will seek vocational training programs that will give them these skills. We estimate the value of the vocational training opportunity at US$20 bn annually.

Contents

CHAPTER 1

Skilling India

Empowering the demographic dividend

A large labor force and an industry grappling with a dearth of labor is just one more paradox among the many ironies that define India's demographic profile. In this case, the paradox brings home the fact that millions of India's educated have no employable skills. Failure to absorb them into the workforce could have long-term negative implications on social stability. We believe vocational training is the need of the hour. We estimate the vocational training market to be US$20 bn per year. The big challenge is designing a model for this industry that benefits both of its main stakeholders: students as well as companies setting up these businesses.

Young and educated: Force for growth

India has one of the largest labor pools in the world, this is expected to increase as India's demographic dividend kicks in. As India's baby boomer generation (those born in the decades of 1980s and 1990s) becomes eligible to work, India will see a large number of people looking for employment opportunities. As we had noted in our GameChanger report '*365 mn: Can India live up to its demographic dividend?*', we expect 11-13 mn people to look for employment opportunities every year over the next 15 years. The rate of growth of population is slowing in the country: the latest census data points out that the decadal population growth in the decade ending Feb 28, 2011 (at 182 mn) is less than in the numbers added in the previous decade (at 183 mn).

India will add significantly to its labor pool and even as the median age bucket rises by FY2026E, it will still be at a relatively young 30-34 age bracket

India's demographic dividend presents an opportunity for India to enhance its growth, the dividend accrues as the country's birth rate stays high (driven by a slowly falling infant mortality) even as its death rate (both at the infant stage and for its seniors) falls dramatically. This dividend begins to peter out once people begin to have lesser children as the specter of infant mortality recedes. We note in Exhibit 1 that India will add significantly to its labor pool and even as the median age bucket rises by FY2026E, it will still be at a relatively young 30-34 age bracket.

Exhibit 1: Demographic dividend coming over the next two decades

Analysis of the population pyramid, March fiscal year-ends, 2006-26E

	2006	2026E	Difference
Median age bucket	20-24	30-34	
Working age (15-59) proportion	60.4	64.3	3.9
Not in working age	39.6	35.7	(3.9)
Young	32.1	23.4	(8.7)
Old	7.5	12.3	4.8
Dependency ratio-overall	0.66	0.56	
Young	0.53	0.36	
Old	0.12	0.19	
Population base (mn)	1,112	1,400	288
Possible working population (mn)	**672**	**900**	**228**
Dependent population	440	500	59

Source: Census of India, KIE calculations

With its large population base, India cannot afford to let this pass: a mass of unemployed youth can be a threat to social stability

A large population in the productive age-group requires significant effort in ensuring that the group is indeed productive. Preparing the economy to absorb the large mass of population coming into the workforce requires ensuring that they are skilled to meet the requirement of the sectors that will employ them. Many countries, especially in Latin America, have missed the opportunity to convert their demographic dividend into a meaningful force for economic growth. With its large population base, India cannot afford to let this pass — a mass of unemployed youth can be a threat to social stability.

Period of transitions

Various transitions are simultaneously taking place in the labor market: (1) a move away from agriculture, (2) a need for moving to organized employment from unorganized employment, (3) a more knowledge- and training-based workforce than just application of traditional skills, and (4) a gravitation to urban India for work from rural. We highlight that these transitions are typical of economic growth anywhere. Ensuring that India capitalizes on these transitions will be the key to harnessing the dividend.

1. **Transition from agriculture.** As the nature of India's economy changes, we expect to see the profile of Indian labor shift to manufacturing and services from agriculture. As we noted in our GameChanger report,' *Indian Agriculture: The Time is Ripe*', Indian agriculture, while employing 57% of its workforce, produces only 17.1% of its GDP (as of FY2009): there is a significant opportunity to transition India from its agricultural base to a more diversified industrial and services-oriented space.

   A massive shift of the labor force from agriculture needs to take place to improve productivity per person in agriculture, which is among the lowest in the world. Every other developing economy has taken the route of moving its population from agriculture to manufacturing and then onto the services sector: India has followed a unique path in that it has a services dominated economy (in value terms) in parallel with a large majority of the labor force in agriculture.

   As Exhibit 2 details, significant employment increases are expected across a range of industries including building, construction and real estate (49 mn), transportation, logistics, warehousing and packaging (41 mn) and auto and auto components (35 mn): these industries will require significant investment in skill development.

A massive shift of the labor force from agriculture needs to take place to improve productivity per person in agriculture — among the lowest in the world

Exhibit 2: Massive shift from agriculture: skill development in many industries critical

Stock of employment across sectors, March fiscal year-ends, 2008-22E (mn)

Industry/Service	2008	2022E	Increase
Auto and auto components	13	48	35
Banking, financial services and insurance	4	9	4
Building, construction and real estate	37	86	49
Chemicals and pharmaceuticals	2	4	2
Education and skill development	5	13	9
Electronics and IT hardware	1	4	3
Food processing	9	18	9
Furniture and furnishings	1	5	3
Gems and jewellery	3	8	5
IT and ITES industry	2	8	5
Leather	3	7	5
Media and entertainment	1	4	3
Organized retail	0	18	17
Textiles and spinning	13	30	17
Tourism	4	7	4
Transportation, logistics, warehousing and packaging	7	25	18
Unorganized sector	36	77	41
Others	68	170	102
Total in industry or services	**209**	**539**	**330**
Total labor force	481	654	173
Employed in industry or services (%)	43	82	39
Employed in agriculture (mn)	272	114	(158)
Employed in agriculture (%)	57	18	(39)

Source: National Skill Development Council reports, KIE estimates

The increase in productivity of the labor force when it transitions from organized to unorganized work-force can be as large as 10X

2. **Transition from unorganized to organized work-force**. As we note in Exhibit 3, only a very small (14%) proportion of India's labor is part of the organized work-force. The increase in productivity of the labor force when it transitions from unorganized to organized work-force can be as large as 10X due to better use of, among other things, capital, managerial skills and technology.

   According to Planning Commission calculations, the value added per worker in the organized pool in FY2005 was ₹313,662, which compared with ₹32,803 by a worker in the unorganized workforce. In certain industries like trade, hotel and restaurant, productivity increase can be as high as 22X: from ₹60,339 to ₹1,324,354.

   Unfortunately, in the earlier part of the decade, for which data is available (as we note in Exhibit 3), the transition had not taken place.

Exhibit 3: Indian labor force predominantly involved in agriculture, the nature of work is informal

People employed across various segments, March fiscal year-ends, 2000-05

	2000			2005		
	Informal	Formal	Total	Informal	Formal	Total
(mn)						
Agriculture	232	5	238	253	6	259
Industry	45	20	65	60	25	86
Services	66	29	94	82	31	113
Total	**343**	**54**	**397**	**395**	**63**	**457**
(%)						
Agriculture	59	1	60	55	1	57
Industry	11	5	16	13	6	19
Services	17	7	24	18	7	25
Total	**86**	**14**	**100**	**86**	**14**	**100**

Source: India Labour Market Report 2008

India is becoming a larger player in services / manufacturing - this will require a transition of the Indian labor pool from traditional skill-based activities to knowledge-based activities

3. **Transition from traditional skill to knowledge and training based occupations.** India's current labor market is not knowledge intensive – it is dominated by traditional skills like farming and manual labor (see Exhibit 4). Linked to India's growth in the services and/or manufacturing space, this transition will see the Indian labor pool evolve from these traditional skill-based activities to more knowledge-based activities.

Exhibit 4: India's labor force is primarily skill based—not really a knowledge economy

Table showing workers by occupation types, March fiscal year-end, 2005 (mn)

Type of Work	Occupation title	Workers	% share
Traditional skill	Farmers, fishermen, hunter, loggers and related workers	255	56
Traditional skill	Production workers, transport equipment operators and laborers (plastic product, paper makers, painters, bricklayers)	53	12
Traditional skill	Service workers (hotel keepers, house keepers, matrons)	37	8
Traditional skill	Production workers, transport equipment operators and laborers (miners, quarrymen, well drillers, food and beverage processors)	24	5
Traditional skill	Production workers, transport equipment operators and laborers (machinery and electrical fitters & assemblers, carpenters)	20	4
Traditional skill	Stewards (domestic and institutional)	19	4
Traditional skill	Sales workers (manufacturers, agents, technical salesmen, salesmen, shop assistants)	13	3
Knowledge+Skill	Clerical and related workers	16	3
Knowledge+Skill	Administrative, executive and managerial workers	14	3
Knowledge+Skill	Professional, technical and related workers (mathematicians, auditor, statisticians, accountants)	5	1
	Total	**456**	**100**

Source: Teamlease report citing Indicus Estimates based on NSSO 61st Round 2004-05. National Classification of Occupation (NCO) 1968 used. All individuals currently working by their principal activity.

Demographic dividend will accrue in the rural areas as currently ~66% of India's population lives in rural India

4. **Transition from rural to urban India**. The demographic dividend will accrue in the rural areas as currently ~66% of India's population lives in rural India (see Exhibit 5). More of this population will move to urban areas or the rural areas themselves will start urbanizing as manufacturing and services sector take hold in employment.

Exhibit 5: Supply of labor to come in from rural areas

Annual supply of labor over various time periods, March fiscal year-ends, FY2007-17E (mn)

	2007 - 2012E		2007 - 2017E	
State/Union Territory	Rural	Urban	Rural	Urban
Andhra Pradesh	0.5	0.2	0.4	0.1
Assam	0.2	0.1	0.2	0.0
Bihar	0.6	0.1	0.6	0.1
Gujarat	0.3	0.3	0.3	0.2
Haryana	0.2	0.1	0.2	0.1
Himachal Pradesh	0.1	0.0	0.0	0.0
Jammu & Kashmir	0.0	0.0	0.1	0.0
Karnataka	0.3	0.2	0.2	0.2
Kerala	0.1	0.0	0.1	0.0
Madhya Pradesh	0.4	0.2	0.4	0.2
Maharashtra	0.5	0.6	0.4	0.6
Orissa	0.2	0.1	0.2	0.1
Punjab	0.2	0.1	0.2	0.1
Rajasthan	0.5	0.2	0.6	0.1
Tamil Nadu	(0.1)	0.5	(0.2)	0.4
Uttar Pradesh	1.5	0.4	1.6	0.4
West Bengal	0.5	0.1	0.4	0.1
Jharkhand	0.2	0.1	0.5	0.1
Chhattisgarh	0.1	0.1	0.1	0.1
Uttarakhand	0.1	0.0	0.1	0.0
Other NE States	0.2	0.0	0.1	0.0
Other states	0.0	0.3	0.0	0.2
Total	**6.5**	**3.6**	**6.7**	**3.2**

Source: NCEUS, KIE calculations

Addressing these transitions partially is sub-optimal. The populace needs to be equipped with the right skills to capitalize on the transitions

We note that addressing these transitions partially is sub-optimal. For example, India is seeing a move out of agricultural labor (to some extent arrested by government's work-for-pay schemes) but the labor force is accumulating as informal workers in urban India. This does not increase productivity: it merely transfers the issue from one area to another.

The populace needs to be equipped with the right skills to capitalize on the transitions. When an agricultural laborer with uncertain employment prospects can move to an urban/semi-urban area for a more secure job (secured via a skill that is valued in the manufacturing or services sector), he/she contributes actively to the gain in productivity and thereby, is an active contributor to the economic growth of the country.

Employability is the new education

Education will make the new laborer desire an urban/semi-urban job with an employment contract in manufacturing or services

An element that will support these transitions is that the new Indian laborer is significantly more educated than his previous generation. Education will make the new laborer desire urban/semi-urban jobs with an employment contracts in manufacturing or services.

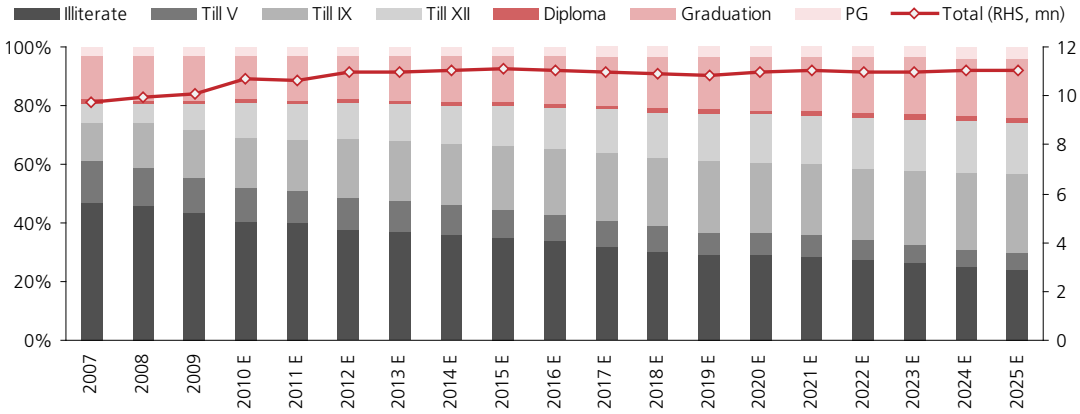
With the success of government schemes like Sarva Shiksha Abhiyaan and the mid-day meal schemes, drop-out rates in India's primary and secondary schools have fallen dramatically. This is leading to the profile of the workforce upgrading over the course of this decade and beyond (see Exhibit 6).

However, as we note in Exhibit 7, the employability of Indian graduates is very low across a variety of sectors. This has to do with the lack of soft skills (communication, English language, etc.) in the services industry and lack of technical skills in the manufacturing space.

This can be traced to variety of reasons, including (1) absenteeism by teachers in the primary schools, (2) outdated teaching methodologies and curricula, (3) lack of interface between industry demand and education supply and (4) a general aversion or reluctance to join vocational training programs (driven by a perception that diplomas do not have the same public standing that degrees do).

Exhibit 6: Education investments paying off: labor force is expected to get more educated with time

Schedule showing potential quality of work force joining each year

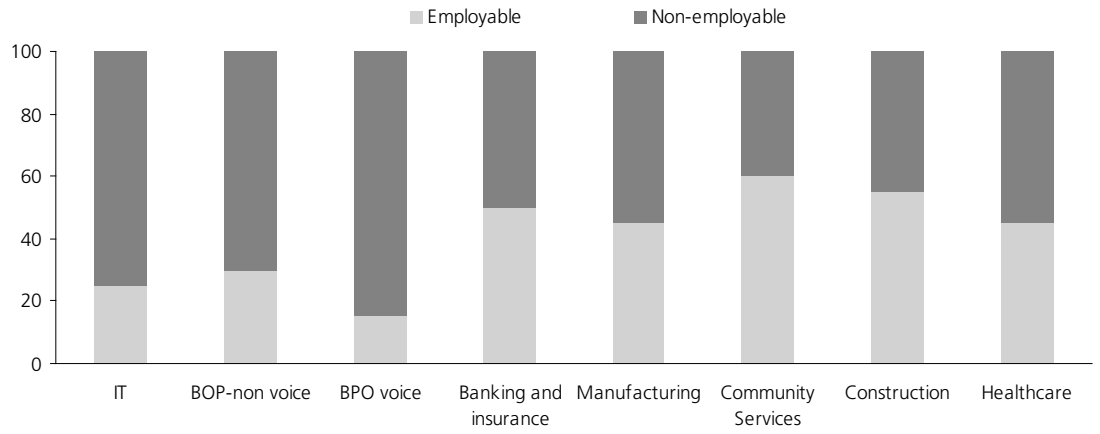


Source: Census of India, KIE calculations

With the focus now shifting from education to employability, we believe that vocational training and employability enhancement will become big opportunities for players with scale and experience. We note that many of the 'consumers' of education are natural consumers of vocational training institutes.

Exhibit 7: Significant chunks of graduates are not employable

Proportion of graduates that industry finds employable (%)



Souce: CII-BCG report on "India's Demographic Dilemma"

CHAPTER 2

VOCATIONAL TRAINING
A US$20 bn business opportunity

Our estimates suggest that vocational training in India is a US$20 bn annual opportunity with 475 mn people in need of training by FY2022E. Sectors like auto, building and construction, textile and organized retail, along with the growth in the unorganized sector, will propel the demand for skilled labor. Creating a steady supply of training is the key next step.

Large market

We estimate the vocational training market to be a US$20 bn opportunity annually. We look at the number of people who would require to be trained over the period till FY2022E (based on the estimates we present in Exhibit 2 above) and also look at the requirement of re-training some of the current work-force as they upgrade their skills.

Our estimate of the pricing of the vocational training is driven by the benchmark of pricing as it exists for the four levels of skills. The skills levels are defined by the National Skills Development Corporation (NSDC) and detailed in Exhibit 8.

Exhibit 8: Levels of skill required vary from the very basic to highly specialized

Description, example and approximate cost of various levels of skills (Rs)

Level	Description	Example	Cost
1	Can be acquired with a short/modular and focused intervention and thereby enhancing employability of those with minimal education	ITI / ITC basic trainings	5,000
2	Require technical training inputs, knowledge of complex operations and machinery, skills of supervision	Basics of accouting, data entry operator	20,000
3	Require long drawn preparation as demonstrated by acquisition of degrees, and involve highly technical or commercial operations	Certifications as finance professional	50,000
4	Highly specialized involving research and design	MBA, CA, CFA, Engineering, Doctor	400,000

Source: Kotak Institutional Equities, NSDC

Our analysis (see Exhibit 9) suggests that the vocational training business could be represented by a set of two inverted pyramids: most of the 'numbers' lie at the skill levels 1 and 2 (our estimate is 81%) while they contribute only 24% to the top-line potential of the business. The other Pareto (76% of the value residing in the 19% of the higher skill-levels: Levels 3 and 4) is what has attracted a wide variety of private players into the skill development market. With industry willing to pay high salaries for skilled or qualified workers, the increase in prices of education or vocational training at the higher end has been significant, and has seen active participation from the private sector.

The government as a large player at the lower end has vitiated the economics of the vocational training market

The government as a large player at the lower end (ITI course prices can be as low as only ₹20 per month) has also vitiated the economics of the vocational training market. With the government now opening up its purse-strings for private companies to receive grants (low-cost debt, equity funding via National Skills Development Corporation, NSDC) and zero-cost debt (₹25 mn interest free loan for each ITI) for starting training institutes at the lower end, there is now an active interest by the private sector in the training space in the low-end skill development.

Exhibit 9: Inverted pyramids of quantity and value have led to capacity-creation challenges

Dichotomy between numbers and value in skill development

	Level 1	Level 2	Level 3	Level 4	Total
New employment opportunities created (mn, between FY2008-22E)	208	59	47	16	330
Upgrading a part of the current work-force (%)	50	40	30	20	
Upgrading a part of the current work-force (mn)	67	15	8	2	92
Re-skilling a part of the current work-force (%)	30	20	10	5	
Re-skilling a part of the current work-force (mn)	40	8	3	1	51
Total skills demand (mn)	315	82	57	19	474
"Annual numbers" (mn)	21	5	4	1	32
Revenue projections					
Revenue from skilling (Rs, in 2008-terms, per person)	5,000	20,000	50,000	400,000	
Value (Rs bn)	1,575	1,645	2,867	7,540	13,628
"Annual revenue" (Rs bn)	105	110	191	503	909
"Annual revenue" (US$ bn)	2	2	4	11	20
Inverted pyramids					
Proportion of people (%)	63	18	14	5	100
Proportion of value (%)	12	12	21	55	100

Source: NSDC, Kotak Institutional Equities estimate

The vocational training business could be represented by a set of two inverted pyramids

Vocational training versus general education

In India, there is a significant demand for 'general' education as opposed to 'vocational training', with the latter not being treated at par with the former. The current school curriculum is either outdated or does not bring in elements of vocational training. Globally, as we explore subsequently, vocational training tracks are molded into the general education track, or alternatively, link back into the university system. 'Degrees' as awarded by universities as opposed to 'diplomas' awarded by the vocational training institutes are preferred in India: this is leading to more graduates than needed by the economy, as we note in Exhibit 10.

In India, there is a significant demand for 'general' education as opposed to 'vocational training', with the latter not being treated at par with the former

Exhibit 10: Vocational training required for the middle educated

Table showing equilibrium across various educated categories, March fiscal year-end FY2012E (mn)

	Demand	Supply	Surplus / (Defecit)
Illiterate	2.4	4.2	1.7
Till V	1.7	1.2	(0.6)
Till IX	4.0	2.2	(1.8)
Till XII	0.9	1.5	0.6
Grad. and above	0.9	2.0	1.1
Total	**9.9**	**11.0**	**1.1**

Source: Demographic dividend or deficit: insights from data on Indian labour, Int. J. Education Economics and Development, Vol. 1, No. 2, 2009

Significant job creation totake place across various industries, with building, construction and real estate, transportation, logistics, warehousing and packaging and auto components

India requires that more of its students get into vocational training: the target segment needs to be people who (1) are going ahead to do their higher schooling or graduation (Class XII or graduation and above) without a clear employability plan in place and (2) those that can be trained in vocational training at the primary or secondary level (Class V or IX) while still at school. We also note that this is consistent with the requirement of lower skill level employees as will be required by the industry.

Demand for training

We look at the opportunities in skill development and divide them into various levels with the easiest skill level being called "Level 1" rising progressively to "Level 4", based on the classification used by NSDC. As we note in Exhibit 11, a large pool of skill development opportunities lies at the bottom of the pyramid.

We highlight that NSDC expects significant job creation to take place across various industries, with building, construction and real estate (48.7 mn), transportation, logistics, warehousing and packaging (41.1 mn) and auto and auto components (35 mn) leading the pack, apart from a large requirement in the unorganized sector (102 mn).

Exhibit 11: 80% of the skill development market is at a basic level

Proportion and number of skilled workforce requirement between FY2008-22E

	Proportion (%)				Numbers (mn)				
Industry/Service	Level 1	Level 2	Level 3	Level 4	Level 1	Level 2	Level 3	Level 4	Total
Auto and auto components	50	25	20	5	17.5	8.8	7.0	1.8	35.0
Banking, financial services and insurance	20	40	30	10	0.9	1.7	1.3	0.4	4.3
Building, construction and real estate	81	15	4	2	39.2	7.1	1.7	0.7	48.7
Chemicals and pharmaceuticals	23	28	45	6	0.4	0.5	0.8	0.1	1.9
Education and skill development	20	30	45	5	1.7	2.6	3.9	0.4	8.7
Electronics and IT hardware	20	26	50	5	0.6	0.8	1.6	0.1	3.2
Food processing	81	10	9	2	7.5	0.9	0.8	0.1	9.3
Furniture and furnishings	80	12	7	1	2.7	0.4	0.2	0.0	3.4
Gems and jewellery	75	5	19	2	3.4	0.2	0.9	0.1	4.6
IT and ITES industry	—	50	40	10	—	2.7	2.1	0.5	5.3
Leather	89	4	6	1	4.1	0.2	0.3	0.0	4.6
Media and entertainment	20	30	45	5	0.6	0.9	1.3	0.1	3.0
Organized retail	52	13	32	5	8.9	2.2	5.5	0.8	17.3
Others (including healthcare)	60	20	15	5	10.1	3.4	2.5	0.8	16.8
Textiles and spinning	86	11	3	1	3.1	0.4	0.1	0.0	3.6
Tourism	40	30	20	10	7.1	5.3	3.5	1.8	17.7
Transportation, logistics, warehousing and packaging	20	40	25	15	8.2	16.4	10.3	6.2	41.1
Unorganized sector	90	5	3	2	91.8	5.1	3.1	2.0	102.0
Total/average	**63**	**18**	**14**	**5**	**207.9**	**59.5**	**46.9**	**16.2**	**330.5**
"Annual numbers"					13.9	4.0	3.1	1.1	22.0

Source: NSDC

Supply of training

The current capacity to train or provide vocational skill is around 4.3 mn per year (see Exhibit 12), which is a small fraction of the overall need of 22 mn of fresh trainings per year. The big issue that these institutes face is the lack of trainers – this is driven both by the low salary paid to trainers as also the general unavailability of trainers, with training not attracting the talent that gets absorbed into the industry.

Skill development, especially at the lower end, has traditionally been the preserve of the government and it is only now that the private sector is getting interested in the space

Exhibit 12: Training and skill development initiatives are highly fragmented across government bodies

Annual training capacities of various ministries, March fiscal year-end, 2010 (mn)

	Capacity
Ministry of human resources development	1.8
Ministry of labour	1.3
Ministry of women and child development	0.2
Ministry of agriculture	0.2
Ministry of rural development	0.2
Ministry of small and medium enterprises	0.2
Other 11 ministries	0.3
Private players	0.1
Total	4.3
Demand	22.0
Gap	17.7

Source: NSDC

Skill development, especially at the lower end, has traditionally been the preserve of the government and it is only now that the private sector is getting interested in the space. According to the '*Report to the People on Employment*' by Ministry of Labour and Employment, a total of 8,039 ITIs and ITCs have been affiliated with the National Council of Vocational Training (NCVT) [2,133 Government Industrial Training Institutes (ITIs) with a capacity of 432,000 and 5,906 (private) Industrial Training Centers (ITCs) with seating capacity of 684,000] with a total seating capacity to 1.1 mn as on March 31, 2010.

There are no courses on offer for illiterates or those who have not completed their Class VII

We note that the even in the programs run by the government ministries, there is a focus on training those who have been to school or have completed primary or secondary education. These courses, which range from short term (running for 1-4 weeks) to as long as two years, in many cases, require a basic education certificate. As we note in Exhibit 13, of the 116 courses that an ITI / ITC can offer, only 20 are open to people who have studied till Class VII: the rest require having studied at least till Class X. There are no courses on offer for illiterates or those who have not completed their Class VII.

Exhibit 13: ITIs also focus on the students who have educational qualifications

Breakup of courses according to educational qualifications at ITIs

	Engineering	Non-engineering	Total
Class VIII	12	8	20
Class X	44	27	71
Class XII	6	19	25
Total	**62**	**54**	**116**

Source: Directorate General of Employment and Training

Given that the need is to train people in Level 1 and Level 2 skills, the disconnect between the supply pool of candidates and the training institutes is surprising. A look at the various private sector players in the space indicates that the focus is on the soft skill development (English language, personality traits, etc.) to cater to a variety of service industries, IT (hardware, basic and advanced software, animation), accounting and retail.

Educated, still unemployed

Cordelia Jenkins; Wed, Apr 14 2010; Livemint

These students in Meerut are not so young anymore, stuck as they are in limbo, where even a PhD doesn't guarantee a government job

Manoj Jatav possesses a rare distinction in the village of Murlipur, a crowded hamlet some 15km outside Meerut in Uttar Pradesh: he is the first scheduled caste member in the village's history to get a doctorate in philosophy (PhD).

But all his education hasn't helped him attain his ultimate goal: a government job as a lecturer.

Jatav is one of hundreds of unemployed graduates in Meerut, qualified on paper but unable to find work in the elusive but sought-after government sector, which offers unparalleled job security and benefits, and remains the desired career for graduates in small-town India. Many are from poor farming families for whom higher education was once a pipe dream. Most, like Jatav, are first-generation students, encouraged by their parents to reach for a piece of the New India that has opened up in the last few decades to the underprivileged, especially those from the scheduled castes or other backward classes, thanks to programmes that reserve seats for such people in colleges.

Still, education doesn't always mean jobs. In some cases this is because the graduates (or postgraduates or PhDs) are simply unemployable, a reflection of the quality of education in some schools and colleges. Manish Sabharwal, chairman of Teamlease Services Pvt. Ltd, perceives a divide between what he terms "learning for earning" and "learning for living" in the mindset of some of India's educational institutions.

"There should not really be a contradiction between the two," he says, acknowledging that many graduates are simply without the vocational skills they need in the workplace.

In Uttar Pradesh, which has has a literacy rate of 56.3%, as measured in the 2001 census, much lower than the national average of 64.8%, however, the issue seems to be rather more complex—and poignant.

According to Craig Jeffrey, a lecturer and fellow at St John's College, Oxford University, "The sheer scale of the problem of youth unemployment is staggering. There are regularly more than 10,000 applicants for a single government post in Meerut."

Jeffrey perceives a "perfect storm of socio-

economic trends" that has resulted in the current situation in Meerut.

And so, in the two years since he got his PhD, Jatav has supported himself through several temporary assignments offered to him by friends, a bit of guest lecturing in private institutions, some tutoring and research work; none of this is enough to make him self-sufficient. "I'm dependent on my family," he says. "I'm searching, but there's no job."

Educated unemployed

Jeffrey's "perfect storm" of factors includes a spike in Uttar Pradesh's youth population in the 2000s (according to the 2001 census, there were nearly 50% more young men in the 15-29 age group than in the 30-44 age group). This surge, Jeffrey states, combined with a decline in the standard of the state's secondary and higher education and a reduction in the number of new jobs created by the state government, has caused "a vast gulf to open up in the state between a tiny upper stratum of higher educational institutions offering internationally acclaimed qualifications and the mass of poorly funded government and private institutions, for the majority of the population".

In Meerut, the result is widespread graduate unemployment.

On the campus of Chaudhary Charan Singh University (CCSU) in Meerut, a group of graduates in their 20s and 30s are gathered in the shade of a local Hindu temple to bemoan their lack of job prospects. "We have no option but to return to farming," says Snehveer Pundir, the son of a farming family, who has been studying at the university for 10 years. Pundir has three degrees and completed his PhD in 2007. Unable to secure a coveted government job, he is dependent on his family and travels home during harvest or sowing season to work on the farm.

Ashok Panwar, 30, is working for his fifth degree at CCSU, a PhD in political science. His farming family supports him and considers the forthcoming PhD a necessity for future employment. His double master's degree (in education and political science) is the result of a premeditated strategy to increase his chances of employment. "If I can't get into one line then I can choose the other," he explains.

Neither Pundir nor Panwar seem keen on private sector jobs. Manoj Chokker, with three degrees, finally settled for one, having applied fruitlessly for 20-30 government jobs. He is now a lecturer at a private college in Budhana, north of Meerut.

According to Pankul Sharma, a journalist with Amar Ujala, who has studied the issue of graduate unemployment in Meerut, it isn't that there aren't enough jobs. It's just that the quality of education in Meerut is poor. "To say that the number of jobs is decreasing here is not true," says Sharma. "There are huge numbers in the private sector but there is a lack of qualified graduates here. We are getting the degrees, but not the competence that should come with them... The syllabus is 30, 40, even 50 years old. These PhDs and MPhils (master's in philosophy) can't compete in the fight against graduates from Delhi University."

Sharma points to systemic failure in university management and claims that corruption and complacency have allowed standards to fall, producing unemployable graduates. "The parents expect that their children will get jobs," said Sharma. "When you're living in a small town you think that when you get admission to university everything will be fine."

University spokesperson S.C. Pitlani denies that Meerut's graduates are at a disadvantage as a result of teaching methods and claimed the students learn in a mix of English and Hindi. Many enrol with little or no knowledge of English and thus require tuition in Hindi, he says. Pitlani also says the syllabus is changed every three or four years and that from 2010-11 the university will abandon the current annual term and switch to a more modern semester system.

Unintended fallouts

A side effect of the lengthy, and often futile, search for jobs is that it leaves a lot of young men in Meerut with a lot of time on their hands. For many, the alternative to returning home is to eke out a living in the university hostels, relying on family members for money and registering for yet another degree.

"What else are they going to do?" asks Jeffrey. "It's shameful going back to the village without a job. It's not that expensive to stay in education."

Jeffrey has built a thesis around the phenomenon of extended studying in Meerut. He suggests that there are several parties with vested interests in the concept of multiple degrees, from hopeful parents to private entrepreneurs who offer tutorial services and promise that final qualification to help you clinch your ideal job. "It's 'one more degree, one more degree, and you'll get your job'," he says.

It's hard to miss the numerous billboards advertising private tutorials and coaching and, according to Jeffrey and the students, this kind of incentive-based "help" exists within the university framework too, with ex-students setting themselves up as "fixers", offering to guarantee admissions, good exam results and lucrative business contracts to those who can afford it.

Student malaise and discontent in Meerut has also sparked renewed interest in university politics. Digvijay Bhatti is a member of a group that calls itself the Student Struggle Committee and which organized a five-day hunger strike in January in protest against a proposed fee hike by the vice-chancellor. Bhatti has a bachelor's in arts, a master's in business administration and an MPhil in public administration, but he wants to be a politician. Bhatti speaks animatedly as he flips through a fat clippings book of photocopied newspaper articles covering various student protests. In each picture, he has circled his own face with a yellow highlighter pen.

Bhatti, who says he is 24, is also from a farming family and dependent on his parents. His elder brother has a government job as a lecturer in a degree college. His parents nag him, Bhatti admitted, comparing him to his brother. "I'm not married yet; if you don't do anything for a living then how can you get married?" The men listening nod and laugh their agreement. Leaning on each other's shoulders, they might be a group of teenagers, if not for the wrinkles and streaks of grey about their ears.

Jeffrey's forthcoming book, Timepass: Youth, Class and the Politics of Waiting in India, to be published in November by Stanford University Press, is a study of the state of limbo in which the young men of Meerut find themselves; adrift in a kind of no-man's land between student life and employment. "A lot of the students in this situation are just waiting," Jeffrey says, "waiting for something to change."

"The word (timepass) should have a positive connotation," explains Jeffrey, "but for these men it has a melancholy, sad feeling. They feel that they are being left behind; for them, life has just become a timepass."

In Murlipur, Manoj Jatav, his wife Manju, now studying for a master's degree in Sanskrit, and his brother Deepak Singh, the second PhD in the village, sit in the sparsely furnished reception room of their brick house, discussing the advantages of an education. Deepak, a grave young man, wears a perpetual frown.

"There's a lot of depression," he says, furrowing his brow still deeper. But, "I am optimistic", he says, reasoning that he is the only one of his caste in 15 villages to have a PhD in commerce.

"I think there's a full chance of getting a government job as a lecturer."

CHAPTER 3

INCREASING PRODUCTIVITY IS A MUST

Wages running ahead of productivity

India is replacing labor with capital as its preferred factor of production. With India's baby boomer generation (those born in the 1980s and 1990s, decades of highest population growth) coming into the work-force over this decade and next, India needs a big push towards expanding its manufacturing base – preferably in north and east India.

The wage, mechanization and productivity imperative

The productivity of India's labor force has been rising (see Exhibit 14), though India has neither seen the consistent rise in labor productivity as China has nor has it been able to close its gap in its labor productivity growth rate with China.

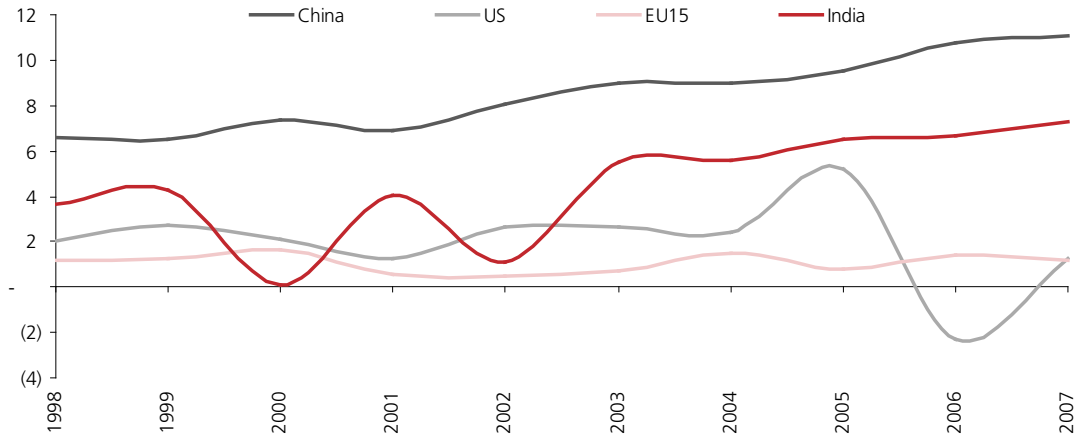
According to the FY2011 Annual Report of the Ministry of Labor and Employment in India, the average productivity of the Indian laborer is low when compared with its foreign counterparts: India's labor productivity (Gross Domestic Product at Purchasing Power Parity per person employed per hour) is US$3.77, as compared to China's US$5.51 and US' US$53.25 in FY2009.

The productivity of India's labor force has been rising, though India has neither seen the consistent rise in labor productivity as China nor has it been able to close its labor productivity growth rate with China

As an issue of the World Employment Report by the International Labor Organization points out, "there is a wide variation in labor productivity among different countries in the world owing to a host of factors, most of which are directly and positively related to the level of economic development of the countries concerned. It is important to underscore the fact that differences in labor productivity levels have essentially nothing to do with differences in how hard workers work – on the contrary they indicate differences in working conditions. A poor worker in a developing country can work long hours, strenuously, under bad physical conditions, but yet have low labor productivity and therefore receive a low income because he or she lacks access of technology, education or the factors needed to raise productivity. Similarly a worker in highly developed economy may have high labor productivity despite working relatively fewer hours."

Exhibit 14: India's labor productivity is increasing - though still eclipsed by China

Trend in labor productivity growth across countries, calendar year-ends, 1998-2007



Source: Ministry of Labor and Employment

On the other hand, wages are increasing fast accross India (as we note in Exhibit 15): we note that the rise in productivity is not as much as the wages. The rise in wages is anecdoctally blamed on the lack of availablity of both general and skilled labor.

Wages are increasing fast accross India: we note that the rise in productivity is not as much as the wages

Exhibit 15: Wages in India rising rapidly - increasing productivity is a must

Cost of labour, March fiscal year-ends, 2007-09 (men, annual average, Rs/day)

	2009	% increase	2008	% increase	2007
Well-digging	116	9	107	31	82
Ploughing	103	13	91	25	73
Sowing	90	14	79	22	65
Harvesting	87	16	75	9	69
Transplanting	83	13	74	8	68
Winnowing	81	14	71	7	66
Weeding	80	14	70	8	65
Average wage increase	**92**	**13**	**81**	**16**	**70**

Source: Wage rates in rural India, Labour Bureau, various issues; Industry estimates, KIE analysis

We note that salaries at the skilled level are rising at a rate slower than those of the un-skilled workers. The Hewitt Associates Indian Salary Study for 2010 showed that salaries at companies rose by 10% in CY2010, up from 6.6% in CY2009. Putting this in the context of the 13% rise in the wages in rural India in FY2009, this corroborates the anecdotal fact that at the lower end, the labor market is becoming tighter.

India is seeking to alter the terms of trade for its informal or low-skill labor similar to what it has done for its agriculture

Impact of government intervention

Increasing non-availability of low-skill labor (at the low prices as earlier) is attributed by many experts and by industry on social security schemes like Mahatma Gandhi National Rural Employment Guarantee Scheme (MG-NREGS). Concern is also expressed that if the Right to Food Bill were to be passed and implemented, it can also lead to a further tightening in the low-end labor market.

India is seeking to alter the terms of trade for its informal or low-skill labor similar to what it has done for its agriculture. The increase in the Minimum Support Prices (MSPs) in the case of agriculture is replicated in the increase in the minimum wages for unskilled labor: just as the government acts as the buyer with the floor price in agriculture (by procuring via the Food Corporation of India, FCI), in the labor market, the government acts as a buyer via the MG-NREGS.

The outcome is also similar: similar to the granaries overflowing due to increased procurement by FCI (as concomitant warehousing space has not been created), the MG-NREGS scheme also is attracting an increasing number of workers.

Capital replaces labor – increasing the emphasis on skilling

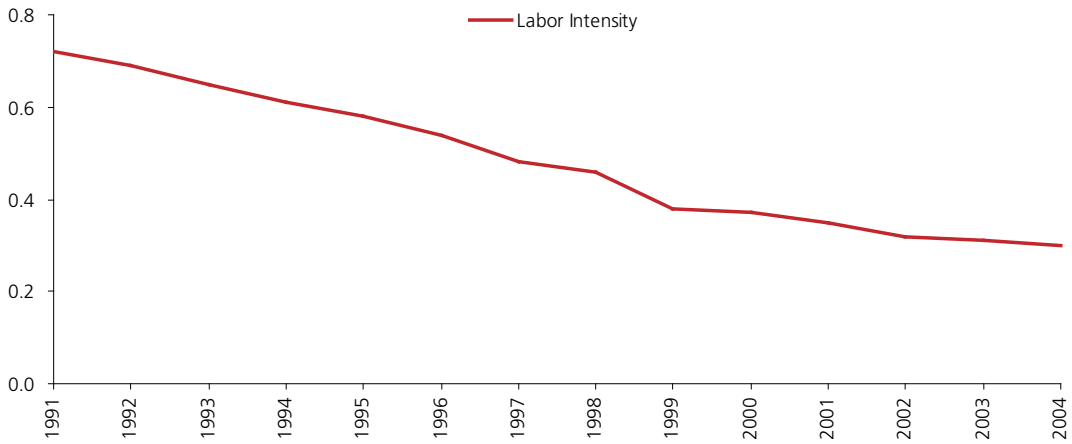
Implementing increased wages at the lower end has prompted agriculture and manufacturing industry to get more capital intensive (see Exhibit 16). The labor intensity in production has been falling led by increasing use of capital in the production process which means that the quality of labor required to operate the equipment needs to be superior than it was when the process was more manual or labor intensive. We believe that the increasing cost of labor will hasten the process of deploying more capital to make the work of labor more productive to justify the higher wage.

Labor intensity in production has been falling led by increasing use of capital in the production process i.e. the quality of labor required to operate the equipment needs to be superior

Unless there is significant employment potential development in the north and east of India, we expect to see significant migration within India

Exhibit 16: Manufacturing has moved to less labor intensive production

Declining labor intensity of manufacturing in India, March fiscal year-ends, 1991-2004



Source: The Employment Potential of Labor Intensive Industries in India's Organized Manufacturing, ICRIER Working Paper # 236, June 2009

India's priority: employing the Gangetic youth

The northern states of Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, along with West Bengal, will add 50.3% of the 239 mn people to India's population from 2009 to 2026E (see Exhibit 17). We note that their contribution to the total population in 2009 was 44.1% and hence they are expected to continue to grow disproportionately to national population growth. These states have traditionally been known to score low in human development indicators.

We also note that the southern and western India is experiencing a demographic dividend currently. Over the next two decades, their 'old' dependency ratios are going to rise in these states. Unless there is significant employment potential development in the north and east of India, we expect to see significant migration within the country.

Exhibit 17: Population growth to be skewed towards north Indian states

Growth in population across states and their contribution, March fiscal year-ends

	2009	2026E	2009	2026E	CAGR	Gain	Contribution
State	(mn)	(mn)	(%)	(%)	(% pa)	(mn)	(%)
Uttar Pradesh	194	249	16.7	17.8	1.5	55	23.0
Maharashtra	110	133	9.4	9.5	1.2	24	9.9
Bihar	95	114	8.2	8.1	1.1	19	7.9
Madhya Pradesh	70	88	6.0	6.3	1.3	18	7.5
Rajasthan	66	82	5.7	5.8	1.3	16	6.6
West Bengal	88	101	7.6	7.2	0.8	13	5.3
Gujarat	57	69	4.9	4.9	1.1	12	4.9
Andhra Pradesh	83	94	7.2	6.7	0.7	11	4.6
Delhi	17	28	1.5	2.0	2.8	11	4.4
Karnataka	58	67	5.0	4.8	0.8	9	3.7
Jharkhand	31	37	2.6	2.7	1.2	7	2.8
Haryana	25	31	2.1	2.2	1.4	6	2.7
Assam	30	36	2.6	2.5	1.0	6	2.4
Orissa	40	45	3.4	3.2	0.7	5	2.2
Tamil Nadu	67	72	5.7	5.1	0.5	5	2.2
Chhattisgarh	24	29	2.0	2.0	1.1	5	2.1
Punjab	27	31	2.3	2.2	0.9	4	1.8
Kerala	34	37	2.9	2.7	0.5	3	1.3
Uttaranchal	10	12	0.8	0.8	1.2	2	0.9
Jammu & Kashmir	11	13	1.0	1.0	1.0	2	0.8
Others	25	32	2.2	2.3	1.4	7	2.9
Total	**1,161**	**1,400**	**0.1**	**0.1**	**1.1**	**239**	**100.0**

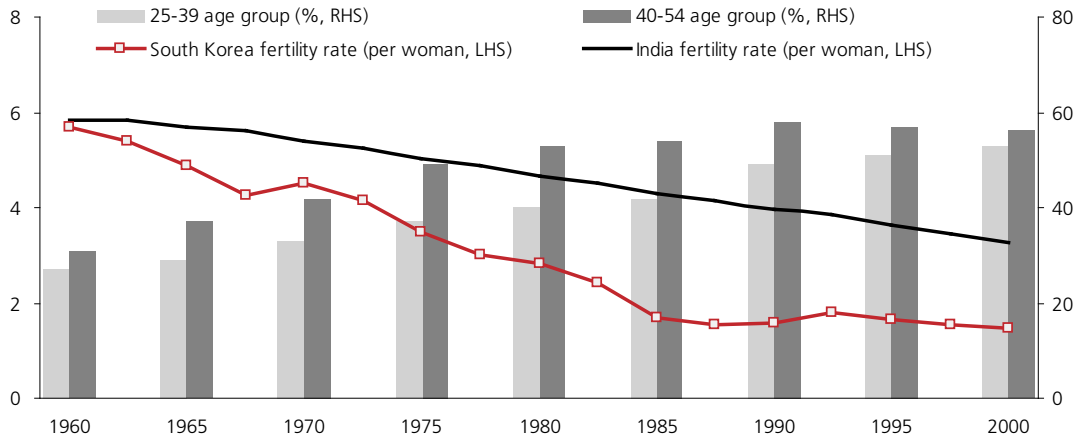
Source: Census of India, KIE calculations

As fertility rates fall, more women are expected to enter the workforce, see South Korea's experience of this trend in Exhibit 18.

As fertility rates fall, more women are expected to enter the workforce, see South Korea's experience of this trend

Exhibit 18: As fertility rates fall, female labor force participation rises

Participation rates in South Korea and fertility rates of women in the respective countries



Source: Fertility, Female Labor Force Participation, And The Demographic Dividend, National Bureau Of Economic Research, Working Paper 13583, November 2007.

India's success in reaping its demographic dividend will hinge on the country's ability to employ those coming onto the job market from the northern and eastern states

We believe India's success in reaping its demographic dividend will hinge on the country's ability to employ (1) those coming onto the job market from the northern and eastern states (preferably employed within rural India – or over time, urbanizing rural settlements) and (2) a larger proportion of women. A key element in creating employability for large numbers is training them in various manufacturing and services sector roles. We believe this can be achieved by increasing the share of manufacturing and services in these states (see Exhibit 19). India needs to actively work towards transforming the agrarian economy of the Gangetic plain into a manufacturing hub – this will create self sufficiency in these regions and trigger the next leg of growth.

Exhibit 19: The north and eastern states need to improve the ratio of manufacturing, services

Proportion of various components of state GDP, March fiscal year-end, 2010 (%)

	Northern and eastern states			Southern and western states		
	Bihar	Uttar Pradesh	West Bengal	Gujarat	Maharashtra	Tamil Nadu
Agriculture and allied	24	28	23	16	10	11
Industry	15	25	19	39	31	28
Services	61	47	58	45	59	61
Total	**100**	**100**	**100**	**100**	**100**	**100**
State GDP (Rs tn)	1.7	5.2	4.0	4.3	9.0	4.6

Source: CEIC

CHAPTER 4

VOCATIONAL TRAINING SYSTEMS
An international perspective

Countries around the world have devised various ways to give their youth vocational training. Typically, this requires that the employers contribute their inputs on the type of talent required, which are then incorporated either as part of the schooling curricula or as part of training institutes, which can loop back into the university system for formal completion of education. The government acts as the facilitator in the interactions and also serves as the accreditation body.

Link back to the school

The important elements of successful vocational education programs include active engagement by the employers and a system designed to effectively deliver the training to students. The focus has to be on the outputs (whether the students are fit for the job post their training) rather than on the inputs provided by the training institutes.

We look at the various models of providing vocational education across the globe. Switzerland has strong industry linkages and more than 90% of its students enroll into vocational training programs. New Zealand has focused on developing 18,000 competency-based standards to assess the skills of graduates. China, on the other hand, has seen dramatic improvement in the enrollment of its vocational and training programs driven by rising demand from the students even as the government has taken over the responsibility of training from the state-owned enterprises that used to run them.

A successful vocational education program includes active engagement by the employers and a system designed to effectively deliver training to students

Switzerland – ensuring students get many options

Vocational education and training (VET) programs consist of part-time studies at a VET school (typically 40% of student's time spent here) combined with a part-time apprenticeship at a host company (with the remaining 60% being spent here). There are VET programs based on a full-time curriculum (i.e. no apprenticeship), though they are not very popular (only 16% of the students take this up). Vocational education and training is part of the education system and takes place at upper-secondary level based on clearly defined curricula and national qualification procedures. Typically, it is very flexible: students may pursue vocational opportunities and change course in their professional life with relative ease. VET programs closely match the needs of the labor market, both in terms of professional qualifications and the number of available jobs. Exhibit 20 shows the choice of subjects taken by VET students in CY2009. We note that of the 88,200 students in the final year of lower-secondary, 82,000 (or 93%) enrolled for the VET program. The VET program expects a graduation rate of 90%.

Vocational education and training (VET) programs consist of part-time studies at a VET school combined with a part-time apprenticeship at a host company

Tertiary-level professional education and training (PET) is the next step after vocational education and training (VET). PET programs provide students with specific qualifications and prepare them for managerial and specialized positions. There are around 400 PET programs leading to national PET examinations and 400 PET programs leading to PET college degrees. The Federal Vocational Baccalaureate provides direct access to Swiss universities of applied sciences (UAS). Continuing education and training (CET) opportunities are also available at all levels. VET/PET is a partnership, a joint mission pursued by the Confederation, the cantons and professional organizations.

Exhibit 20: 60% of Swiss students choose the top 20 vocations, 84% prefer dual-track programs

Choice of subjects by students, calendar year-end, 2009

	Occupation	(#)	(%)
1	Commercial employee	10,890	13
2	Retail employee	5,850	7
3	Commercial employee, FVB	4,120	5
4	Health care worker	2,960	4
5	Social care worker	2,280	3
6	Cook	2,150	3
7	Electrician	2,110	3
8	Mechanical engineer	1,870	2
9	IT worker	1,730	2
10	Hairdresser	1,550	2
11	Automobile mechanic	1,470	2
12	Retail assistant	1,470	2
13	Joiner	1,430	2
14	Gardener	1,420	2
15	Logistician	1,330	2
16	Brick layer	1,220	1
17	Farmer	1,080	1
18	Carpenter	1,030	1
19	Painter	1,010	1
20	Draughtsman	970	1
Others	Other 210 vocations	34,060	42
	Total	**82,000**	**100**
	of which,		
	Enrolled in dual track VET	68,500	84
	Enrolled in school based VET	13,500	16

Source: Federal Office for Professional Education and Technology (OPET), Kotak Institutional Equities

Tertiary-level professional education and training (PET) is the next step after vocational education and training (VET). PET programs provide students with specific qualifications and prepare them for managerial and specialized positions. There are around 400 PET programs leading to national PET examinations and 400 PET programs leading to PET college degrees. The Federal Vocational Baccalaureate provides direct access to Swiss universities of applied sciences (UAS). Continuing education and training (CET) opportunities are also available at all levels. VET/PET is a partnership, a joint mission pursued by the Confederation, the cantons and professional organizations.

New Zealand – quality assurance of providers

Quality control in accreditation also requires a control over the processes that go into creating the output. As McKinsey and Company note in their report to FICCI, "Learning to Earn: Transforming India's skill development landscape", countries like New Zealand have created the New Zealand Quality Control Association (NZQA) which uses a quality assurance framework that assesses both the providers' quality and the trainees' competencies. NZQA has developed "Standard One" criteria as a comprehensive framework of provider quality, which assesses the educational mission, inputs, processes, assessments and outputs. As part of this, NZQA (along with industry associations) has developed 18,000 competency-based standards to assess the skills of graduates (e.g., student can "draw and explain simple electric diagrams").

New Zealand Quality Control Association uses a quality assurance framework that assesses both the providers' quality and the trainees' competencies

China – rising wages propelling need for skill education

In this section, we draw heavily on a January 2009 document titled 'A Policy Note on Skills Development for Guangdong Province, China,' authored by Arvil V. Adams, labor economist and former Senior Advisor for Social Protection, the World Bank. We take the example of Guangdong to be representative of the skill development situation in China.

China is close to achieving universal compulsory education of 9 years, although issues of quality remain. More attention is being given to post-basic education covering secondary and higher education. Students are given choices when pursuing a secondary education. Students completing 9 years of basic education have to make the decision whether to enter the workforce or continue onward to secondary education.

For many youths in rural areas, rather than continue their education, the decision is made to migrate to urban areas for employment. As an option for further education, secondary education is split into general, vocational, and technical schools with the first two under the direction of the Department of Education and the third under the Department of Labor and Social Security. Many secondary technical schools, known as skilled worker schools, were formerly administered by other economic Departments before their transfer to the Department of Labor and Social Security. State-owned enterprises played an important role in running these schools, but in the interest of focusing on their core business, reforms have led to their divestiture of this responsibility. Consolidation has reduced the number of technical schools from 717 in CY1995 to 202 in CY2006 with average enrolments per school increasing.

Enrolments in vocational and technical schools are now expanding at a faster pace than enrolments in general secondary education

Reflecting the demand for skills, enrolments in vocational and technical schools are now expanding at a faster pace than enrolments in general secondary education. From CY2000 to CY2006, vocational and technical enrolments grew by 55% and 158%, respectively, while the increase in general secondary education trailed at 35%. Strong jobs growth has underpinned the demand for vocational and technical education and plans for its expansion. Overall, enrolment in vocational and technical schools is 15.7% (compared to 93% in Switzerland) of secondary enrolment with vocational school enrolments outnumbering those in technical education 2 to 1.

Courses in vocational and technical schools are expected to balance theory and practice in roughly a 60:40 ratio with the ratio for practice rising as the student progresses in the program. In key schools, only 30 to 40 percent of teachers have industrial experience for guiding practice and in other schools the percentage is lower. The problem is compounded by inadequate facilities and outdated equipment even in key schools. Curricula are also dated and obsolete in the face of new technologies. Management of schools in a market economy is also found to require strengthening and updating. When combined, quality and relevance are important issues affecting vocational and technical secondary schools.

Sector skills councils – these will be industry bodies that will help codify the types of skills required for new joinees

India – starting to take small steps

Sector skills councils. India is in the process of setting up sector skills councils – these will be industry bodies that will help codify the types of skills required for new joinees. The objective will be to ensure that the industry gets to mould the type of talent it needs. Setting up these councils will require significant inter-firm co-ordination – industry associations are participating in making this happen.

Participation of employers. Many ITIs now work in collaboration with corporate clients who provide machinery and equipment to the ITIs with the understanding that the students trained on these machines will be available to the companies. Similarly, many are now providing access to their shop-floors so that students can see the application of their learning first-hand. In many cases, many engineering colleges are doubling up as places where ITIs are run – the ITIs employ some of the college teaching resources as well as equipment and other infrastructure. As noted earlier, the government is also providing grants and low-cost loans for upgradation of ITIs. Many industry partiipants have taken upon themselves to 'adopt' ITIs across the country (see Exhibit 21).

Exhibit 21: CII members have 'adopted' ITIs across the country

ITIs adopted by CII members, March fiscal year-ends, 2008-09 (number)

	2008	2009	Total
Maharashtra	18	19	37
Karnataka	11	14	25
Rajasthan	15	8	23
Tamil Nadu	12	11	23
Andhra Pradesh	13	4	17
Haryana	8	7	15
Punjab	10	3	13
Uttar Pradesh	11	2	13
Gujarat	8	4	12
Tripura/North east	1	10	11
Kerela	5	5	10
West Bengal	3	6	9
Himachal Pradesh	8	0	8
Chhastisgarh	3	5	8
Uttarakhand	2	5	7
Jammu and Kashmir	6	0	6
Madhya Pradesh	4	0	4
Bihar	4	0	4
Jharkhand	2	0	2
Delhi	0	1	1
Orissa	1	0	1
Total	**145**	**104**	**249**

Source: Confederation of Indian Industry

Cost of delivery: We note that the costs of providing training vary widely – for example, the cost of providing training in ITIs across the country varies from ₹11,790 to ₹47,662 per student, with an average cost being ₹20,770 in FY2004 (see Exhibit 22). A lot of this disparity is explained by the low occupancies and utilizations: better utilization can lead to decrease in costs.

Exhibit 22: Cost per student is high in ITIs

Cost of training a student at an ITI, March fiscal year-end, 2004

	Institutions	Students	Total cost	Unit costs
	(#)	(#)	(Rs mn)	(Rs/student)
Andhra Pradesh	83	19,683	310	15,751
Arunachal Pradesh	3	298	12	40,503
Assam	24	2,432	92	37,911
Bihar	28	2,057	98	47,662
Chandigarh	1	473	15	30,803
Chhatisgarh	61	6,969	154	22,040
Delhi	16	7,879	263	33,344
Goa	10	1,937	84	43,578
Gujarat	133	56,974	672	11,790
Jammu and Kashmir	37	3,300	129	39,042
Madhya Pradesh	140	19,527	337	17,267
Orissa	24	5,182	89	17,190
Punjab	94	11,909	358	30,029
Tamil Nadu	57	11,987	433	36,106
West Bengal	28	4,856	184	37,906
For all states	**739**	**155,463**	**3,229**	**20,770**

Source: Skill Development In India The Vocational Education And Training System, January 2006, World Bank

Significant time and effort needs to be spent by the company engaged in the vocational training business in 'training the trainer'

Finding the right faculty. The biggest challenge is with respect to finding appropriate faculty. More than the costs, the availability of faculty is a big challenge. Significant time and effort needs to be spent by the company engaged in the vocational training business in 'training the trainer'. This suffers from the same issues as training the students: attrition. Also, attracting the right talent into training is difficult – the pay scales of the trained student and the trainer tend to converge quickly, especially at low-end skill levels.

Accreditation. Accreditation requires that the government or sector skill councils create the right mix of output indicators on which to measure the effectiveness of the schools. India focuses too much on the inputs: for example, the latest guidelines on the website of Directorate General of Employment and Training (DGET), Ministry of Labour for opening up of new ITIs/ITCs details the process of verification of inputs (facility, trainers, financiability of project, etc.). Students, however, look at the employability post their training at an ITI or ITC. Hence, focusing on standardizing and strengthening the quality of the output, rather than focusing on the input is the key to creating more market-friendly institutes.

Given the general lack of accreditation and standardization across training institutes, the cost of reaching out to the student can be significantly high. In case of an accredited institution, instead of spending on reaching out to the student, the student ends up paying the institute for enrolling in its course. Over time, for organizations that achieve scale or create a large well-placed alumni pool, the cost here can dramatically reduce: word-of-mouth advertizing works best in this sector.

CASE STUDY 1: Training at Larsen & Toubro

Larsen and Turbo, in their Engineering Construction and Contracts division, follows a five-step training process:

- Setting skill standards
- Preparing the training curriculum
- Training the trainers
- Trainer the students
- Testing and certifying the students

The skill development program is for students of 18-35 years of age who apply via a simple test procedure. It offers an opportunity for career enhancement. A 15 month site-experience and 3 month training program leads to a Level III practical test and certification. A further 2 years of on-site experience and a month of training leads of Level II oral and practical tests and certification. A further 4 years of on-site experience and two weeks of training leads to Level I practical and theory tests and certifications.

The qualifications for the various trades are:

Formwork carpentry - I T I NCVT / V - XII Standard

Masonry (brick work) - I T I NCVT / V - XII Standard

Plumbing and sanitary - I T I NCVT / X - XII Standard passed

Electrical - I T I NCVT + X Standard passed

Welding (structural) - I T I NCVT passed or 2 years experience in welding

Welding (piping) - I T I NCVT passed or 2 years experience in welding

Bar bending and steel fixing - V Standard and above

Scaffolding - V failed and below

Trade assistant - V failed and below

Each institute, of which there are six centers (Ahmedabad, Bengaluru, Chennai, Delhi, Kolkata and Panvel) focus on delivering 100 trained workmen every month ready for deployment at projects. The institutes are registered as Vocational Training Provider [VTP] under Skills Development Initiative Scheme [SDIS] by DGE & T, Ministry of Labour and Employment, Government of India. The trainees are eligible to appear for National Council for Vocational Training (NCVT) Certification.

CASE STUDY 2: Training at Infosys Technologies

Training at Infosys – Excerpt from a letter by S Gopalakrishnan, Chief Executive Officer and Managing Director, Infosys Technologies to the shareholders in the Annual Report 2010-11

"While we were scaling up, we realized that it was imperative to build our own education and department as a core competency rather than outsource the training to third-party vendors.

Over the years, an incredible amount of material

has been created and this has become the main pillar of our successful training programs. Our approach to education was always innovative – we identified several gaps in the prevailing education system and created our own processes by experimenting with various learning methodologies. Our educators were associated with real-life projects and this helped them in designing courses that were comprehensive, inter-connected and relevant.

Initially, our approach to learning was distributed. Every Development Center had its own team and employees, and trainees had to often move across locations to complete their training. We decided that creating a centralized and strategic infrastructure would address our growth. With this intent, the Global Education Center (GEC), Mysore was established. The GEC is the largest corporate education center in the world…a facility that hosts over 14,000 trainees."

Elsewhere in the report, the company mentions, that the total training provided for Infoscions in this financial year was over 1.5 million person days.

CASE STUDY 3: St. Josephs Industrial Training Institute, Don Bosco Centre of Learning, Kurla, Mumbai.

We met up with Mr. Amarr G Prabhu, Manager, West, Don Bosco Technical Institute and ex-Principal of St. Josephs Industrial Training Institute, Don Bosco Centre of Learning, Kurla, Mumbai, India. The ITI runs seven courses (each with a permitted capacity of 21 students each year). The courses (fitter, machinist, electronic mechanic, mechanical motor mechanic, electrician, mechanical draughtsman and plumbing) are 1 to 2 years long and cost the students ~₹10,000 a year on average along with an initial investment of ~₹5,000 for dresses and materials. The students expect a first year salary of ~₹3,500 a month, increasing to between ₹7,000 and ₹10,000 by the time they move beyond the probation period of 1 year or so.

Given the 46 year old pedigree of the institute – its alumni have scaled up in many organizations – there is a queue of recruiters for all the courses. On the day of our visit, preparations were on to host Toyota for recruitment of the mechanical motor mechanics. The other departments also spoke of at least 4-5 companies coming over to recruit the students. In one department (plumbing), they are considering shortening the course to six months since the students get picked up early in the study process.

We noted that in many cases companies collaborated with the ITI: Toyota has helped designed the course, Grohe has contributed to the development of the plumbing lab, companies like Fiat (among others) invite the faculty for faculty development programs. The faculty themselves are drawn from various sources (some who have been teaching since their own graduation from ITIs and many others with between 10 and 30 years of experience with manufacturing companies, from where they have either retired or have taken voluntary retirement as their companies closed shop in Mumbai). The faculty salaries (at ₹15,000 or so a month) are lower than what they would be at government ITIs or even in the industry.

The cost of running the institute is estimated at ₹3.5 mn a year and the fees from the students (~300-350 students are studying this year, across both the years) amount to ₹2.0-2.5 mn. The institute needs to bridge the gap of ₹1.0-1.5 mn which is met by the trust or through various other activities (like teachers imparting training for corporate employees, trying out double shift use of the premises, etc.). The sustainability of such institutes can be ensured by companies paying placement fees to the institute.

CHAPTER 5

VALUE FOR ALL STAKEHOLDERS
Creating the right business model

Getting the value equation right for all the stakeholders will determine the success of the vocation training model. Employers want trained employees but are afraid of losing them to attrition, students need assurance of employment and corporates need to make a decent IRR, which can be facilitated via scale, technology or fiscal incentives. The overall objective requires converting a manual laborer into a trained technician – this will increase incomes and productivity.

The four stakeholders

A successful business model of skill development requires that the aspirations of the four stake-holders are met: (1) students, (2) employers, (3) training companies and (4) government. The central objective of all four of them is increased productivity and income; however, defining a business model requires defining who pays when, and how the costs of delivery can be controlled.

Students

The student comes into the vocational training program with the objective of an assured job (or as close to it as possible)

The student comes into the vocational training program with the objective of an assured job (or as close to it as possible), or in cases where people come for re-skilling or upgrade of skills, an increase in salary. Typically, and practically in India, the value of the course gets determined not by accreditation but by the ability of the course to tangibly add value to the income stream of the student.

We note that most of the skill development needs to take place at the lower end of the skill spectrum and possibly involve students from poor or impoverished backgrounds. There is a belief that in many cases the student is not in a position to afford the payment for a training institute. The government is also promoting the concept of vocational training loans – our discussions with industry players indicate that if students find that a short-term course (1-6 months) yields tangible benefits (increased pay or even getting a job), it is not difficult for the student to generate internal or external financing.

Employers

The employers face a situation where, while wanting trained students, they are typically unwilling to pay for the development of what would be a personal skill set for the employee

Employers look for trained students but are typically unwilling to pay for the development of what would be a personal skill set for the employee. This stems from (1) the limited ability to control attrition and (2) in many low-end jobs, the employment of temporary labor (in order to circumvent arduous hire-and-fire rules).

Many employers, especially in industries that have large scale like IT and BPO, have set up internal units for training and skill development. Skill development is hence done on the job and with support from seniors in the field, with some help taken from outside agencies.

The employer base in some of the large, absorptive industries like transport and real estate is very fragmented. For companies engaged in training, the skill required needs to be customized according to the needs of every employer. However, if a common skillset were to be agreed upon by various members of the industry, the issue of fragmentation can be solved and the skill (and the employee) will become more portable.

Training companies

The challenge is to create a process that is more efficient and cost-effective than the internal training programs that the employers have created

For companies engaged in the sector, the challenge is to create a process that is more efficient and cost-effective than the internal training programs that the employers have created. They need to constantly be in touch with the employers with respect to the new training needs, and especially in the case of machine-based training, spend on the capex for the machines (which in many cases now includes a computer) on which the student needs to be trained.

Finding, retaining and adequately compensating the trainers are major challenges for the companies. Developing 'train the trainer' programs are critical at this juncture.

The private companies also struggle to compete with the regulated and subsidized ITIs – students are required to choose between the 'low cost' government training institutes and the 'higher cost' private institutes. Given that many of the students choosing to go into a vocational training program come from poorer backgrounds, they end up choosing the lower-cost option.

Government

The government is interested in ensuring that the population is well trained and adequately employed in high productivity jobs. The government also needs to ensure that the vocational training institutes are spread far and wide so that they reach out to the more remote areas. The government also has its own inclusive growth agenda of encompassing minorities, scheduled castes and tribes, backward and extremist-infested regions, etc.

The government is interested in ensuring that the population is well trained and adequately employed in high productivity jobs

Getting the revenue equation right

One rule of thumb that many in the industry follow is that the 'cost' of the program that the student can bear is around 4-5 months of his/her pay (if it is his/her first job) or equivalent enhanced pay: the rest needs to be borne by the employer or the government.

For example, industry dynamics and discussions suggest that if a person trained in accounting can be placed with an employer for a monthly salary of say, ₹5,000, the student will be willing to be pay around ₹20,000 – ₹25,000 for such a course. In case the cost of delivery is more than that, the extra amount needs to be recovered either via placement fees (recovered from employers) or some support from government (tax breaks or grants, etc.).

However, given (1) the economic backgrounds of the students who enroll and (2) the low (in absolute terms) income potential of the jobs at skill Level 1, this model tends to break down and requires intervention.

Standardizing the delivery model

We define below the business model of a training institute (see Exhibit 23), which for example, skills students on accounting or basic computing. The top line is critically dependent on the number of students that it can take and how much occupancy it can create. Typical class sizes in India are currently small and do not necessarily leverage technology for teaching and instruction.

The top line is critically dependent on the number of students that it can take and how much occupancy the two large components of cost for a training institute are infrastructure and faculty costs

On the cost side, the two large components of cost for a training institute are: (1) infrastructure, including renting or owning the space of operations and the machinery associated with the same and (2) the faculty costs. Accounting for these and other direct costs at a center, we note that at a center level, the unit can be profitable and earn a decent return on equity. We note that this does not take into account central costs, which can impact the overall profitability of the enterprise.

We note that this business model suggests that the entire cost of the training is borne by the student. This can work in circumstances where (1) the student is in a position to pay or (2) the immediate salary rise or job opportunity justifies that the cost of investment. In many cases where that may not be possible, we look later at situations where the government or prospective employers need to shoulder some of the costs.

Exhibit 23: A vocational training centre can earn a reasonable ROE

Profit and loss and balance sheet for a typical training center

	Details	Rs mn		Rs mn
Profit and loss account for a center			**Balance sheet of a center**	
Annual number of students	300		Value of hardware	1.3
Fees per student	15,000		Cost of deposit for leasing	1.1
Revenue of a centre		**4.5**	Net current assets, others	0.6
Student teacher ratio (students/teacher in a batch)	6		**Total assets**	**2.9**
Number of teachers required	4		Equity	2.2
Monthly salary (Rs/month)	25,000		Debt	0.8
Annual staff cost		1.3	**Total liabilities**	**2.9**
Area required (sq ft per student)	50			
Total leased area (sq ft)	1,250		**Ratio-analysis**	
Rental costs (Rs/sq ft/month)	75		ROE	14.6
Annual rental costs		1.1		
Other costs like marketing, admin, etc (50% of staff+rental costs)		1.2	**Assumptions**	
Earnings before interest, depreciation and tax		**0.9**	Cost of computer, hardware (Rs.)	50,000
Depreciation		0.4	Life of the assets (years)	3
Interest (@8% pa)		0.1	Number of students per batch	25
Profit before taxation		**0.5**	Number of batches in a day	5
Tax @ 30.9%		0.1	Course length (months)	4
Profit after tax		**0.3**	Occupancy (%)	80

Source: Discussion with industry, KIE calculations

Profitability can sway significantly based on the (1) ability of the institute to charge premium fees and (2) the ability of the local unit to get occupancy

The profitability can sway significantly based (see Exhibit 24) on the (1) ability of the institute to charge premium fees and (2) the ability of the local unit to get occupancy. Hence, this requires a sustained performance at the central level (in ensuring that the students get the right jobs at the right salaries) and a appropriate choice of location (such that it is easy for students to access and attend).

Exhibit 24: Vocational training centers: Buying occupancy by lowering fees is not the solution

Sensitivity of ROE to fees and occupancy (%)

		Occupancy (%)				
		70	**75**	**80**	**85**	**90**
Fees (Rs)	**10,000**	(44.7)	(38.7)	(32.8)	(26.9)	(21.0)
	12,500	(23.9)	(16.5)	(9.1)	(1.7)	5.7
	15,000	(3.2)	5.7	14.6	23.4	32.3
	17,500	17.5	27.9	38.2	48.6	59.0
	20,000	38.2	50.1	61.9	73.8	85.6

Source: KIE calculations

Creating an enabling environment – making a skilled worker out of a laborer

As noted earlier, the cost of vocational training needs to be borne by one or more of the stake-holders. Across the different skill levels, income levels of students, etc. different proportion of money needs to be contributed by each of the stakeholders. We note that in the low skill market, which is where, as we noted earlier, 80% of the numbers of students lie, there is a significant need to co-opt the government and/or the employers (see Exhibit 25).

For acquiring high skill levels, the employers can be in a position to fund the program by paying placement fees to the institutes in return for providing trained resources. In many cases, given the higher value attached to the skill level, funding for the costs of the program is easily available.

At the low skill level, where the student has a limited ability to pay, the typical way in which a student pays is through low-paid apprenticeship. For example, a person would spend 2-5 years as a laborer with a head-carpenter/mason or a truck-driver and then turn into an experienced technician himself. This informal learning not only is very time-consuming for the student but may not prepare him for all aspects of the trade. If the 2-5 year gleanings can be compressed into a 3-6 month course, the student as well as the employer can benefit. Ensuring that the student is able to attend the course (the loss of pay at such levels can be debilitating) is a challenge.

Ensuring that the student is able to attend the course (the loss of pay at such levels can be debilitating) is a challenge

Creating a situation where the vocational training market takes off – making it profitable for the employee, employer and corporates – will help create the right skill sets required in the country. Having too much government control or intervention will only reduce the ability and the incentive of the private companies to bring quality in its low-priced courses.

The government has a critical role in helping the transition of a laborer to a skilled worker/trained technician. Starting with financial help (vouchers allowing the student to chose which course he wants to undertake) to helping the corporates recover the cost of training, the government can add to the productivity growth imperative.

Temping versus training

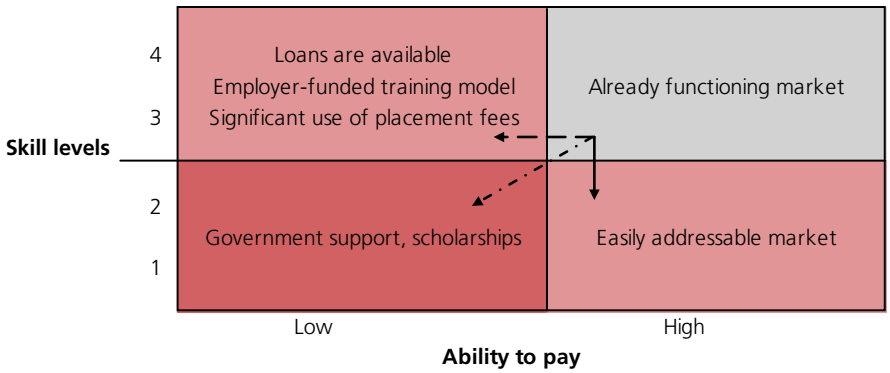
One element of the business model that has emerged stands out – the temp employee. This phenomenon has emerged from the need of companies to keep some employees off their rolls and hence there is no need to offer them 'permanent positions'. Onerous labor laws in India make 'firing' a permanent employee difficult. The variability associated with business changes (fall in demand, seasonal surge, etc.) is absorbed at the level of an agency that keeps low skilled employees on its rolls and offers them to companies as required. Such agencies typically charge the corporate client a fee for their services, typically, a percentage of the employee's pay – this allows the agency to participate in the growth of its employee's salary as well. For many low-skill or high attrition jobs, such agencies of temps, along with training services for these temps, may present a more successful business model than just training them and expecting them to find a job.

For many low-skill or high attrition jobs, such agencies of temps, along with training services for these temps, may present a more successful business model than just training them and expecting them to find a job

Exhibit 25: Low ability to pay for skilling requires government, employer support

Various segments of the skill development market based on skill levels and ability to pay

Theoretical model



Practical proportions

Legend

- Transition via expansion of existing players into 'lower skills' model
- Easier financing (government, employers) can enhance the market
- Significant government initiaves required

Source: Kotak Institutional Equities

CHAPTER 6

DISCUSSIONS WITH S RAMADORAI
Cognizant of challenges

Our discussions with Mr. S Ramadorai indicate that the government is cognizant of the woeful lack of trainers and the employability of the students after completing various levels of education. The government's co-ordination mechanism under the National Skills Development Council will help channelize the effort of the 17 ministries. He believes that innovative use of technology can make the delivery mechanism robust.

Takeaways from our discussion with Mr. S Ramadorai, Advisor to PM on Skill Development

The various dimensions of the issue. The issue needs to be looked at by industry and by region. Consider the fact that most of the population growth will come from the states of Bihar, Uttar Pradesh, West Bengal and Orissa. A lot of work has gone into understanding the employment opportunities by industry. There is immense potential in construction, tourism, health, IT and ITES, manufacturing, retail and textiles, among others. The need also is to focus on agro based jobs - for example food processing, dairy framing, etc. Working on a cross section of these issues is required to ensure that employment is created - this is also important as the demographic dividend needs to be harvested before it becomes a social/political problem.

Role of the government. A key element of delivering skill development is the state government machinery (ITIs and polytechnics). The private sector is responding to the issue either through private ITIs or industry bodies 'adopting' ITIs. The government needs to focus on creating a more meaningful curriculum and in setting the ground rules for accreditation. There needs to be an active focus on making the distinction between degrees and diplomas irrelevant. There is an on-going discussion with the Ministry of Human Resource Development on creating an equal track of vocational training program in the 9-12th standard in general education and integrating vocational education into the university system.

Focus on the unskilled and unemployed. Analytically speaking the government needs to focus on the unskilled and the unemployed. The skilled and the employed are obviously part of a functioning market. The vast section of the employed who are unskilled also need to be re-trained to improve productivity as also to keep them up to date with the changing technologies.

Creating the ecosystem. There is a need to create the right ecosystem for skill development, which include various aspects like (1) a strong apprenticeship programs across corporates, (2) adoption of ITIs by corporates, (3) enabling the non-governmental bodies that help impart skill development , and (4) supporting employment creation at the small and medium enterprise levels, which is where a large majority of the jobs will be created. This ecosystem building will need to be done at the central as well as the state level and there is an active movement towards creating state sector skill councils and energizing state skills missions.

The numbers are large and the urgency understood. There are currently discussions on to create 100 mn jobs in manufacturing over the next 10 years by increasing the value contribution of manufacturing in Indian GDP to 25%. National Skill Development Council's (NSDC) reports talk of training 500 million people over the next 15 years. These numbers are very large and will require detailed study to avoid double-counting to see how such training needs can be met. There is also the issue of coordinating between 17 ministries that are charged with the mandate of skill development and creating a common shared vision and program. There is a sense of urgency in these issues which needs to be well understood.

Technology can tilt the delivery mechanism. There are many instances of disruptive change in the delivery of services due to the use of technology. Whether it is the e-passport system or the revamped system at the Ministry of Corporate Affairs or land records digitization in Karnataka, many government services have been exceptionally transformed by the use of technology. An element missing in the entire skills issue is the availability of quality data on which decisions can be made. Linking the creation of a skills database to a unique number (whether UID or otherwise) can help create information on how training or re-training can help create jobs. As an example, Karnataka has taken a pioneering role in revamping its employment exchanges.

CHAPTER 7

GAMECHANGERS

Target right, train the trainers, certify and fund

Skilling India will require an overhaul of the education system: introducing vocational training into the school curriculum and targeting those who graduate from/drop out of 'general' school programs. For vocational training to work, India requires trained faculty — the first challenge is to train the trainers. Creating an accreditation platform will reduce transaction costs for both students and employers. Funding mechanisms like NSDC raise the viability of training for both students and companies.

Target the school leavers

The industry needs people with skill levels 1 and 2 and the people best suited for being trained in these skills are those who drop out of the general school system. In many cases, the reason for leaving school is to augment the family income. Making vocational training a part of the school curriculum will also help introduce many aspects of the opportunity to the students.

A large proportion of the school drop-outs ends up being a part of the informal workforce where the drop-out has limited certainty with respect to the stability of his employment as well as his rights. With a skill development program, the quantum of the income generated and its sustainability can be improved.

Creating a strong vocational training identity will help create a positive image for this stream of education

Creating a strong vocational training identity will help create a positive image for this stream of education. There seems to be a perception of lower quality when a student enrolls for a vocational training course. If vocational training courses are structured such that the student is awarded a degree or a diploma at par with students in general courses (corresponding to the time and effort spent), it would attract more students. Tying up with employers who can absorb the talent will make the courses more relevant and meaningful.

The private sector needs to be roped into the skill development market in order to ensure upgradation of the curriculum to suit the needs of the industry, and to localize the content

Get the employers involved

Any skill development program is meaningless without involving the final people who will absorb the talent. There is a move afoot to create sector skill councils that will define the types of skills required by the industry. Also, there are ITIs which are being adopted by local and national employers so as to help create the skills that are relevant to them.

The private sector needs to be roped into the skill development market in order to (1) ensure the consistent modernizing of the curriculum to suit the needs of the industry, and (2) localize the content.

Train the trainers – sustainable methodologies required

One of the biggest challenges facing the skill development sector is getting the right set of trainers. Part-time professionals from industry are not the best choice as the training institutes spend significant time and money training the trainers; for the part-time trainers, their priority is their day job.

Higher quality trainers can lead to better 'students' which will reflect in their eventual placements, in turn, giving the institute the leverage to increase its fees

This issue can be solved by attracting the right talent at the right price –giving them enough incentive to leave industry and join as a trainer. This will put a higher price on trainers and disturb the business equation for companies. However, we believe that higher quality trainers can lead to better 'students' which will reflect in their eventual placements, in turn, giving the institute the leverage to increase its fees.

Accreditation

Fragmentation of the employer base in large labor intensive industries requires creating an accreditation process so that employees can easily move between employers. Credible accreditation also helps lower transaction costs for the both the students and the employers. If there is certainty with respect to the quality of accreditation, the employer knows what to expect from the employee and the employee is trained for what the employer wants.

A large part of the role of the sector skills council will be to help be the facilitator by setting up the process of accreditation. As with many other businesses, the government needs to act as an umpire rather than be present in the business of skill development itself.

Creating a viable business model for this segment can be facilitated by the government supporting companies in these segments via low-cost debt and equity investment

Create funding mechanism for students, corporates

A large majority of the students require training in skill levels 1 and 2 and many of them are not in a position to pay for the training before getting an employment opportunity which will materialize post the training. Creating a viable business model for this segment can be facilitated by the government supporting companies in these segments via low-cost debt and equity investment. Bodies like NSDC which vet and monitor the government-sponsored investments will help create an ecosystem of more private sector players.

CASE STUDY: NSDC

The Prime Minister's National Council for Skill Development works in co-ordination with the National Skill Development Co-ordination Board which co-ordinates the efforts of (1) 17 Central ministries and (2) the National Skill Development Corporation, which seeks to fund and incentivize entrepreneurs in the skill development space (see Exhibit 26).

NSDC is a not-for-profit company set up by the Ministry of Finance, under Section 25 of the Companies Act. It has an equity base of ₹100 mn, of which the private sector holds 51%, while the Government of India controls 49%. The corporation has a 12-member Board and the National Skill Development Fund (NSDF), a 100% government-owned trust to which the government has contributed ₹10 bn and ₹5 bn in FY2011 and FY2012, respectively.

NSDC is a first-of-its-kind Public Private Partnership (PPP) in India set up to facilitate the development and upgrading of the skills of the growing Indian workforce through skill training programs. A large part of the NSDC's efforts are directed at the private sector and towards developing the skills in the unorganized sector in India. NSDC supports skill development efforts, especially in the unorganized sector in India by funding skill training and development programs. It also engages in advocacy and training programs, in-depth research to discover skill gaps in the Indian workforce, and developing accreditation norms.

Exhibit 26: NSDC has funded companies which expect to train 45 mn people over the next 10 years

Funding by NSDC

S No	Companies	Targetted sectors	Project cost (Rs mn)	Trainees (number)
1	Everonn Skill Development	Tourism and hospitality, healthcare services, organized retail, media and entertainment, IT and ITES, textile, construction and automotive	1,538	11,700,000
2	Centum Learning	Automobile, OrganisedRetail, Telecom, Healthcare and Building & Construction	163	11,570,000
3	Talent Sprint Education Services	IT, ITES and BFSI	150	5,200,000
4	Empower Pragati Vocational & Staffing	ITES/BPO, Tourism, Hospitality & Travel, Organized Retail, Informal Sector	260	2,100,000
5	IL&FS Cluster Development Initiative	Textile, Construction, Leather and Leather Products, Automotive and Auto Components and Logistics, General Engineering and Service Sector	2,168	1,950,000
6	IIJT Computer Education (a subsidiary of TeamLease)	IT, Retail, BFSI, Healthcare, Hospitality, Manufacturing and Construction	836	1,800,000
7	JobCorpSolutions	BFSI, BPO, Unorganized Sectors	245	1,740,000
8	Pratham Education Foundation	Education / Skill Development Services, Hospitality, Construction, Organised Retail, Electronics /Hardware, Automotive work, Agriculture	230	1,690,000
9	GRAS Hospitality Services	Organized Retail, Health Care Services, Building and Construction, Automobile/Auto Component, Tourism Hospitality and Travel Trade, Electronics, IT, Banking and Insurance, Spoken English	800	1,300,000
10	Laurus Edutech	Automotive, Construction, Textile, Electronics and IT Hardware and Education and Skill Development Sector	536	1,110,000
11	Laqsh Job Skills Academy	IT, ITES/BPO, Retail, Hospitality, Banking and Education	101	1,054,000
12	BASIX Academy for Building Lifelong Employability	Construction, Tourism, Banking, Rural Farm, Hospitality, Food Processing	332	1,000,000
13	Red Hat Investments	Construction	220	740,000
14	EdubridgeLearning	IT-BPO, Microfinance, Banking & Insurance, Organised Retail, Sales and Marketing in Rural areas	54	700,000
15	TMI Input & Service	BFSI, FMCG, Telecom, Pharma, Hospitality, IT&ITES, e-learning & education	292	530,000
16	Globsyn Technologies	ITES, Electronics & IT Hardware and Organised Retail	125	350,000
17	Indian Institute of Skill Development	Automotive (Light Engg.), Building Construction, Real Estate and Retail	164	240,000
18	iSTAR Skill Development	Retail and BFSI	13	130,000
19	GOLS Technical and Vocational Education	Chemical and Manufacturing		120,000
20	Technable Solutions	ITES-BPO; Retail; Transportation, Logistics, Warehousing and Packaging; BFSI; Tourism and Hospitality	14	100,000
21	Construction & Real Estate Developers Association of India		185	97,920
22	Managerial Excellence Resource Centre	Finance, Retail, Sales-related, ICT and Gems & Jewelry	30	96,665
23	Gram Tarang Employability Training Services	Production-related (50%) and Construction, tailoring, plumbing, textiles, security guards, retail, computer related (remaining 50%)	145	21,000
24	Indian Institute for Gems and Jewellery	Jewellery Design, Stone setting, Diploma in Jewellery making	1,114	18,000
25	International Association for Human Values	Self Development Training and Technical Training in Garmenting, Driving, Computer Operating, Mobile Repairing, Electrician, Plumbing, Domestic BPO etc	5	128
26	Association for Rehabilitation Under National Trust Initiative of Marketing	To empower and enable people with the disabilities to become economically contributing and participating members	3	
	Total		**9,722**	**45,357,713**

Source: NSDC

TeamLease Services Raises Rs 100 Crore In Second Round Of Funding

Shrija Agrawal, VC Circle, April 06, 2011, 07:56 AM IST

The current round of private capital was raised from ICICI Venture, along with existing investor, Gaja Capital Partners.

TeamLease Services, one of the top staffing companies in India, has raised Rs 100 crore in private equity funding to fuel the vocational education expansion of the company.

The current round of private capital was raised from ICICI Venture, along with existing investor, Gaja Capital Partners. In 2009, Gaja Capital Partners had invested $5.38 million in the company for a 16.77 per cent stake. The current round of valuation for the deal is not known.

The capital raised will be deployed for the vocational education initiative – a rollout of IIJT centres and national satellite delivery capabilities, building a corporate training business, acquiring a footprint in new domains more suitable for students who want to join directly after Standard X and implementing the TeamLease University project.

Focused on the organised temporary staffing market since 2003, TeamLease Services entered the vocational education segment by acquiring the Indian Institute of Job Training (IIJT) in 2010. As part of the deal, TeamLease had bought out the majority stake held by the US-based PE fund Tiger Capital in IIJT. Tiger Global Management LLC acquired 25 per cent stake in New Delhi-based IIJT Computer Education Ltd for $6 million (Rs 246.88 million) in 2007.

IIJT operates over 150 centres that deliver classroom and satellite training in five domains – finance & accounting, IT infrastructure, sales & marketing, retail and English/soft skills. The company has also started work on the TeamLease University that will offer associate degree programmes in the same domains and will start operations later this year, after regulatory and legislative approvals. The company is also actively engaged with various state governments through Public Private Partnerships (PPP).

Vishakha Mulye, managing director and CEO of ICICI Venture, said, "The education and staffing sector in India is poised for an exciting future as there is clear recognition within the government, as well as in the private sector, about the need to address gaps in the people supply chain. There's need for up-skilling of workforce, demand for quality training and so on, thanks to the current growth trajectory of India."

However, there have been other PE investments in this space. In 2009, VIA Human Resource Solution Pvt Ltd raised funding from Ojas Venture Partners while Ikya Human Capital Solutions Pvt Ltd raised $8.06 million from India Equity Partners Fund I in two tranches.

SAIF Partners Invests $10 Million In English Fluency Institute Veta

Sahad P V, VC Circle. 10/08/2007

Education sector continues to attract investment. This is the fourth deal in the space in the last two months. SAIF Partners has invested about $10 million in Veta, a Chennai-based English language fluency training institute. This is the second investment of SAIF Partners in this space. Last week, we reported SAIF Partners' investment in ICA Infotech, a Kolkata-based non-IT training company (such as finance and personality development). We had also reported Gaja Capital Partners' $8.25 investment in Career Launcher, a preparatory education company.

Veta, owned by Amoha Education Pvt. Ltd, claims to be India's largest academy for teaching spoken English. Earlier known as Vivekananda Institute, it claims to have trained more than 1.9 million students, job seekers and others to speak English over the last 25 years through a combination of direct class coaching and distance education course. The company was founded in 1981, and now it has some 150 centers across India. It also provides soft skill and personality development training.

Says Ravi Adusumalli, General Partner, SAIF Partners, "Historically English has played a crucial role in the Indian social and business context serving as the common bridge in our country. And the recent job requirements from sectors like IT/BPO, retailing, Hospitality, financial services have further fuelled the demand for people with fluent spoken English." VETA is one of the few businesses in this highly fragmented sector that have achieved scale. V. Ganesh Ram is the Managing Director of Veta.

ANNEXURES

APPENDIX 1: PROFILES OF SOME COMPANIES IN THIS SECTOR

IndiaCan - http://indiacan.com/about-indiacan.asp

IndiaCan is a joint venture between Educomp, India's largest education company and Pearson, world's largest education service provider.

IndiaCan is a pioneering initiative with a view to bridge the gap between employment opportunities, skills and knowledge base of the unemployed youth in the country and therefore, helps them get suitable placements.

With the combined strength of two of the largest education companies, the JV is on track to become the largest provider of vocational education & training with a mission to:

- Provide talent for India's economic growth engine
- Train over 500,000 persons 'ready to deploy' to the industry annually by 2012
- Be the Top Vocational and Skill Development Company in India

The program is highly sensitive to market demand and takes up only those employable trades that are in demand in the local market. It strongly focuses on providing employability to young aspirants with great aspirations.

ICA Infotech - http://www.icajobguarantee.com/CompanyProfile.aspx

ICA start with Account Training and ends with a guaranteed job. The organization was formed by a group of professionals with considerable work experience in the field of accounts and taxation. The journey started in 1999 and after ten years the institution was spread up its wings to more than 300+centres with 3 zonal offices and 30+placement offices across India with Head office at Kolkata. The ICA family includes more than 3000+competent staff members and more than 200,000 students.

IndiaSkills - http://www.indiaskills.com/about-us/

IndiaSkills is a joint venture between Manipal Education and City & Guild, UK. Drawing upon City & Guilds' expertise in developing qualifications that are reflective of global industry needs, its 130 years of leadership across 30 industry sectors and 600 qualifications that have certified over 18 lakh learners every year, IndiaSkills is poised to change the dynamics of the Indian market.

Learners are provided with cutting-edge, industry-relevant certifications and job assistance. Multiple levels of qualifications are available at the entry, supervisory and managerial levels, opening up opportunities for lifelong learning and growth. While learners get a head start in their career, partner companies get easy access to trained, 'work-ready' staff. For the industry as a whole, this translates into a job-ready work force with 'first day first hour' productivity.

ILFS Clusters - http://www.ilfsclusters.com

IL&FS Cluster Development Initiative Limited (IL&FS Clusters) is an initiative of Infrastructure Leasing and Financial Services Limited (IL&FS), a leading institution in the field of infrastructure development promoted by UTI, Central Bank of India and HDFC. IL&FS Clusters has been set up to leverage on the experience gained from design and execution of several programs for development of SMEs on cluster-based approach in particular the Tirupur Water Supply Programme. Set up as a strategic business unit in IL&FS in June 2005, IL&FS Clusters as a separate entity initiated operations in April 2007. Some initiatives include:

1. Skills for Employment in Apparel Manufacturing (SEAM), a Project to bridge unemployment and the skill needs of the industry
2. Strengthening BDS in Kanpur Leather Cluster, a multi-donor Project for improvement of Business Development Services (BDS) for MSMEs
3. Tripura Bamboo Mission, a Programme for development of bamboo sector in a mission mode with special focus on promoting sustainable livelihood for tribal and rural poor
4. Setting up of Integrated Textile Parks, a Programme to set up state of the art greenfield textile cluster parks pan India with plug and play infrastructure
5. Skills for Employment in Leather Fabrication (SELF), a placement linked skill development programme to train shop floor operators for placement

TeamLease Services - http://www.teamlease.com/company_profile.htm

TeamLease Services is India's leading staffing company and provides a range of Temporary and Permanent manpower solutions to over 1000 clients.

The Temporary staffing group establishes a co-employment relationship with clients and takes responsibility for all compliance, HR and administrative of employees on assignment. The Permanent staffing group undertakes turnkey and recruitment mandates for permanent fulfillment. We view ourselves as a liquidity provider that enables better matching of demand and supply in labor markets.

TeamLease started operations in 2002 and now has 75,000 employees in over 600 locations. Our core team of 1000+ employees operates via a network of branches that give us a national footprint.

APPENDIX 2: FURTHER READING & BIBLIOGRAPHY

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