



IT and IT-Enabled Services Industry in Nepal

An Assessment and Prioritized
Recommendations

World Bank



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This report is prepared by Tenzin Norbhu, Senior ICT Policy Specialist; Mohan Kharbanda, Senior IT/ITES Specialist; and Siou Chew Kuek, ICT Policy Specialist; at the World Bank. Randeep Sudan, the Lead ICT Policy Specialist at the World Bank, also provided extensive input and guidance during its preparation; and the report is based on a thorough review process by a high-level panel that consists of experts in the IT industry and other relevant specialists. The views expressed in this report are those of the contributors, and do not necessarily reflect the position of the institution they represent.



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Acronyms and Abbreviations

Bandh	A movement to shut down the commercial and civilian operations, often politically motivated
BOT	Build-operate-transfer
BPO	Business process outsourcing. Also see ITES above.
CAN	Computer Association of Nepal – the national industry group
CMMi	Capability Maturity Model® Integration (CMMI) is a process improvement approach that provides organizations with the essential elements of effective processes
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
FTE	Full Time Employee
GDM	Global delivery management
HLCIT	High Level Commission on Information Technology
NITC	National Information Technology Center
ICT	Information and communications Technologies
IT	Information Technology e.g. software development
ITES	Information Technology Enabled Services such as cash ledger journal entries done in remote low cost locations.
ITO	IT outsourcing
KPO	Knowledge process outsourcing
MNC(s)	Multinational Corporation(s)
NASSCOM	The National Association of Software and Services Companies (NASSCOM), is a consortium that serves as an interface to the Indian software and Indian BPO industry
Off-shoring	An IT or ITES task that is outsourced outside the country.
PPP	Public Private Partnership suggested between Government of Nepal and Industry trade associations.
SMB	Small, Medium Businesses



Introduction

The Government of Nepal (GON) has recognized the burgeoning opportunities offered by the global IT services and IT-enabled services (ITES) market for economic growth and employment creation, and has accorded a high priority to this sector. The government has, evolved a national IT Policy to harness the potential of Information Technology similar to what its southern neighbor, India, has already achieved.

The World Bank has been assisting Nepal to review the market opportunities and develop enablers to participate in the emerging IT/ITES market opportunities. With funding support from AusAID, the Australian government's international aid program, the Bank had assigned a team (Team) to conduct an assessment of the market for Nepal that takes into account the country's current status and positioning, and draw conclusions and recommendations. The study commenced in December, 2008; and the output of this study is based on consultations with government officials, industry incumbents, academia and other stakeholders during the Team's first mission to Nepal in December 2008, and a subsequent workshop to prioritize actions in August 2009.

The focus of this final report is to:

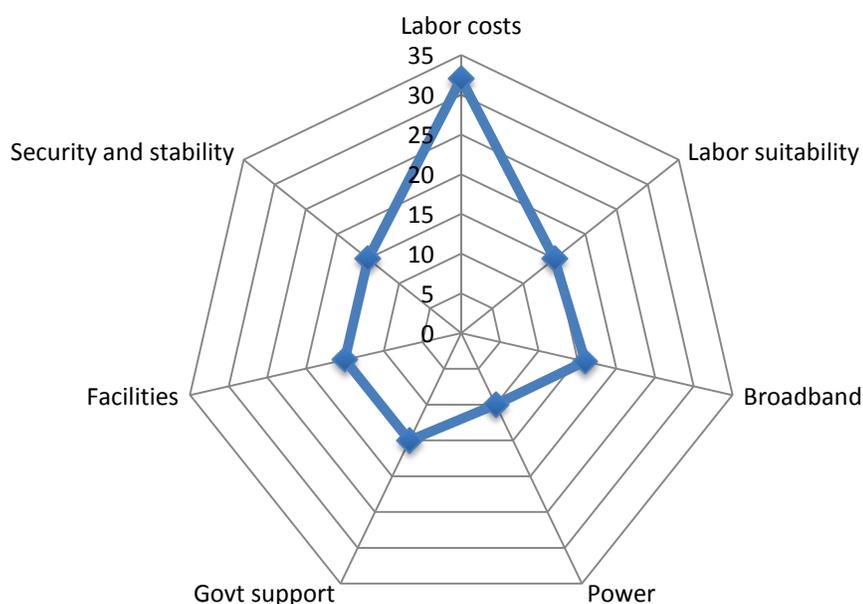
- Share an assessment of the current status in Nepal;
- Develop a comprehensive, multi-year, implementable program for the industry's development; including the strategic planning approaches with examples of important executable initiatives;
- Develop investment estimates, key metrics and responsibilities for key initiatives; and
- Suggest how public and private core constituents can partner to develop the potential of Nepal.

Together, these initiatives are designed to stimulate growth in IT/ITES exports so that the industry is self-sustaining and Nepal becomes a credible destination. The public-private partnerships (PPP) recommended later will need to validate detailed action plans, key targets, metrics, and responsibilities; and develop an internal implementation plan.



Executive Summary

The IT services and IT-enabled services (IT/ITES) industry is the fastest growing segment of the global IT market – its potential market size is estimated at \$500 billion, and it is growing 35% annually until recently (McKinsey & Co., 2008). The rate of growth may decline in the current economic environment, but the crisis is expected to trigger further globalization of services over the longer term. Countries worldwide are competing for a piece of this lucrative market, and the burgeoning demand for these services offers a distinct opportunity for Nepal to enhance incomes and increase employment. However, the IT/ITES industry in Nepal is in a state of infancy and key enablers are not well developed as shown below.



Source: Team's assessment

At some \$10-\$15 million in export revenues in 2007, Nepal's IT/ITES industry is operating below its potential and has not emulated the example of its southern neighbor. Normalized for population with India, Nepal's export revenue should be about \$1.1 billion, with the industry employing 40,000 professionals. This is about 100 times the current revenue. However, the industry is currently fragmented and the incumbents have entered the market due to chance rather than in pursuance of a systematic strategy to realize a collective vision of the country. The industry has expressed the following as key concerns:

- Government incentives and policies are not IT/ITES export-friendly in terms of both demand generation (Nepal brand promotion, tax holidays, etc.) as well as supply creation (talent and skills development);



- Frequent “bandhs” or politically motivated work stoppages cause investor concerns. These will be showstoppers for significant MNC captive investments;
- Banks have limited experience in funding business plans for new ventures but expressed an interest in exploring this sector; and
- The IT Park is in a remote location from the city center and given the road infrastructure, it can take up to 2 hours each way to commute. It appears better suited as an incubation site rather than an IT/ITES production facility.

Nepal has one of the lowest labor costs in the global IT/ITES market. The recent depreciation of the currency gives it further advantage. Business Process Outsourcing (BPO) starting salaries at \$1,800 per year is half of India, and the gap increases after tenure of two years. Nepal is far less expensive than most other locations for software developers. The average annual salary for an IT worker in the U.S. with about 3 to 5 years experience is about \$75,000. It is about \$8,000 in India, and less than \$6,000 in Nepal. The quality of talent, however, is uneven and could be improved. Unless Nepal invests in talent development, it will not be able to emerge as a destination in its own right.

As a result of the current state, Nepal will need to manage multiple constraints in order to participate meaningfully in the sector. As mentioned earlier, there is no lack of demand. The market will almost double in less than five years, but the Nepal advantage in labor cost will be lost if the issues described in this report are not addressed. Many of the structural problems associated with the Nepal ITES sector do not lend themselves to the ‘stroke of the pen’ quick solutions, and discourage investment by Nepalese entrepreneurs in potentially high reward or high-risk ventures. Such problems include:

- Lack of international promotion;
- Average small size of enterprises in the sector;
- Low levels of inter-company collaboration and merger and acquisition (M&A) activity;
- Skills deficiencies in project management;
- General lack of experienced middle managers; and
- Difficulty in funding start-ups either through Venture Capital (VC) or banks.

The Government of Nepal (GON), Computer Association of Nepal (CAN), and Federation of Nepalese Chambers of Commerce and Industry (FNCCI) could act as powerful catalysts for addressing these challenges but they face a classical chicken and egg dilemma. CAN, unlike India’s NASSCOM, is run by executives from the private sector who cannot yet dedicate sufficient time until the IT/ITES industry is somewhat developed. Similarly, FNCCI has had to address challenges in the overall business climate and other industries and has not devoted sufficient resources to the ICT sector.

A sustainable growth in IT/ITES exports will require that Nepal addresses the challenges described in this report. If Nepal does, it could be one of the second tier outsourcing countries. Vietnam, South Africa, Ghana and others are also focused on



these opportunities and are likely to sprint ahead unless Nepal acts with a sense of urgency. The “select few” actions that Government could take are listed below:

- Nepal’s government has a significant role to promote IT/ITES. In countries where the ICT off-shore service sector has a potential competitive advantage, the governments have facilitated the creation of an environment where private sector players could drive sector growth. In addition, governments of countries such as Ireland and Singapore, assigned responsibility to a suitably empowered institution to coordinate actions across different ministries.

While the GON is focused on drafting the constitution, it is proposed for a PPP to coordinate the IT/ITES efforts of diffused government bodies and industry groups. This will be a new entity with specific goals and charter. The specific roles of the PPP are described later and deal primarily with:

- Skills development
- Attracting large pioneer/anchor companies
- Aggressive marketing and promotion
- Establishing Special Economic Zones (SEZ) for the sector, modeled after the Software Technology Parks Initiative (STPI) policy in India.
- Studies on infrastructure (power, telecommunications redundancy, etc.) for future investments and implementation.

These actions are described in detail in Section 6 of this report. The proposed PPP will be for a limited time as the role of GON will subsequently decline, as the industry finds its footing and becomes self-sustaining.

- As mentioned earlier, the IT/ITES industry has significant room to grow. Nepal does not need to necessarily wrest businesses from incumbent players to participate. The overall off-shore market is forecasted to grow to at least \$200 billion by 2014. The proposed target for Nepal is \$200 million in five years. This is 15 times the current IT/ITES export revenues but still represents only 0.1 percent of the overall global market. The target is modest because it is not expected that Nepal will be able to jump start activities very rapidly, for example, establishing an IT park will take at least 2 to 4 years.
- Nepal needs to develop competitive incentives to attract business. Countries in the region have put in place similar incentive packages. Key examples include:
 - Subsidies to assist industry achieve international certification and for training. Suggested training subsidy is \$200 per employee for training or a similar subsidy of \$200 per employee per month for apprenticeship;
 - Zero percent VAT, customs duties and taxes on imports for IT/ITES businesses;
 - Specific tax holidays through 2016. The tax exemption to the companies will be more than offset by the revenue generated by the new



- employment. Virtually all countries vying for the IT/ITES opportunity offer some form of tax holidays; and
- 100% foreign ownership and dividend/capital repatriation.
- While Nepal develops these policies, it will also need to address the laws on venture funding and legal framework for M&A activities. These activities generally lag the development of the IT/ITES industry but will be critical once the industry reaches a reasonable market size, based on an estimate of about \$100 million in revenue per annum. Given the security perception issues, Nepal will also need to make some bold moves, such as:
 - Classification of ITES-BPO industry as “essential or public utility services” enabling 24 x 7 x 365 operations for these companies. Some other countries, or states within the countries, have allowed for this provision by offering “comfort letters” to the companies so that the operations are not disrupted;
 - Ensure flexibility with respect to both weekly and national holidays for ITES-BPO employees in compliance with labor laws;
 - Provision for women employees to work in night shifts and ensuring their safety;
 - Simplify procedures relating to hiring and dismissal of ITES-BPO industry employees; and
 - Relaxation of laws relating to labor unions for the ITES-BPO industry.
 - The bandwidth and electricity load shedding issues also need to be addressed:
 - Bandwidth redundancy and reliability need to be brought up to global standards. This will require regulatory enforcement; and
 - Exemption from statutory power cuts or load shedding for ITES-BPO establishments. Currently, the power availability is erratic with frequent load shedding.

The easier segment to penetrate for Nepal is the ITES sector, also called BPO. In ITES Nepal has some 30 to 40% cost advantage over India in labor costs. Until the industry can be established, it should leverage the cost advantage and participate in the entry-level BPO market.

- In the near term, Nepal could focus on processes such as:
 - Non-voice back office processes;
 - Graphic design;
 - Animation;
 - Geographic Information Systems (GIS); and
 - Web design.
- In the intermediate term, Nepal can also add on voice processes such as:

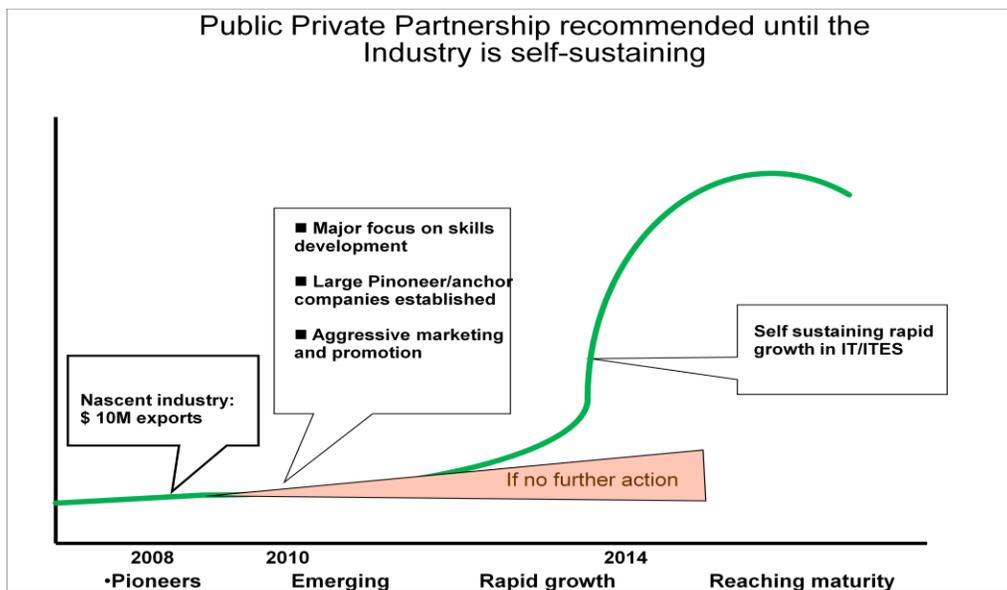


- Customer support; and
- Technical support.

- Banking and related financial services offers the largest opportunity segments. The recent turmoil in the banking sector has increased incentives to reduce costs, and the rationale for Nepal to focus on this sector is based on the following:
 - Nepal already has a strong domestic banking industry.
 - Back office functions remain the largest opportunity;
 - North America remains more open to off-shoring and is the largest geographical segment;
 - One or more large “pioneers” should be attracted with special incentives, described later, to gain credibility as a viable destination; and
 - Ease of entry for Nepal – specifically the sub-sectors that deal with low complexity and low regularity oversight such as application processing, credit evaluation, collateral evaluation, accounting, document preparation, payment processing, loan tracking, collections, check processing, records management, fraud detection, report generation, mortgage processing and claims management.

- This target has also been discussed with, and agreed by the Nepalese stakeholder community. To participate in this market, Nepal will need to mitigate security concerns as well. Frequent bandhs will discourage mission critical processes to be off-shored to Nepal. Given the current state of the business, Nepal will also need to make some bold moves, for example:
 - Negotiated investment guarantees, if necessary, for a leading regional company, or an MNC, that creates in excess of 500 immediate jobs to give the country global credibility and visibility; and
 - Invite a regionally established CMMi level 5 capable company with global reach and credibility, to set up operations in Nepal either as a captive operation or a joint venture. This will also require special incentives and guarantee of some domestic business.

If the above actions, particularly those related to infrastructure, security and talent can be addressed; the target of \$200 million in 5 years can be easily achieved. This will create about 10,000 jobs, and establish an eco-system to self-sustain the industry for growth towards a \$1 billion industry. The recommended actions are designed to lead Nepal on a path shown below:



Note: Graph above is for illustrative purposes only. It is based on multiple assumptions, and is intended to show that unless action is taken, the outcome is expected to be similar to recent past

Source: Team assessment and forecast

Implementation of some important actions will require a 5-year program divided into 3 phases, with an estimated investment of about \$19,250,000 (including planning and evaluation) and the bulk of spending over the first two years. The financing for this investment can come from a number of sources, such as the Nepalese government and the private sector (e.g. if the IT parks are developed on a PPP basis) and the donor community.

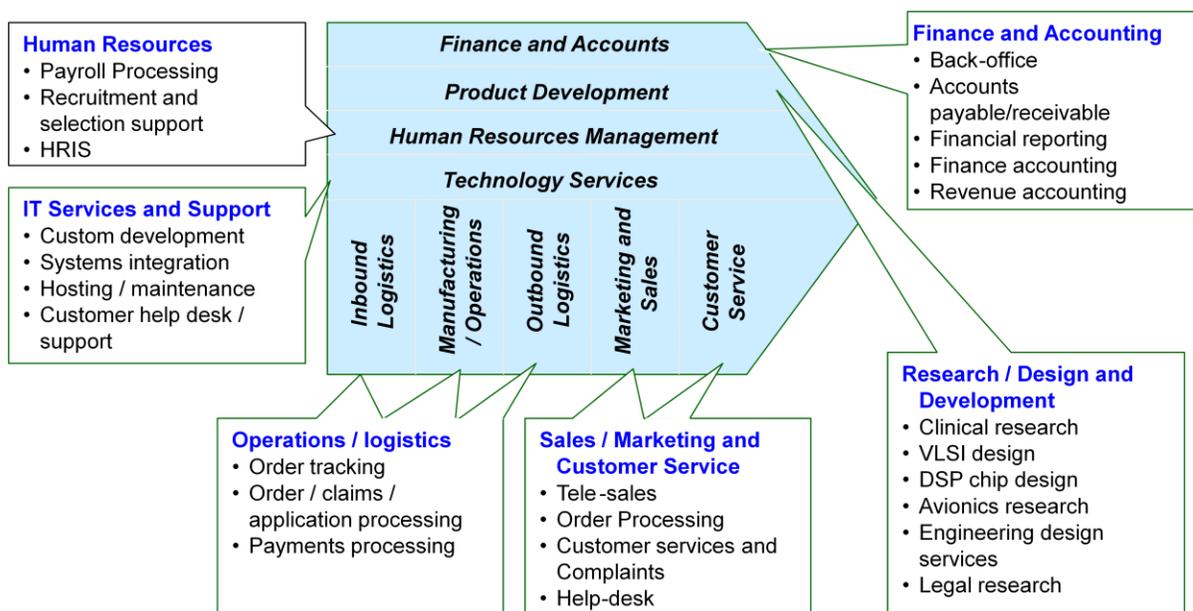
Assuming that the bulk of the investment is made in the first two years and industry revenue grows linearly over the five years to \$200 million with an approximate 10% bottom line profit, the internal rate of return to the economy will be 198%.

A McKinsey study for Indonesia showed a net benefit of \$14,000 per IT/ITES employee to the Gross Domestic Product (GDP). Lowering it to \$10,000/employee for Nepal shows an incremental GDP growth of \$80 million per year. Thus a one-time investment of about \$19 million, can result in a sustainable and ongoing GDP increase of \$80 million. Either methodology makes a compelling financial case for investment.

1. IT/ITES Market Overview

1.1 Market Definition and Segmentation

IT services typically include IT applications and engineering services, while ITES include a wide range of services delivered over electronic networks. In comparison to the manufacturing industry where products are physically visible, the “raw materials” in the IT/ITES industry are data, information and knowledge. IT/ITES consists of broad segments, and service sophistication varies considerably in each. The table below outlines a few representative segments and associated services. It can be seen that virtually all functions that do not require a real-time hand shake with a customer or a supplier can be outsourced.



Source: NASSCOM-KPMG 2004

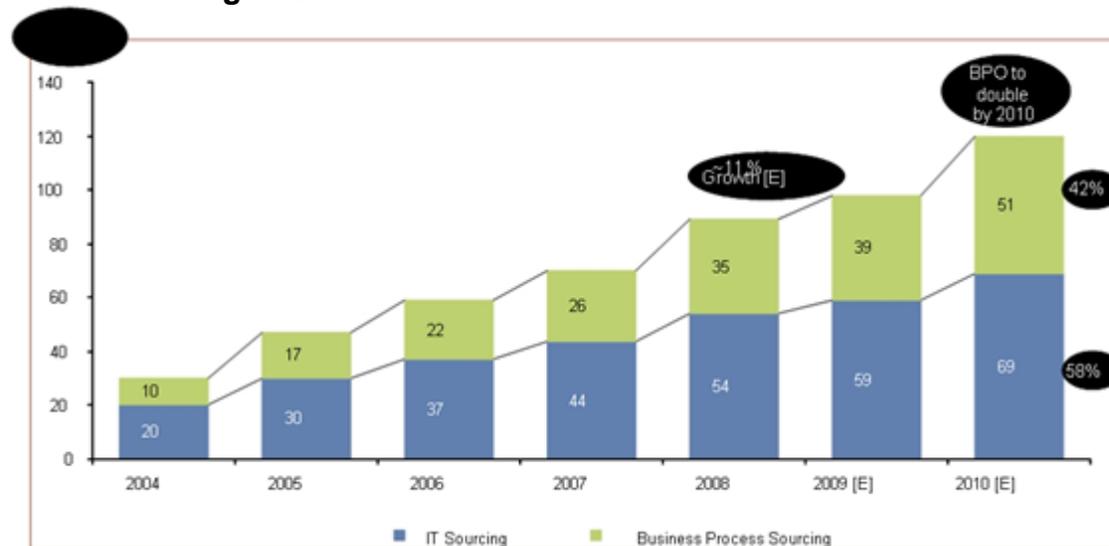
1.2 Market Size

As reported in several studies sponsored by the World Bank, the IT/ITES market is large and growing (Dongier et. al, 2009). According to the McKinsey estimates, the total potential market in 2008 was \$500 billion of which only about 18% had been off-shored. In addition, Gartner Research (2007) estimates that the global market is expected to grow from \$160 billion in 2007 to \$235 billion in 2011. NASSCOM-Everest (2008) estimates the potential to be more than three times that, at \$700–800 billion by 2012. The details of the market profile are available from several reports and are not



reproduced here but it is worth noting that ITES (BPO) market has grown about 300% since 2004 as shown below.

Global Sourcing of Services is forecasted to double between 2007 and 2010



Source: Hewitt chart based on McKinsey data

1.3 Socio-Economic Benefits

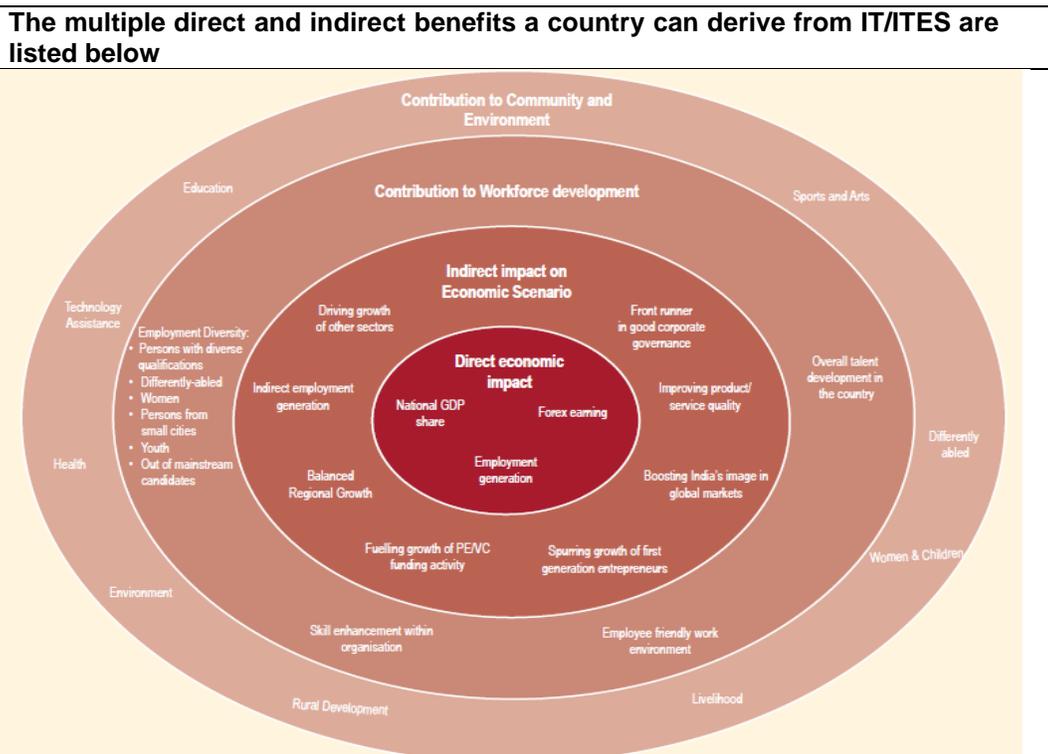
Successful participation can have a major positive impact on Nepal's economic and social development. Some of the socio-economic benefits presented by the industry include¹:

- Enhanced job creation: The ITES-BPO industry is highly labor intensive. Scale is achieved by high deployment of people unlike traditional industries, where growth and development does not necessarily imply an increase in the number of jobs;
- Export revenues: Earnings from services provided to developed markets have become the mainstay for the majority of the ITES-BPO industry in emerging locations. This provides several related benefits as well, including higher wages and skills upgrading;
- Enhancement of education, both quality as well as quantity: IT/ITES industry is talent intensive and requires a large number of educated and qualified resources. In countries where IT/ITES has been successfully launched, it has vastly improved the education system;
- Investment in ICT infrastructure: Positive spillover effects also include improvements in ICT infrastructure and business services, which further lead to increased efficiencies within the domestic economy;
- Increased participation of women in workforce: The ITES-BPO industry also encourages greater female participation in the workforce, unlike traditional,

¹ Hewitt SARS report and various other studies

manufacturing industries. It is estimated that in the Philippines, women comprise 65 percent of the employee pool on average in ITES-BPO organizations. In India, the percentage of women employed in the industry was in the range of 30% and is expected to reach 45% in 2010;

- Creation of ancillary industries: Another significant benefit, which has arisen from the growth of the ITES-BPO industry, is the creation of ancillary service sectors such as transportation, training, catering, etc. In fact, it is estimated that for every direct job created in the ITES-BPO industry, four additional jobs are created in the economy;
- Fiscal, regulatory and legal reforms. Policy reforms are often easier to enact when a “new” export-oriented industry like IT/ITES is targeted, since entrenched special interests are less directly affected than when reforming other sectors;
- Improved competitiveness of local companies through acquisition of best-of-breed business and human resource practices, adoption of international standards, etc.; and
- Re-positioning of the image of a country, bringing about a “branding” effect that can have profound implications.



Source: NASSCOM-Deloitte, 2008

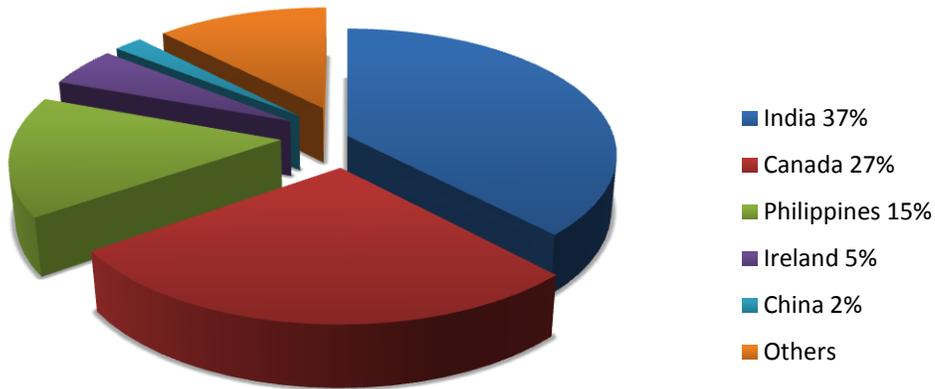
1.3 Competition

The geography of IT/ITES is changing fast. Relatively unknown locations can become important destinations as the number of countries competing for the off-shore market continues to increase. The large untapped market offers enormous opportunities for countries that meet its requirements, and the challenges to participate in this opportunity for Nepal are significant but not insurmountable. As can be seen from the



chart below, the competition is global in scope as countries worldwide are competing for a piece of the lucrative IT/ITES business opportunity.

2007 Market Share



Source: NASSCOM

Various consulting firms produce regular rankings of country attractiveness. The table below for example, outlines A.T. Kearney’s Global Services Location Index that is based on (i) financial attractiveness, (ii) people and skills availability, and (iii) business environment. Many countries have focused on improving their ranking and continue to emerge as possible IT/ITES destinations. Even though Nepal is not yet on the radar of consulting companies, it has several potential advantages that can be further strengthened as described in the next section.



FIGURE: The 2009 A.T. Kearney Global Services Location Index™

Rank	Country	Financial attractiveness	People skills and availability	Business environment	Total score
1	India	3.13	2.48	1.30	6.91
2	China	2.59	2.33	1.37	6.29
3	Malaysia	2.76	1.24	1.97	5.98
4	Thailand	3.05	1.30	1.41	5.77
5	Indonesia	3.23	1.47	0.99	5.69
6	Egypt	3.07	1.20	1.37	5.64
7	Philippines	3.19	1.17	1.24	5.60
8	Chile	2.41	1.20	1.89	5.50
9	Jordan	2.99	0.91	1.59	5.49
10	Vietnam	3.21	1.02	1.24	5.47
11	Mexico	2.48	1.50	1.45	5.43
12	Brazil	2.18	1.83	1.37	5.39
13	Bulgaria	2.83	0.89	1.62	5.34
14	United States	0.47	2.71	2.15	5.33
15	Ghana	3.26	0.70	1.36	5.32
16	Sri Lanka	3.13	0.95	1.17	5.25
17	Tunisia	2.86	0.91	1.45	5.22
18	Estonia	2.06	0.93	2.20	5.19
19	Romania	2.63	0.91	1.58	5.12
20	Pakistan	3.12	1.08	0.91	5.11
21	Lithuania	2.31	0.81	1.99	5.11
22	Latvia	2.28	0.86	1.96	5.10
23	Costa Rica	2.67	0.89	1.50	5.07
24	Jamaica	2.77	0.79	1.49	5.06
25	Mauritius	2.32	0.95	1.77	5.04
26	Senegal	3.06	0.88	1.08	5.03
27	Argentina	2.47	1.34	1.21	5.02
28	Canada	0.54	2.10	2.38	5.02
29	United Arab Emirates	2.10	0.84	2.04	4.98
30	Morocco	2.62	0.93	1.42	4.97
31	United Kingdom	0.43	2.13	2.39	4.94
32	Czech Republic	1.74	1.14	2.07	4.94
33	Russia	2.39	1.45	1.08	4.92
34	Germany	0.42	2.10	2.40	4.91
35	Singapore	0.72	1.55	2.62	4.90
36	Uruguay	2.46	1.00	1.43	4.89
37	Hungary	1.95	1.01	1.92	4.88
38	Poland	1.82	1.22	1.73	4.77
39	South Africa	2.28	1.02	1.44	4.74
40	Slovakia	2.05	0.94	1.75	4.73
41	France	0.40	2.03	2.29	4.72
42	Ukraine	2.63	0.97	0.99	4.58
43	Panama	2.48	0.70	1.40	4.58
44	Turkey	2.01	1.23	1.29	4.54
45	Spain	0.57	1.90	2.00	4.47
46	New Zealand	1.12	1.18	2.15	4.45
47	Australia	0.42	1.62	2.22	4.26
48	Ireland	0.27	1.56	2.26	4.09
49	Israel	0.85	1.39	1.78	4.02
50	Portugal	1.00	1.00	1.97	3.98

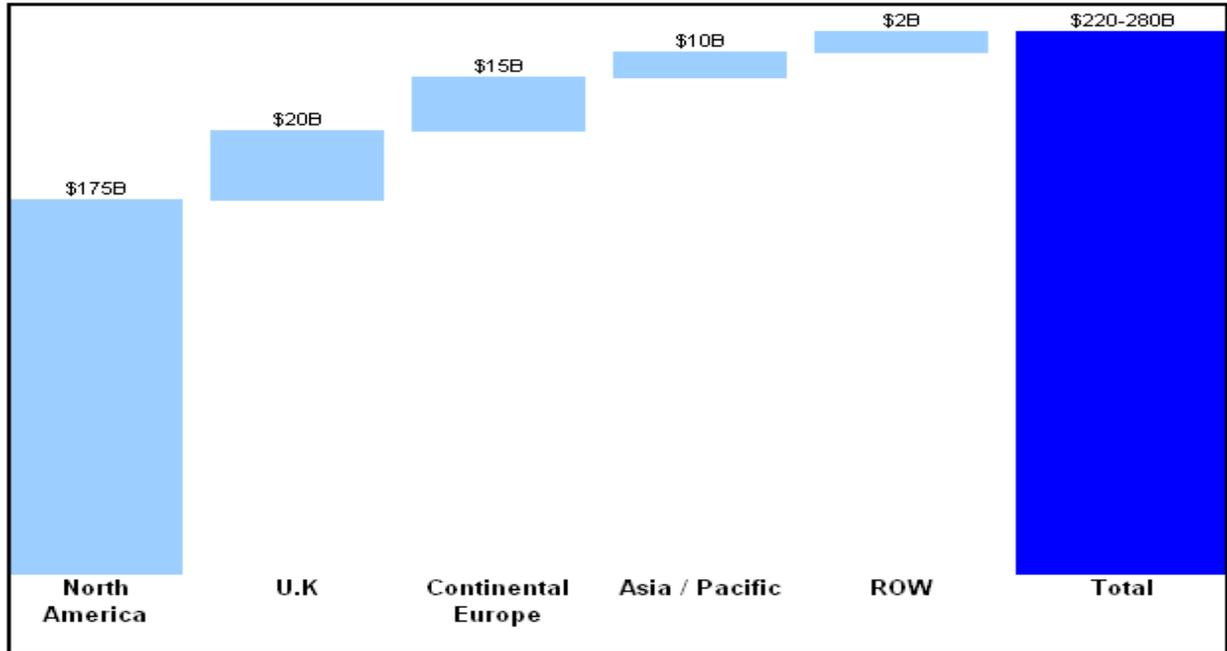
Note: The weight distribution for the three categories is 40:30:30. Financial attractiveness is rated on a scale of 0 to 4, and the categories for people skills and availability, and business environment are on a scale of 0 to 3.

Source: A. T. Kearney



2. Overall Opportunity for Nepal

Geographically, North America presents the largest opportunity (70%) for Nepal as shown below, but India and the Asia/Pacific region also offer unique opportunities for Nepal due to physical proximity, cultural affinity, and tourism-related exposure to Nepal.



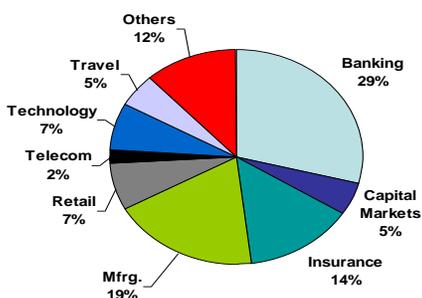
Source: NASSCOM/Everest study, 2007, BPO market only

The easier segment to penetrate for Nepal is the ITES space, also called Business Process Outsourcing (BPO). In ITES:

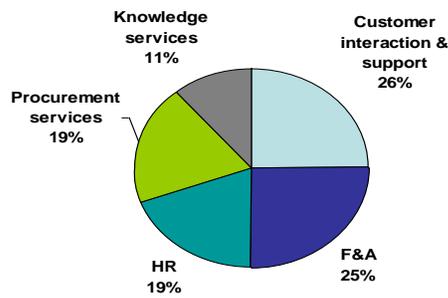
- Most opportunities are in vertical specific services.
- Banking and its related financial sectors represent the largest opportunity segments as shown below. The recent turmoil in this sector has increased incentives to reduce costs.



Addressable ITES Market by Vertical



Addressable ITES Market by Horizontals



Source: NASSCOM-Everest 2008

- Nepal has a good domestic banking industry.
- Back office functions remain the largest opportunity.
- North America remains more open to off-shoring and is the largest geographical segment.
- Nepal should first focus on the following geographies:
 - Middle-sized businesses in North America as these are under penetrated;
 - Australia, New Zealand and Malaysia; and
 - Indian market.
- One or more large “pioneers” should be attracted with special incentives, described later, to gain credibility as a viable destination.

Nepal also has opportunities in many other areas such as back office processes; graphic design, animation, geographical information systems (GIS), medical transcription, web design and technical/customer care support. These should all be pursued, but banking and CMMi 5 certified companies are recommended for scale and visibility.

For healthcare, the area of electronic healthcare records is expected to experience an explosive growth once the standards and protocols are developed in the U.S. By most accounts this will be in about three to four years and will certainly be a significant opportunity for Nepal. The exact nature of the work and training is not yet clear but Nepal will need to watch the developments and be ready to participate.



As mentioned earlier, the IT/ITES industry has significant room to grow. Nepal does not need to necessarily wrest market share from incumbent players to participate. This is because the overall off-shore market is forecasted to grow to at least \$200 billion by 2014. Hence it is proposed that Nepal targets a modest 0.1 percent share of this market i.e. \$200 million in revenue in 5 years' time, as it is not expected that Nepal will be able to jump start activities very rapidly, e.g. setting up an IT park will take at least 2 years. This \$200 million target is developed by balancing various factors such as the current state and constraints, the size of the potential market, realistic assessment of the current political situation in Nepal, and the desire to have a "stretch goal". These factors were considered and agreed by the stakeholders in Nepal.

India is ~ \$47B in revenue and adding:

- ◇ **300,000 employees/year**
- ◇ **\$7B in incremental revenue/year**

Normalized for population, Nepal could be:

- ◇ **\$1.1B in revenue**
- ◇ **80,000 employees**

Source: Team's analysis



Recommended Intermediate Goals for Nepal

Description	Current State	Desired State
IT/ITES Export Volume	\$10 - \$15 million (Estimated)	\$200 million
Employment	1,500 - 2,000 (Estimated)	10,000
IT Park	Unoccupied	Utilized new facility
Talent	8% proficiency in English	15% proficiency in English
College graduates/year	25,000	35,000
Salaries	Attractive	Maintain
Government: Incentives Policies	Minimal IT/ITES unfriendly	Competitive Neutral to positive
Broadband accessibility	Limited and expensive	Competitive and available
Promotion	Unlisted on key indices	Top 30

While 8% proficiency at first glance implies 2,000 employable talent per year, and assumes that all will be needed for the IT/ITES industry to reach the goal of 10,000 jobs in 5 years' time, it should be clarified that:

- 8% proficiency deals with spoken English skills that require limited intervention through on-the-job training. Since most courses are taught in English in Nepal, students already have basic understanding of English and more than 8% can be trained.
- In addition, some of the BPO work does not require much emphasis on spoken English e.g. order entry. In these cases, significantly more students are employable.
- Finally, it is expected that some of the existing workforce employed in other sectors will see the IT/ITES opportunities, and can be attracted.

Based upon this assessment, the 5-year goal to employ 10,000 is attainable.



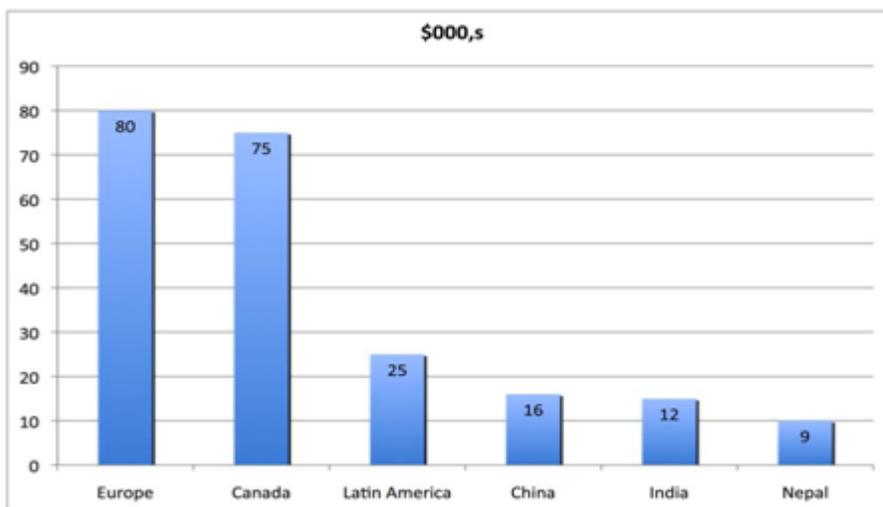
3. Current State: A Mixed Picture

Nepal already has some key advantages. These include:

- Facility with English language;
- Incumbent IT/ITES industry, although very small, has been growing since 2000;
- Estimated export revenues of \$10-15 million;
- Employment of 1,500 – 2,000 in the IT/ITES export sector;
- Key client verticals in banking, capital markets, and insurance;
- Nepal is keen to pursue this emerging opportunity to promote innovation, technology development, establish infrastructure, and offer additional incentives; and
- Nepal already has an edge over labor costs in India and the Philippines.. Some incentives are already available to the foreign companies (US FCS & US DOS, 2009):
 - 100% foreign ownership, and dividend/capital repatriation;
 - Sale of the share of foreign investment;
 - Profit or dividend from foreign investment;
 - Payment of principal and interest on any foreign loan; and
 - Technology transfer fees.
- Other incentives are not yet competitive:
 - SEZ (Special Economic Zone) ordinance is not publicly available so far;
 - No special incentives or tax holidays are offered to the industry; and
 - Trade restrictions regarding imports for the IT/ITES industry.
- The labor employment regulations and power outages are similar to India though bandhs (work stoppages) are a concern.
- Nepal has one of the lowest labor costs as shown below. The recent currency depreciation of the country gives it further advantage.

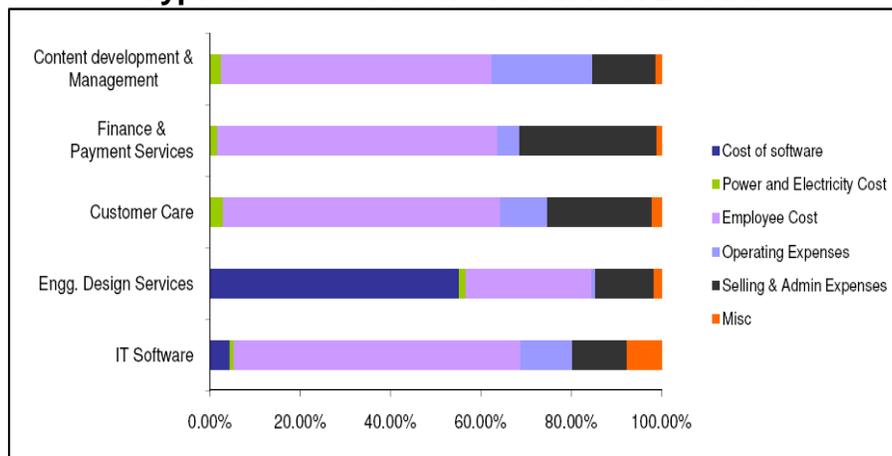


Cost/FTE for BPO Functions



- BPO starting salaries at \$1,800 per year are half of India's, and the gap increases after a tenure of two years.
- Nepal is far less expensive than most other locations for software developers as well. The average annual salary for an IT worker with four years experience in the U.S. is about \$75,000. It is about \$8,000 in India and in Nepal; it is less than \$6,000. Lower labor cost is a major strength, since labor is the largest cost component across most IT/ITES segments as shown below.

Typical Cost Structure for an IT/ITES Firm



Source: DfID, 2008

Nepal's labor quality, however, is uneven and needs to be improved. Unless the country invests in talent development, it will not be able to emerge as a destination in its own right. In addition, Nepal has not yet made progress in moving towards global standards in some areas. For example, the country does not yet have a CMMi level 4 or 5 rated IT company.



Nepal, as a result, needs to address multiple constraints in order to grow the industry 15 fold. As mentioned earlier, there is no lack of demand. The market could almost double in less than five years. But Nepal's advantages in incentives and labor cost could be dissipated due to many real and perceived issues. Many of the structural problems associated with Nepal's ITES sector do not lend themselves to quick solutions. Such problems include:

- Inadequate international promotion;
- Average small size of enterprises in the sector;
- Low levels of M&A activity. As noted earlier, it may require revision of the S57 income tax code;
- Skills deficiencies in project management;
- Poor customer relations and teamwork;
- General lack of experienced middle managers; and
- Failure to implement the 2000 IT Policy.

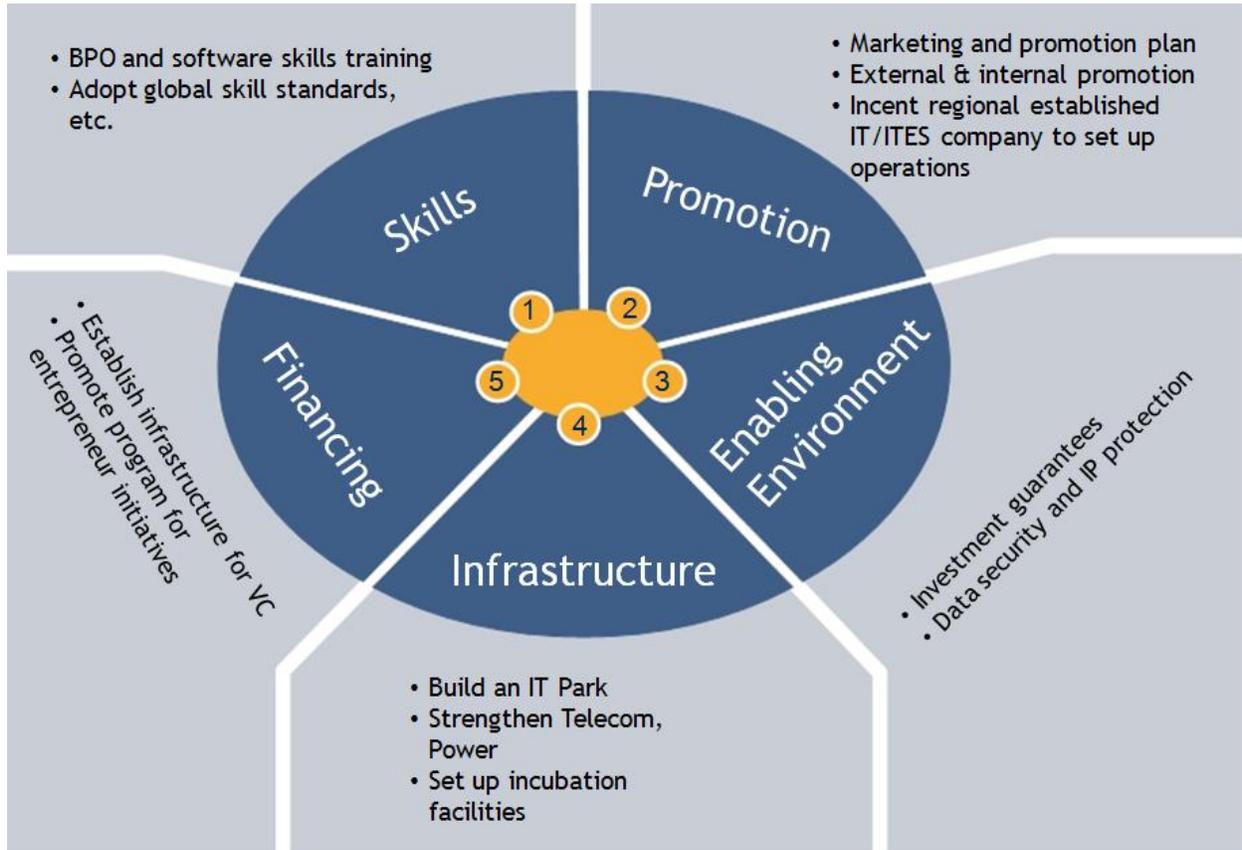
Such circumstances discourage innovation, and potentially high reward or high-risk ventures. The GON seems to be committed to act as a powerful catalyst for addressing these issues, and those that need to be addressed as a matter of high priority include:

- External perception of Nepal is neutral to unfavorable, and the recent political events and "bandhs" cause a concern;
- The quality of resource pool is uneven. This is true in India as well but India has the volume - the sheer number of graduates – advantage from which to source talent;
- The incumbent companies have limited know-how on developing external export markets; and
- Physical IT infrastructure is modest in areas such as IT Parks, power supply and reliable telecommunications; and
- There is difficulty in funding start-ups either through venture capital (VC) or banks.

A sustainable economic model will require that Nepal addresses the five challenges listed below. If Nepal does, it could grow into one of the key secondary outsourcing countries. Vietnam, Ghana and other countries are also focused on these opportunities and are likely to sprint ahead unless Nepal acts with a sense of urgency.



Potential Initiatives for Nepal





4. Program Overview and Description

4.1 Program Overview

It is recommended for Nepal to take a strategic, systematic, and gradual approach to IT/ITES industry development. Hence, it is anticipated that a 5-year program with 3 phases will be needed; and the scope, sequence, and timelines is illustrated in the simplified table below:

Year	1				2				3				4				5				
Quarter	Q1	Q2	Q3	Q4																	
Phase 1: Strategizing, Planning, and Quick-Wins																					
Skills Development Planning	←→																				
Industry Promotion Planning	←→																				
Confirm Plans for Other Areas of Industry Development	←→																				
Identifying and Implementing Quick-Wins	←→																				
Phase 2: Implementing Action Plans																					
Implementing Priority Action Plans		←→																			
Implementing Remaining Action Plans			←→																		
Phase 3: Completion and Monitoring																					
Completion of Implementation																	←→				
Evaluation																		←→			

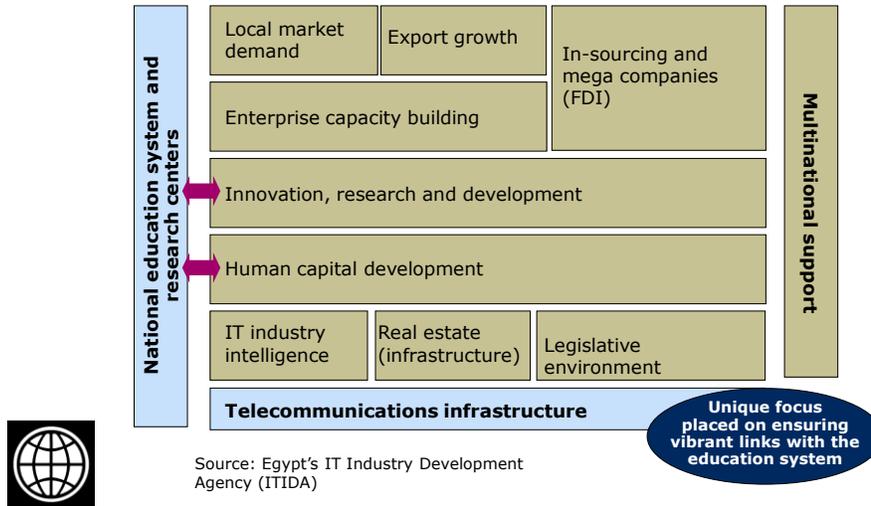
The starting point of the industry development program is to conduct skills development and industry promotion planning. These are deemed necessary as they are the main areas of challenge for Nepal’s IT/ITES industry, and will constitute the bulk of the activities for the program. The detailed planning processes for these two areas will also involve close collaboration with the local stakeholders - in order to solicit their inputs, and gain ownership by the constituents. The other areas of this program (infrastructure, enabling environment, and financing) do not constitute a significant portion of the proposed program, and could be reconfirmed at the start of the program by the project team. Other actions (such as security and power) are outside the feasible scope of the program.

It may be mentioned here that most successful countries have pursued a holistic approach to IT/ITES industry development. For example, Egypt, which has been very successful in quickly improving its position in global rankings, has adopted a holistic framework for developing its industry (refer to diagram below). This could also be used by Nepal to organize the recommendations and actions by relevant strategic groupings.

The scope, sequence, and timelines above need to be developed during the program preparation process, and professional consultancy firms with relevant expertise and experiences could be engaged for each of these planning processes. The following provides a brief description of Phase 1.



Holistic approach: ITIDA’s Strategy Framework

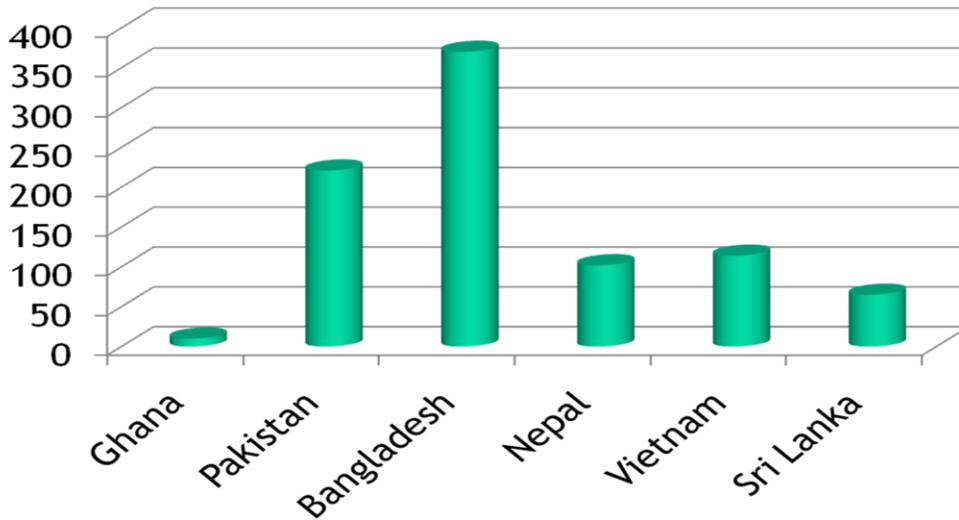


4.2 Skills Development Planning

The purpose of the skills development planning process is to develop a suitable talent base for supporting the industry, and for attracting IT/ITES companies to set up in Nepal. This planning process should be designed based on the needs of the industry, in order to create an internationally bench-marked talent pool in the country.

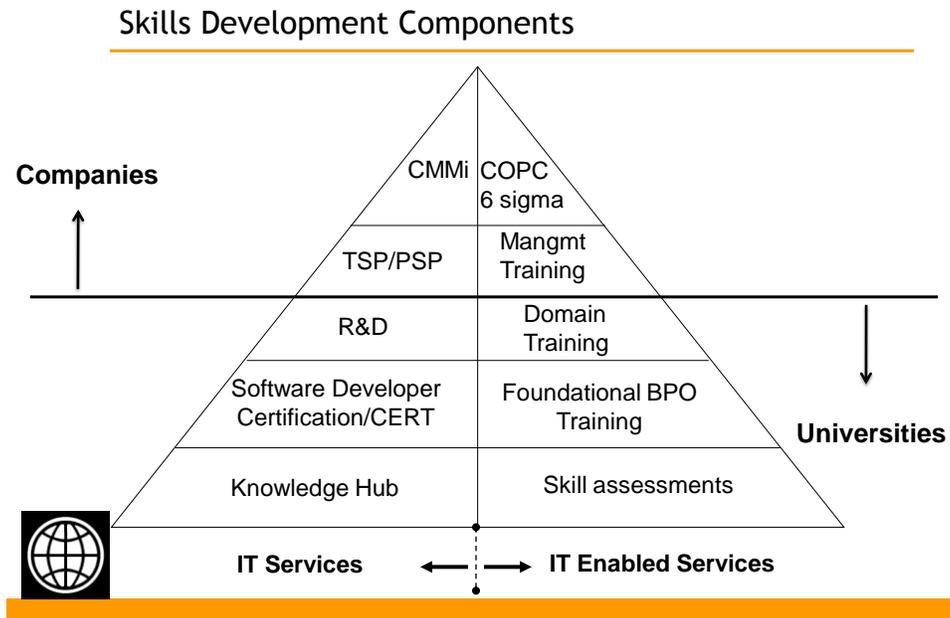
Even though Nepal has a similar graduates-to-population ratio to India, the country is somewhat disadvantaged in the number of graduates given its small size (refer to chart below). The other emerging destinations in South Asia have a slightly higher enrollment. Nepal, will therefore, need to invest in both the quality, as well as quantity, of education to bridge the talent gap.

Nepal enrollment: 102K, graduates: 25K/year, English fluency 8%.



Source: Team's analysis

The prioritized skills development actions are focused on BPO and software skills training, assessment, and certification; so that the industry has a competitive and ready pool of talent. The following diagram illustrates a possible approach:



Source: World Bank

The diagram presents a framework currently under development as part of a Global ICT Skills initiative taken up by the World Bank in partnership with leading global



companies. Each part of the pyramid is being developed as a module based on three criteria namely: (i) employability, (ii) industry alignment, and (iii) industry participation. On the ITES side for example, skill assessments are proposed to be carried out by a firm that has conducted more than 100,000 assessments in the previous year, and has a database of the skill profiles of candidates successfully hired into global ITES firms. Carrying out assessments that are benchmarked against the profiles of candidates who were successfully hired by global firms can provide a clear picture on the quality of the talent pool available in any given country, and offer insights into areas where skills need to improve. Similarly the module on Foundational BPO Training is based on training and certification of trainers and students by leading global ITES firms rather than pure training companies. Such training is extremely important as it can potentially be used as a hook to attract leading ITES companies to invest in the country, once they have trained and certified their trainers and students.

A number of countries are participating in the development of the framework through piloting of different modules. For example the module on skills assessment is being piloted in Nigeria, while the module on Foundational Training is being piloted in Kenya. Kenya is also piloting the Software Developer Certification program, which seeks to create a global certification through a leading international university. The examination consists of the candidate performing a series of transformations on source code that demonstrates his/her ability to modify, develop, build, test, and debug software in a particular programming language, for a particular environment and application domain (e.g. C, POSIX, and networking). The candidate might be asked, for example, to detect and eliminate existing defects in the software, perform preventative maintenance, and add new capabilities to the system. The resulting code can then be evaluated for completeness, correctness, performance, maintainability, reliability, robustness, and security. Such an approach is likely to raise the quality of software developers in Nepal to global standards, and the certification program will allow leading companies to base their hiring decisions on the qualified talent pool.

Similarly, Mexico is rolling out training in Team Software Process and Personal Software Process in order to create the world's largest pool of TSP/PSP trained professionals. Having such professionals makes it much easier and cheaper to acquire CMMi certification.

The module on R&D requires a partnership between leading companies and universities on cutting edge technologies. For example, IBM is in discussion with the Nigerian government to establish a "Collaboratory" focusing on mobile applications and technologies.

The above framework is presented as an example of the type of initiatives that other countries are pursuing for skills development. Nepal could potentially benefit from adopting and customizing such global initiatives.



4.3 Industry Promotion Planning

The purpose of this planning process is to develop a strategic, comprehensive, and prioritized approach to industry promotion. Nepal needs then, to promote the industry aggressively both internally and externally to increase awareness and interest that the country is open for business, and to be able to conduct direct business development engagements with potential clients, especially the large MNCs and regional IT/ITES companies. The Nepalese government and the private sector will have a significant role in IT/ITES industry promotion as governments in successful countries have undertaken aggressive and often top-level driven activities to promote the sector. Hence, it is proposed for the country to engage business planning, marketing, business development expertise with domain knowledge of the IT/ITES industry; in order to provide advice and assist the government in this process. For promotion, the plan should cover relevant tools related to:

- a. Marketing collaterals in terms of brochures, newsletters, flyers, etc.;
- b. Advertising in the form of print (magazines, trade journals, programs for events), broadcast (Internet, radio or TV as appropriate), direct mail, etc.;
- c. Promotional activities such as trade shows, fairs, sponsorships, etc.;
- d. Public speeches at international IT/ITES events and conferences; and
- e. Media relations campaigns for relationships with relevant trade magazines and newspapers, and includes developing press releases and press kits, etc.

It must be mentioned however, that in a world where different countries are vying for the IT/ITES market opportunity, it will be important for Nepal to differentiate itself from the crowd. Nepal needs to take credible actions and adopt strategies that can attract global attention. However, such marketing, advertising, and promotional activities are not expected to succeed unless there is a clear and unique value proposition to be offered.

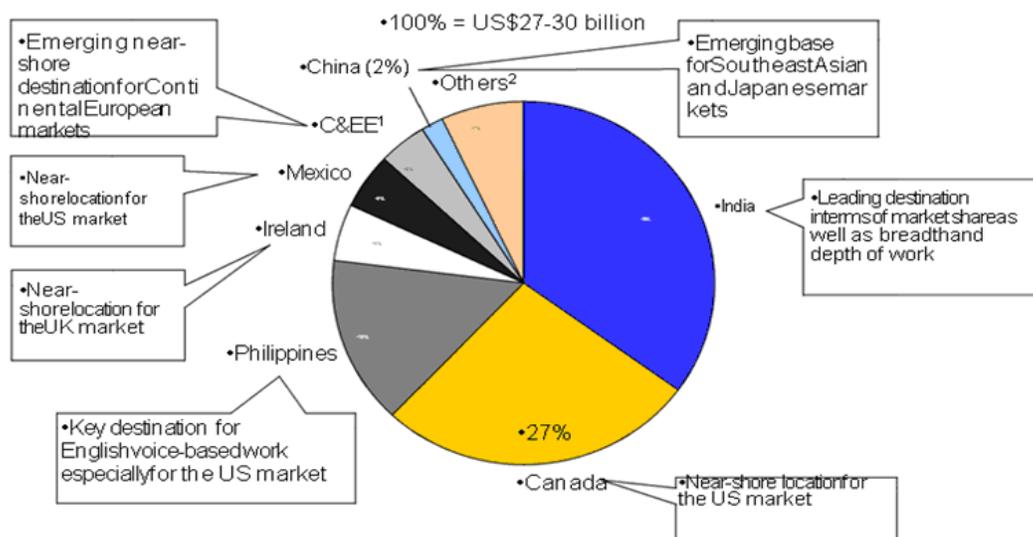
Hence, the plan will identify strategic IT/ITES segments, value propositions, target clients, etc. to guide the promotional process. It is important to have this strategic focus because there are many opportunities in the IT/ITES market, and new entrants such as Nepal, have many paths they could follow. In the segment identification processes, Nepal might also attempt to identify segments where they have industry or domain knowledge due to their location advantage, such as a focus on IT/ITES segments related to tourism and snow since these are unique factors for Nepal. Finland, for example, is attempting to leverage its location advantage to focus on certain technologies. Snowpolis in Vuokatti focuses on wellness, sports, and winter technologies. Nepal could similarly exploit its location advantage by attracting, for example, over the long term, green data centers. These could use renewable hydro power and be located in snowbound locations. This would of course entail significant infrastructural improvements. However, the fact that Nepal has certain location advantages and should take steps to capitalize on such advantages is a point worth mentioning. In addition, the industry development plan could also provide innovative approaches for attracting businesses, such as establishing joint training programs with potential client companies to incent them to Nepal.



The government should also develop a unique, credible, and attractive brand and slogan for the country in the industry promotion process. This could be developed with the assistance of relevant expertise, be aligned with the country's value proposition, and addresses the interests and needs of the target clients. For example, A slogan like "Nepal the Exciting Technology (NExT) Destination" could result in a new industry promotion organization being branded as NExT.

In addition to marketing, it is also important for the country to be able to engage directly with large potential clients through business development activities, both at the government and individual company-level. For example, the highest level of government in Andhra Pradesh took a visionary, committed, and proactive approach to industry promotion. They engaged directly with large potential clients, tailored solutions in their offerings to each client's specific requirements, and followed up closely on opportunities from potential to closure. Hence, it is proposed that Nepal develop similar high-level government champions and business development capacity in the public sector for these types of direct engagements with large potential clients. In addition, it is important for Nepal to develop the private sector's business development capacity, in order for the local IT/ITES companies to be able to engage their foreign counterparts productively for business opportunities and growth.

Many countries are vying for the offshore delivery of business processes



Source: NASSCOM/Everest 2007 study. Data is for ITES only.

A variety of approaches can be taken to determine the strategic focus, and the sample table below provides a possible approach based on:



Service Segments: IT/ITES industry is very broad with multiple segments; Nepal, therefore, needs to prioritize target segments based upon consideration of existing domain knowledge and locational advantages.

Complexity: Nepal could target segments with lower level complexity due to the current level of technological proficiency of talent, and prepare itself to move up the ladder for more complicated projects in the close future.

Operational Size: Smaller-scale operations in the short term are more realistic due to the lack of qualified resources to support large operations of 1,000 - 2,000 employees. Nepal could promote itself aggressively once talent availability increases.

Market/Customers: Focus on the typical big markets including U.S. and Europe since they have diverse needs, and identify niche geographic markets where Nepal might have a competitive advantage.

Table 12: Competitiveness and Attractiveness Matrix		
Market Segments	Competitive Position	Market Attractiveness
Software Development	<p><u>Medium to High</u></p> <ul style="list-style-type: none"> ▪ Good value talent for standard of software development (cost competitive and acceptable basic quality) ▪ Moderate supply of good quality computer science graduates ▪ Limited experience in complex solutions and advanced business practices/processes ▪ Bandwidth performance and redundancy not critical ▪ Lowest cost services for specialty customers due to good quality software development talent 	<p><u>Medium to High</u></p> <ul style="list-style-type: none"> ▪ Large market with various niche possibilities in terms of vertical applications, or lower-end development for less complex solutions such as: ▪ Web & mobile content development ▪ Back office software, Animation, Desktop publishing
Data Digitization, Processing & Conversion	<p><u>Medium</u></p> <ul style="list-style-type: none"> ▪ Abundant supply of inexpensive, low-skilled, production-oriented workers ▪ Short training time suits local labor dynamics ▪ Medium to high bandwidth requirements 	<p><u>Medium</u></p> <ul style="list-style-type: none"> ▪ Large overseas market with high growth rates ▪ Crowded industry becoming very competitive and commoditized

4.4 Reconfirm Plans for Other Areas

The following describes the plans that could be utilized for the other 3 areas of IT/ITES industry development program in Nepal, and could be reconfirmed during the start of the program by the project team.



4.4.1 Infrastructure

The success of the Stanford Industrial Park (later Stanford Research Park) which morphed into what is now Silicon Valley has further inspired some governments to establish or facilitate the setting up of IT Parks with ambitions beyond provision of basic infrastructure. In Nepal, IT parks will help to:

- Cluster knowledge based businesses;
- Provide infrastructure and HR talent more efficiently than a dispersed model;
- Provide a one-stop shop for administration, training, legal and financial services; and
- Help in promoting venture capital, synergies, and policy formulation.

Choice of site location is one of the most critical decisions in the development of an IT Park. The current IT Park, assessed against the critical considerations, does not score well as shown below:

Criteria	Assessment	Comments
Close to a main population centre with adequate amenities; including education, housing, hospitals, entertainment, shopping etc.	Negative	The site is remote and can take up to 2 hours to reach
Linked by good public transport system, and be close to major road arterial systems	Negative	The road is being widened but it will still take excessive time from the population centers
Close to universities/third level educational institutions	Positive	Is close to a reputable university
Easy and close access to an airport, preferably an international airport	Negative	
Offers balance between buildings and open area, with scope for landscaping in order to create a park-like ambience	Positive	Seems to have additional area for expansion
Cost of land must be acceptable and not excessive, and there must be scope for future expansion	Neutral	
High quality telecommunications available, with self healing loops to ensure “redundancy” availability in the event of loss of main source	Negative	The site does not seem to have redundancy

Source: Team's analysis

Based upon the above criteria, the current IT Park is unsuitable for the growth of the industry and as a consequence it remains unoccupied. Until a suitable IT Park can be developed, it is recommended that Nepal grant ‘Special Economic Zone’ or a virtual IT Park status to establishments that export IT/ITES-related services. This is similar to what India has done under the STPI policy (the specifics of the STPI policy are highlighted in



the box below). Nepal could also take a futuristic approach to the development of IT parks; hence the proposed study could also examine the possibility of including research hotels, disposable parks, mobile incubators, etc.

Policy and Benefits of the Software Technology Parks (STP) of India

The STP scheme is a 100 percent export-oriented scheme for the development and export of computer software, including export of professional services using communication links or physical media. This scheme is unique in its nature as it focuses on one product/sector, i.e. computer software. The scheme integrates the government concept of 100 percent Export Oriented Units (EOUs) and Export Processing Zones (EPZs), and the concept of Science Parks/Technology Parks operating elsewhere in the world.

"The unique feature of the STP scheme is the provisioning of single-point contact services for member units, enabling them to conduct exports operations at a pace commensurate with international practices."

Scheme's Benefits & Highlights

- Approvals are given under single window clearance scheme.
- A company can set up STP unit anywhere in India.
- Jurisdictional STPI authorities clear projects costing less than Rs.100 million with Indian investments.
- 100% foreign equity is permitted.
- All the imports of hardware & software in the STP units are completely duty free, and import of second hand capital goods is also permitted.
- Re-export of capital goods is also permitted.
- Simplified minimum export performance norms i.e., " Positive Net Foreign Exchange Earnings"
- Use of computer system for commercial training purposes is permissible, subject to the condition that no computer terminals are installed outside the STP premises.
- The sales in the Domestic Tariff Area (DTA) shall be permissible up to 50% of the export in value terms.
- STP units are exempted from payment of corporate income tax up to 2010.
- The capital goods purchased from the Domestic Tariff Area (DTA) are entitled for benefits, such as exemption of excise duty and reimbursement of Central Sales Tax (CST).
- Capital invested by foreign entrepreneurs, know-how fees, royalty, dividend etc., can be freely repatriated after payment of income taxes due on them, if any.
- Items such as computers and computer peripherals can be donated to recognized, non-commercial educational institutions; registered charitable hospitals; public libraries; public funded research and development establishments; organizations of the government of India; etc.; without payment of any duties after two years of their import.
- 100% depreciation on capital goods over a period of five years.



Source: Ministry of Communications and IT, Government of India at http://www.stpi.in/STP_Scheme.htm

Nepal also needs to develop infrastructure in several other areas:

- Physical, e.g. reliable telecommunications, uninterrupted power supply, and security;
- Legal framework;
- Technical and logistical support.

Many of these fundamental issues are interlinked and add to the complexity of defining a way forward. The proposed actions are detailed in Section 6. With the exception of broadband redundancy and higher reliability (refer to action A.3.1 below), other actions can wait and only their study is suggested at this time.



4.4.2 Enabling Environment

The general business and living environment of a country—government policies toward foreign direct investment (FDI), incidence of corruption, labor laws, ease of travel to and from the country, and general quality of life—are also important in a company’s decision about whether to invest there. There are numerous cases of countries offering special status for IT/ITES investors to speed them through the formalities and insulate them from the more difficult aspects of doing business (Dongier et. al, 2009).

Government roles could cover various areas that could be specific (enabling MNCs to cut through red tape) and general (negotiate for increased trade in services through the World Trade Organization, tax treaties, reciprocal market opening steps, removing visa restrictions where appropriate, etc.). The Agency to Promote and Facilitate Investments in Remote Services and Technology (APFIRST) in Andhra Pradesh in India; and the IDA in Ireland, for example, cut through red tape to help IT/ITES companies start local operations, while the broader business environment strengthened more slowly (Dongier et. al, 2009). Hence, the Nepalese government could also take such a proactive role to support the industry’s growth.

In addition, companies doing outsourcing typically focus initially on external risk factors, such as vendor stability, off-shore country stability, and security; and here Nepal scores neutral to negative due to work stoppages called ‘Bandhs’ (BMI, 2008).

There is also a vague perception of low levels of intellectual property (IP) and data security protection. IT/ITES investors typically care deeply about a range of “on-line” issues; and chief among them are ensuring the legal validity of online transactions, data security and data privacy protection, IP protection and safeguards against misuse of computing infrastructure (e.g. cyber crime). Similar issues in India do not seem to elicit similar perceptions. As a background, Nepal’s “Electronic Transaction and Digital Signature Act (ETDSA) – 2061” was promulgated as an ordinance some years ago. The ordinance included provisions on computer crimes, data protection and privacy, and intellectual property. Nepal therefore has the legal framework to deal with cyber security in place. Nepal also has NepCERT, the national Computer Emergency Response Team. However, it might be necessary for the government to have a fresh look at the whole issue of cyber security. This is an area that will become increasingly important in the future and Nepal would do well to focus on this, while designing its strategies to grow the IT/ITES sector.

While the physical security was not assessed during the mission, and is beyond the scope of this project, Nepal should consider a study on the possibility of overcoming this issue. In addition, existing labor practices could be reexamined based on international experiences, such as those in India and Singapore (refer to box below).



Labor practices in India, Malaysia, and Singapore

Some state governments in India have declared IT/ITES as “Public Utility Services”, e.g. West Bengal. This imposes certain restraints on the right to strike under the Industrial Disputes Act 1947. For example, members of a public utility service cannot go on strike "during the pendency of any conciliation proceedings before a conciliation officer". Further, a public utility service can be declared to be an essential service by mere notification in the official gazette. Once declared as an essential service, government can prohibit strikes under the Essential Services Maintenance Act 1981.

Another example is from Malaysia. Under Malaysian law, unionization is prohibited in respect of "Pioneer Industries" for the first 10 years. According to the Malaysian Industrial Development Authority, companies undertaking ICT and multimedia activities have been conferred "Pioneer Status" as part of various incentives provided to the industry.

For Singapore in mid-1968, in an attempt to woo private foreign investment, Prime Minister Lee Kuan Yew successfully pushed through Parliament a new employment bill and amendments to the 1960 Industrial Relations Act. In order to make factors such as working hours, conditions of service, and fringe benefits predictable, and thus make businesses sufficiently attractive for investors, trade unions were barred from negotiating such matters as promotion, transfer, employment, dismissal, retrenchment, and reinstatement, issues that accounted for most earlier labor disputes". "In the 1982 Amendment to the Trade Union Act, the role of trade unions was defined as promoting good industrial relations between workers and employers; improving working conditions; and improving productivity for the mutual benefit of workers, employers, and the country".

Sources: *Financial Express*. 2003. "Public Utility Service" Provider for All Bengal IT Cos.

<http://www.financialexpress.com/news/public-utility-service-provider-status-for-all-bengal-it-cos/93182/>;

For Malaysian laws, please refer to <http://bit.ly/8IXDWM> and <http://bit.ly/93fVUe>.

Federal Research Division of the Library of Congress. "Country Study Series – Singapore". [http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field\(DOCID+sq0079\)](http://lcweb2.loc.gov/cgi-bin/query/r?frd/cstdy:@field(DOCID+sq0079))

4.4.3 Financing

Generally, mainstream venture funds avoid high risk markets. But most funds have a “herd” mentality and therefore, Nepal needs some momentum in attracting off-shoring business before it can successfully pitch to the mainstream venture funds. The industry’s long term growth requires nurturing of innovations and individual entrepreneurs through venture financing, and the proposed actions are included in Section 6.

4.5 Identifying and Implementing Quick Wins

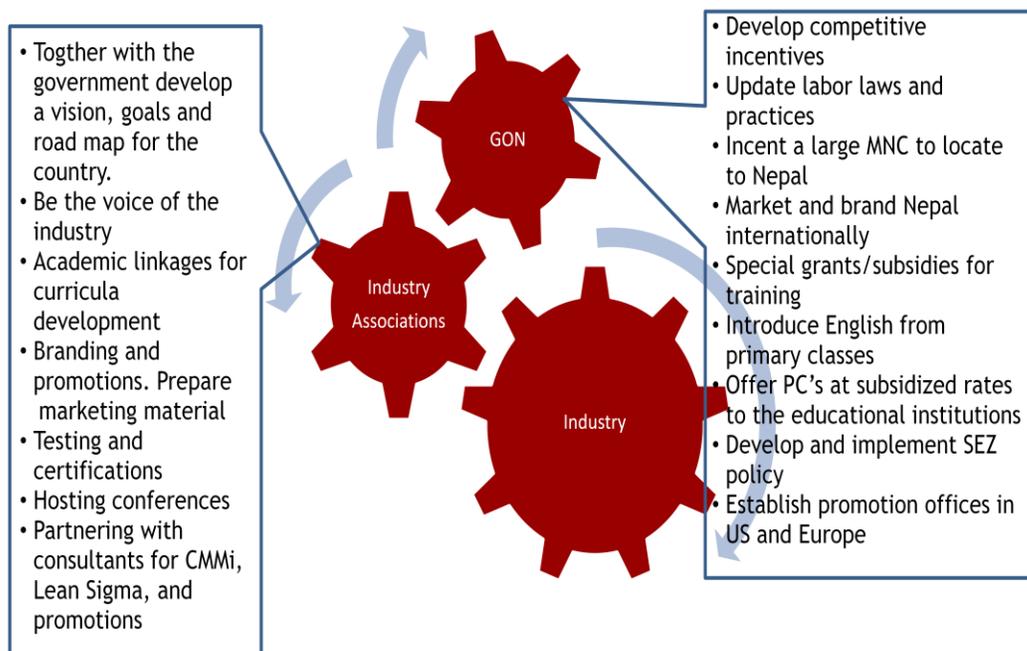
Phase 1 of the industry development program will also identify and implement quick wins. These quick wins will consist of limited activities that have high and immediate impact on the industry, and have demonstration effects for interested stakeholders. Some examples of quick wins include provision of limited subsidies for specified IT/ITES training, declaring suitable buildings as software technology parks to cater to immediate demands, and organization of business development trips for local IT/ITES companies to relevant international fairs and conferences.

4.6 Program Investment and Implementation Roles

The proposed program is estimated to cost \$19,250,000 over a 5-year period, as illustrated in the table below:

Phase	Action Description	Estimated Investment (USD)
1	Planning for Skills Development and Industry Promotion	\$600,000
2	Implementation of Actions Identified (detailed estimates are provided in the next section, and includes cost of quick wins)	\$18,500,000
3	Program Evaluation	\$150,000
Grand Total		\$19,250,000

Given the magnitude of the actions, neither the government nor the industry can implement them alone. Both have roles to play until the industry reaches an inflection point. Several countries have tried PPPs to address such challenges and the proposed model for Nepal is shown below:



The role of GON will diminish over time as Industry Association matures

Source: Team's analysis

The formation of the PPP will require the strengthening and resourcing of the High Level Committee on Information Technology (HLCIT). It will also require the inclusion and



institutional capacity-building of CAN, FNCC, and other organizations such as the IT Professionals Forum (ITPF) and National Information Technology Center (NITC); to co-drive the initiative and support the implementation.

The rights and responsibilities of each party in a joint Government and private sector partnership will be determined by the shareholders' agreement and other relevant documents. In this case, the Government will most likely be responsible for policy and regulatory issues, while the private sector will take responsibility for the promotion, development and management of the actions on a day-to-day basis.

The PPP, once formed, will need to socialize the recommendations across all constituents in Nepal to ensure that there is an agreement on the market opportunity, key actions, funding and the next steps. This will help prioritize the actions, assign responsibilities and allocate resources. A number of actions can be performed concurrently, and some may require "stroke of the pen" actions such as approval of laws, regulations and incentives.



5. Summary of Possible Actions and Investments

The planning processes above should yield action items for all of the 5 areas identified. These actions would be prioritized and sequenced for gradual implementation over the program years. Section 6 will provide the detailed description and investment estimates for these actions, and the table below provides a summary view:

Reference Section	Action Description	Estimated Investment (USD)	
		Breakdown	Subtotals
4.2	Planning for Skills Development and Industry Promotion		\$600,000
6.1	Implementation: Skills Development		\$14,110,000
1	Special scholarships, or subsidies, for ITES-BPO and software courses and training	\$5,040,000	
2	Special grants to get specialized 'train the trainers' from abroad – especially for CMMi and Lean Sigma	\$150,000	
3	To be at par with other off-shore locations, Nepal needs to have its ITES companies adopting globally accepted certifications. If the perception of low quality is established early on in the process, it will be difficult to overcome and would require significantly more investments eventually	\$550,000	
4	Development of national assessment and certification standard for ITES-BPO industry	\$1,500,000	
5	Competency assessment framework and certifications by national bodies to highlight areas for improvement, allowing customization for further training	\$100,000	
6	Management and business training: The top and middle management of IT/ITES companies should be trained on marketing, sales, and leadership skills to compete in the global marketplace	\$500,000	
7	PPP should add directors to its board from Ministry of Education, HRD, labor and employment agencies, and representatives of the central body of universities, and if possible, key VCs of universities	\$0	
8	Collaboration with academic institutions for course design and implementation	\$50,000	
9	Introduction of basic IT courses in primary and secondary education, and specialized courses in colleges in line with ITES-BPO industry needs	\$620,000	
10	Introduction of English as a mandatory medium of education, or as a primary subject combined with efforts promoting spoken English from primary school level	\$1,450,000	
11	Provision of IT related equipment (computers, software etc.) at no charge, or at subsidized rates for educational institutions	\$4,150,000	
6.2	Implementation: Industry Promotion		\$2,665,000
1	Internally launch a national drive, headed by PPP to promote IT/ITES revenue using a catchy slogan	\$125,000	
2	Externally publicize that Nepal is open to business by highlighting incentives and other advantages through	\$700,000	



	multiple channels		
3	Fund industry associations for industry promotion using a PPP approach	\$1,020,000	
4	PPP to develop relationships with IT/ITES analysts or advisory groups to validate Nepal's capability in servicing BPO/ITES requirements, and place Nepal on key off-shoring indexes	\$100,000	
5	Leverage proximity with established neighbors in IT/ITES. Incent a pioneer MNC in the banking sector to establish operations in Nepal. Also, incent an large regional company to establish presence in Nepal. Offer negotiated investment incentives for MNCs that create immediate employment in excess of 500. One such incentive could be free land to the first 10 companies that bring in employment in excess of 500 each over three years. This will reduce the need for a larger IT park	\$480,000	
6	Develop IT/ITES champion in government, and build up business development capacity in Government	\$240,000	
6.3	Implementation: Infrastructure		\$1,140,000
1	Declare suitable private and public sector buildings into Software Technology Parks to address immediate demand of IT/ITES companies for office space at affordable rates	\$0	
2	Provision of telecommunications redundancy on fiber with end-to-end, service level agreements providing at least 99.996 percent uptime	\$1,015,000	
3	Study on strengthening general power infrastructure	\$25,000	
4	Study on establishing ICT incubator facilities, as a part of leading large universities to provide necessary support infrastructure and advisory services to ITES-BPO start-ups	\$100,000	
6.4	Implementation: Enabling Environment		\$135,000
1	Implement standards for data security and intellectual property at multiple levels to alleviate security concerns associated with Nepal	\$100,000	
2	Apply favorable industry and labor law provisions to the IT/ITES industry	\$35,000	
6.5	Implementation: Financing		\$450,000
1	Establish infrastructure to attract VC funds	\$260,000	
2	Promote a program for entrepreneurial initiatives	\$190,000	
-	Program Evaluation		\$150,000
GRAND TOTAL			\$19,250,000



6. Details of Possible Actions and Investments

The following are the detailed description of the actions that could be undertaken for developing Nepal's IT/ITES industry. The actions cut across the five areas identified, and are selected initially based on the following criteria:

- Size of investment;
- Impact on 5-year goals;
- Political considerations and government involvement; and
- Complexity and time to implement.

The actions for skills development and industry promotion will have to be confirmed and prioritized based on their associated planning processes in Phase 1 of the program; while the actions for infrastructure, enabling environment, and financing could be confirmed at the start of the program by the project team.

6.1 Skills Development

Action # 6.1.1	Special scholarships or subsidies for ITES-BPO skills and SW courses.					
Rationale	Increase the quality and quantity of trained technical expertise					
Details	A number of countries are providing training grants for this purpose. South Africa offers a Training and Skills Support Grant towards the costs of company-specific training up to \$1,700 per agent. The President of the Philippines directed the Technical Education and Skills Development Agency to allocate \$8 million to provide scholarships for training 70,000 call center agents. The training capacity of Nepal IT/ITES Training Institutes would need to be assessed.					
Priority	High					
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Agreement with International/Nepalese Training Institutes ▪ Marketing Drive ▪ Selection of Candidates ▪ Conduct of Training <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of Applicants, trainees, and trained ▪ Feedback post course ▪ Feedback one year later 					
Responsibility	PPP					
Timing	Year 1 to Year 5.					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Training: Software Developers & Call Center Agents	Training grants	\$400 per trainee	10,000 trainees over 4 years	2	\$4,000,000
		Marketing: Paper Media	\$30,000/ year	1 campaign /year		\$120,000
		Marketing: Electronic Media	\$30,000/ year			\$120,000



	Marketing: Internet Media	\$20,000/ year			\$80,000
	Admin: Project Manager-Evangelizer	\$2,500/ month	1 person		\$120,000
	Admin: Regional Coordinator	\$650/ month	6 persons		\$188,000
	Admin: National Coordinator	\$650/ month	3 persons		\$94,000
	Admin: Rent / Utilities	\$4,000/ month	1		\$192,000
	Admin: Travel	\$2,000/ month	1		\$96,000
	CAPEX: Laptops, Printers, Furniture, Fixtures, Network etc	\$3,000/ person	10 persons total	Once over 4 years	\$30,000
				Total	\$5,040,000

Action # 6.1.2	Special grants to get specialized 'train the trainers' from abroad – especially for CMMi and Lean Sigma					
Rationale	Increase number of trainers in the country until a critical mass is reached					
Details	Countries such as Sri Lanka offer grants up to \$10,000 for a specialized trainer from abroad under their 'train the trainer' program. The training should be provided to dedicated training companies rather than to IT companies alone. "Train the trainer" is a foundational program required for sustainable success of other programs. Proximity to India should help lower the cost of trainers.					
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Identification of skills, number and kind of trainers ▪ Agreement with International Training Institutes ▪ Marketing Drive ▪ Selection of Candidates ▪ Conduct of Training <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of Applicants, trainees, and trained ▪ Quantified feedback post course ▪ Quantified feedback one year later 					
Responsibility	Industry group					
Timing	Planning in Year 1, training in Year 2 onwards.					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Training: Train the Trainers	Foreign trainers to train the trainers	\$10,000 per program (including location allowance)	5 programs /year	2	\$100,000
		Marketing	\$5,000	1	2	\$10,000
		Admin Overhead	\$15,000	1	2	\$30,000
		CAPEX	\$10,000	1	Once over 2 years	\$10,000
					Total	\$150,000



Action #6.1.3 To be at par with other off-shore destinations, Nepal needs to have its ITES companies adopt globally accepted certifications. If the perception of low quality is established early on in the process, it will be difficult to overcome this perception and it would require significantly more investments eventually.

Rationale

- To counter the perception of low quality, many off-shore companies have made concerted efforts to ensure that they are certified in global certifications for quality and maturity. The most common ones being:

	Example	Description
Enterprise level	<ul style="list-style-type: none"> eSCM CMMI ISO 27001 OHSAS Six Sigma TR19 	<ul style="list-style-type: none"> Framework for establishing, managing and continually improving sourcing relationships with clients Process improvement approach that provides organizations with the essential elements of effective processes for SW development Standard for information security management International occupational health and safety management system specification (e.g., OHSAS 18001) Business process improvement/design framework Business continuity management assessment framework
Vertical oriented	<ul style="list-style-type: none"> FSA PCI LOMA¹ IIA¹ NASD¹ AHM¹ TL 9000 	<ul style="list-style-type: none"> Standards prescribed by UK's Financial Services Authority Security standards for the Payment Card Industry Certifications offered by the Life Office Management Association (e.g. FLMI 280 — Principles of Insurance: Life Health & Annuities) Certifications offered by the Insurance Institute of America (e.g. INS21 for Property and Liability Insurance) Insurance certification by the National Association of Securities Dealers Certifications offered by the Academy for Healthcare Management (e.g. AHM 250) Telecom Quality management system developed by the QuEST forum
Horizontal oriented	<ul style="list-style-type: none"> COPC 2000 SAS 70 	<ul style="list-style-type: none"> Certification offered by the Customer Operation Performance Centre Inc. for performance management in customer-centric service operations Auditing standard prescribed by the American Institute of Certified Public Accountants (AICPA) (e.g. Type I and Type II audits)

(Source: Nasscom/Everest Study)

- These provide assurance that a consistent level of quality and process maturity will exist at the outsourcer.

Details

Type: Capacity Building

- There are a host of local and international consultants that can provide training
- There are no CMMi certified companies in Nepal today.

Key Activities-Metrics

Key Activities

- Selection of consultants companies, certification companies, and candidate companies

Key Metrics

- Number of selected candidate companies
- Number of candidate companies that have completed consultancy phase
- Number of candidate companies that have been certified

Responsibility PPP

Timing Begin in 2nd quarter Year 2

Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Company Certification: International Certification in ITES	Certification Program	\$25,000/ Company (funded by government)	20	Total over 2 years	\$500,000
		Admin, Overhead, Marketing and CAPEX	\$50,000	Lump sum estimate over 2 years	N.A.	\$50,000
					Total	\$550,000



Action # 6.1.4 Development of national assessment and certification standard for ITES-BPO industry.

Rationale	Standards are important determinants of quality and sustainability, and assist in branding.					
Details	Type: Capacity Building The first preference should be the use of global standards and certifications. 50 certifications can be reasonably targeted over two years.					
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> Selection of consulting companies, certification companies, and candidate companies <p>Key Metrics</p> <ul style="list-style-type: none"> Number of selected candidate companies Number of candidate companies that have completed consultancy phase Number of candidate companies that have been certified 					
Responsibility	PPP					
Timing	4 th quarter Year 2					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Company Certification: ITES-BPO	Certification Program	\$25,000/ Company	50 over 2 years	N.A.	\$1,250,000
		Admin, Overhead, Marketing and CAPEX	\$250,000	Lump sum estimate over 2 years		\$250,000
					Total	\$1,500,000

Action # 6.1.5 Competency assessment framework and certifications by national bodies to highlight areas for improvement, allowing customization for further training.

Rationale	Talent is the single most critical element in attracting IT/ITES business										
Details	<p>Type: Capacity Building</p> <ul style="list-style-type: none"> An example of this is the Assessment of Competency introduced by NASSCOM in India. NASSCOM consulted a large number of ITES players to come up with a 'NASSCOM Assessment of Competence' (NAC) framework. This framework is emerging as a national standard for generic skills and recruitment of entry-level talent for the ITES industry in India. The skill testing themes are shown in Table below. The test scores indicate areas for improvement, allowing customization of further training. Firms to be selected by PPP would administer the framework. <p style="text-align: center;">Skill Competence Testing Themes</p> <table border="1" style="width: 100%;"> <thead> <tr> <th><i>Test</i></th> <th><i>Competencies assessed</i></th> </tr> </thead> <tbody> <tr> <td>Spoken English</td> <td>Typing speed, accuracy Voice clarity, fluency, vocabulary, Grammar/ sentence Construction, accent, Situation comprehension</td> </tr> <tr> <td>Writing Ability (Multiple Choice & Essay)</td> <td>Message clarity, comprehension</td> </tr> <tr> <td>Listening</td> <td>Comprehension, accent understanding</td> </tr> <tr> <td>Numerical and Analytical</td> <td>Numerical ability, logical reasoning, Comprehension</td> </tr> </tbody> </table>	<i>Test</i>	<i>Competencies assessed</i>	Spoken English	Typing speed, accuracy Voice clarity, fluency, vocabulary, Grammar/ sentence Construction, accent, Situation comprehension	Writing Ability (Multiple Choice & Essay)	Message clarity, comprehension	Listening	Comprehension, accent understanding	Numerical and Analytical	Numerical ability, logical reasoning, Comprehension
<i>Test</i>	<i>Competencies assessed</i>										
Spoken English	Typing speed, accuracy Voice clarity, fluency, vocabulary, Grammar/ sentence Construction, accent, Situation comprehension										
Writing Ability (Multiple Choice & Essay)	Message clarity, comprehension										
Listening	Comprehension, accent understanding										
Numerical and Analytical	Numerical ability, logical reasoning, Comprehension										



	(Source: NASSCOM 2007)					
Priority	High					
Key metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Award of Competency Assessment Framework Study ▪ Completion of Study ▪ Submission of Policy to competent authority for Approval ▪ Approval of policy by competent authority ▪ Establishment of National Certification Bodies <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of Personnel Certified ▪ Difference in retention rates, remuneration and employee feedback between certified and non-certified personnel 					
Responsibility	PPP					
Timing	2 nd quarter Year 2					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Talent Assessment and Certification: National Level	Development of Assessment Framework and Certification	\$50,000	One time over 2 years	N.A.	\$50,000
		Admin Overhead	\$50,000	Lump sum estimate over 2 years		\$50,000
				Total		\$100,000

Action # 6.1.6	Management and business training: The top and middle management of IT/ITES companies should be trained on business planning, marketing, sales, and leadership.
Rationale	<p>Management and business training is needed for the top to mid-level executives for skills to compete in the global marketplace. This is especially important in the areas of marketing and sales given that industry promotion is one of the key challenges in Nepal. Business planning skills and leadership training is also essential to lead and drive the growth of these local companies, and there appears to be a dearth of suitable middle management skills in Nepal based on the industry's feedback.</p>
Details	<p>Type: Training Program</p> <p>The training programs to be provided should cover these basic areas:</p> <ul style="list-style-type: none"> ▪ Business planning: key strategic, planning and budgetary issues, etc. ▪ Marketing training: value proposition, target market identification, channel strategies, branding, etc. ▪ Sales training: prospecting, qualifying, solutioning, proposing, negotiating, and closing, etc. skills for direct client engagement and follow-up throughout the sales cycle ▪ Leadership training: coaching, mentoring, performance management, etc. <p>These trainings could be provided by professional training firms (e.g. the use leading sales performance company such as Miller-Heiman for sales training), and executive programs could also be developed with local business schools.</p> <p>The training could be tailored to cover different depths for the top and mid-level executives (e.g. strategic versus tactical/operational focused), and it is suggested for the Government to subsidize 50% of the cost for the first two years, until these</p>



	skills are embedded and the industry grows. After that, the cost could be borne by the individual companies.					
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Identification of key skills and course selection ▪ Agreement with training organizations ▪ Selection of Candidates ▪ Conduct of Training <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of applicants, trainees, and trained ▪ Quantified Feedback post course ▪ Quantified Feedback one year later 					
Responsibility	GON/Industry PPP					
Timing	Begin planning in 1st quarter and initiate training in the 2 nd quarter of Year 2.					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Planning	Assessment of training needs, options; and program development	\$30,000	Lump sum estimate	N.A.	\$50,000
	Training: Top-level Management	50% Subsidy for Training Course	\$5,000 per executive (based on \$10,000 per program)	40 across 2 years		\$200,000
	Training: Mid-level Management		\$2,500 per executive (based on \$5,000 per program)	100 across 2 years		\$250,000
						Total

Action # 6.1.7 As a partner in the PPP, the industry group should add directors to its board from Ministries of Education, HRD, labor and employment agencies, representatives of the central body of universities in Nepal, and if possible, key Vice Chancellors of universities.

Rationale	The challenge lies in the education system not accepting to integrate and introduce BPO curricula.
Responsibility	Industry group, GON
Timing	4th quarter, Year 1
Budget	No Cost Implication.

Action # 6.1.8 Collaboration with academic institutions for course design and implementation

Rationale	IT is a dynamic discipline; therefore course content needs to keep pace with changes in technology.
Details	<p>Type: Study</p> <ol style="list-style-type: none"> 1. The scope of this activity should include the development of an overall vision for course curriculum that spans: <ol style="list-style-type: none"> a. Primary School Education i.e. Grades 5- 8, b. Secondary School Education i.e. Grades 9-12, c. Vocational Training, d. Higher Education i.e. Bachelors, Masters, PhD, and Post Doctoral, e. Professional Training for Senior Managers, Middle Managers, and other



	professionals.																					
	<p>2. For each tier, the following should be considered:</p> <ol style="list-style-type: none"> Curriculum development and annual review methodology; development of curriculum for each tier Demand assessment and nature for each tier and identification of number of targeted students, trainees, institutions, etc. Instructor training Cost of trainings and requirement for subsidies Requirement of facility type, computers, audio-visual, software, admission criteria, instruction feedback and assessment mechanism, and timings of instruction; includes need for provision of computers and software to schools and colleges Summer school if applicable Distance Learning 																					
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Notification of National IT Curriculum Committee ▪ Establishment of Secretariat within education department ▪ Selection of Consultant to conduct Study ▪ Completion of Study ▪ Change in Curriculum ▪ Assessment of results 																					
Responsibility	PPP, Ministry of Education																					
Timing	2 nd -4 th quarter Year 2																					
Budget	<table border="1"> <thead> <tr> <th>Category</th> <th>Sub-Category</th> <th>Unit Cost (USD)</th> <th>Units</th> <th>Years</th> <th>Sub-Total (USD)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Education: Curriculum Design</td> <td>Design & Implementation</td> <td>\$40,000</td> <td rowspan="2">Lump sum estimate over 2 years</td> <td rowspan="2">N.A.</td> <td>\$40,000</td> </tr> <tr> <td>Updating of materials</td> <td>\$10,000</td> <td>\$10,000</td> </tr> <tr> <td colspan="4"></td> <td>Total</td> <td>\$50,000</td> </tr> </tbody> </table>	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)	Education: Curriculum Design	Design & Implementation	\$40,000	Lump sum estimate over 2 years	N.A.	\$40,000	Updating of materials	\$10,000	\$10,000					Total	\$50,000
Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)																	
Education: Curriculum Design	Design & Implementation	\$40,000	Lump sum estimate over 2 years	N.A.	\$40,000																	
	Updating of materials	\$10,000			\$10,000																	
				Total	\$50,000																	

Action # 6.1.9	Introduction of basic IT courses in primary and secondary education, and specialized courses in colleges in line with ITES-BPO industry needs																	
Rationale	Global demand for ITES-BPO services is growing fast. The sector is price-sensitive and Nepal's can leverage its key strength i.e. low price of resources. Skills can be developed relatively quickly.																	
Details	Target 200 schools and colleges across Nepal. Given 1 instructor can cover 3 schools-colleges, 70 instructors will be needed. However, this number is likely to be much lower if the course curriculum is integrated into the existing courses.																	
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Identification of Training Firms ▪ Identification of participating training institutions ▪ Initiation of Training ▪ Completion of Training <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of trainees ▪ Number of instructors ▪ Number of training units completed ▪ Quantified feedback on training 																	
Responsibility	PPP, Ministry of Education																	
Timing	1 st quarter Year 2																	
Budget	<table border="1"> <thead> <tr> <th>Category</th> <th>Sub-</th> <th>Unit Cost</th> <th>Units</th> <th>Years</th> <th>Sub-Total</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Category	Sub-	Unit Cost	Units	Years	Sub-Total											
Category	Sub-	Unit Cost	Units	Years	Sub-Total													



	Category	(USD)			(USD)
Education: IT & BPO Course	Course Instructors	\$3,000 instructor / year	70 instructors	2	\$420,000
	Admin, Overhead, Marketing and CAPEX	\$200,000	Lump sum estimate	Once over 2 years	\$200,000
				Total	\$620,000

Action # 6.1.10 Introduction of English as a mandatory medium of education or as a primary subject combined with efforts promoting spoken English from primary school level.

Rationale Prevalence of English in Nepal is a key competitive advantage but this skill exists in a relatively small part (8 percent estimated) of the population. Expanding the prevalence of English will create more off-shoring opportunities

Details Type: Training Program
This would be a “train the trainer” program where English language skills of instructors would need to be improved; in addition English language courses would be introduced where they are not being offered.
Ideally this component needs to be owned by the Ministry of Education.

- Key Activities-Metrics**
- Key Activities**
- Identification of Training Firms
 - Identification of participating training institutions
 - Initiation of Training
 - Completion of Training
- Key Metrics**
- Number of trainees
 - Number of instructors
 - Number of training units completed
 - Quantified feedback on training

Responsibility PPP, Ministry of Education

Timing 2nd quarter Year 2.

Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Education: English Language	Course Instructors	\$2,000 to \$3,000 / instructor / year	200 instructors	2	\$800,000 to \$1,200,000
		Admin, Overhead, Marketing and CAPEX	\$250,000	Lump sum estimate	Once over 2 years	\$250,000
					Total	\$1,050,000 to \$1,450,000

Action # 6.1.11 Provision of IT-related equipment (computers, software etc.) at no charge, or at subsidized rates to the education institutions.

Rationale Educational institutions are a critical link in the preparation of an IT savvy workforce

Details Type: Capacity Building
Microsoft Corporation already provides significant discounts to academia; free open source software is also available. Computer laboratories with computers, printers, scanners, UPS etc. can be provided to those schools and colleges that can provide space.



Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Identification of Vendors ▪ Identification of participating training institutions ▪ Initiation of Supply <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of computers purchased ▪ Number of computers supplied ▪ Number of laboratories established 					
Responsibility	Ministry of Education					
Timing	2nd quarter Year 2.					
Budget	Category	Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	Education: Provision of IT Equipment	Subsidy for Laptops	~\$400/ laptop (based on cost of \$600/laptop)	10,000 laptops over 2 years	N.A.	\$4,000,000
		Admin, Overhead, Marketing and CAPEX	\$150,000	Lump sum estimate over 2 years		\$150,000
					Total	\$4,150,000



6.2 Industry Promotion

Action # 6.2.1 Internally launch a national drive, headed by PM's Office to promote IT/ITES																													
Rationale	Government IT initiatives can be vital to boost the IT industry																												
Details	<ul style="list-style-type: none"> ▪ Appoint focal points with clear responsibilities and accountabilities in each ministry ▪ Appoint a high-profile government spokesperson ▪ Ensure that IT gets adequate importance on all government websites ▪ Establish IT Parks and assist software parks in marketing programs ▪ Publicize government initiatives for reform in the telecom sector, tax incentives, IT Parks etc. ▪ Develop coherent marketing message and catchy slogan ▪ Create an IT/ ITES Entrepreneurship Challenge with a prize of a significant award (e.g. \$200,000 / \$500,000) to any company that creates business opportunities in Nepal that contribute to the most dramatic growth in this sector. It will require the creation of measurable and actionable targets and time frame. For example, it could be in the form of a prize of \$200,000 for creation of 500 sustainable jobs. (This is not included in the investment summary). ▪ Two studies/plan formulations should be undertaken, one for Government websites and the other for initiative and incentives promotion 																												
Priority	High																												
Key Activities-Metrics	Key Activities <ul style="list-style-type: none"> ▪ Development of Government Website IT promotion and e-Government Plan. ▪ Government website and e-Government Plan implementation. ▪ Development of IT Industry Initiatives and Incentives Promotion Plan ▪ Promotion Plan Implementation 																												
Responsibility	Chairman PPP or other Government Spokesman																												
Timing	Ongoing after the initial launch in 1st quarter Year 2.																												
Budget	<table border="1"> <thead> <tr> <th>Category</th> <th>Sub-Category</th> <th>Unit Cost (USD)</th> <th>Units</th> <th>Years</th> <th>Sub-Total (USD)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Industry/ Export Promotion: Nation Drive</td> <td>Studies for National Drive</td> <td>\$15,000 per study</td> <td>2</td> <td>N.A.</td> <td>\$40,000</td> </tr> <tr> <td>Admin, Overhead, Marketing and CAPEX</td> <td>\$5,000</td> <td>Lump sum estimate</td> <td>Once over 2 years</td> <td>\$5,000</td> </tr> <tr> <td>Promotional Website</td> <td>\$40,000 for development cost across all ministries. \$10K/year maintenance/year</td> <td>One time development and yearly maintenance</td> <td></td> <td>\$80,000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Total</td> <td>\$125,000</td> </tr> </tbody> </table>	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)	Industry/ Export Promotion: Nation Drive	Studies for National Drive	\$15,000 per study	2	N.A.	\$40,000	Admin, Overhead, Marketing and CAPEX	\$5,000	Lump sum estimate	Once over 2 years	\$5,000	Promotional Website	\$40,000 for development cost across all ministries. \$10K/year maintenance/year	One time development and yearly maintenance		\$80,000					Total	\$125,000
Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)																								
Industry/ Export Promotion: Nation Drive	Studies for National Drive	\$15,000 per study	2	N.A.	\$40,000																								
	Admin, Overhead, Marketing and CAPEX	\$5,000	Lump sum estimate	Once over 2 years	\$5,000																								
	Promotional Website	\$40,000 for development cost across all ministries. \$10K/year maintenance/year	One time development and yearly maintenance		\$80,000																								
				Total	\$125,000																								



Action # 6.2.2 Externally publicize that Nepal is open to business by highlighting incentives and other advantages through multiple channels																														
Rationale	Nepal's vague image overseas needs to be countered in order to give confidence to overseas customers and investors to do business in Nepal.																													
Details	<p>Highlight competitive incentives in the areas of:</p> <ul style="list-style-type: none"> ▪ Generous job creation and apprenticeship grants mentioned earlier. ▪ Land at concessions for building IT Parks. ▪ Tax holidays until 2016. ▪ Training grants ▪ Duty exemptions ▪ 100% foreign ownership ▪ 100% Profit/capital repatriation ▪ Speedy custom clearances <p>External promotion may be best done by:</p> <ul style="list-style-type: none"> ▪ Advertising in global print media (e.g. newspapers and magazines) that reaches appropriate target markets ▪ Utilizing Internet and associated search technologies. The web has become the starting point for off-shore research. Searchable database of member companies, news/press information, and business opportunities needs to be included ▪ Utilizing existing embassies in target markets (e.g. U.S. & U.K.) for on-site promotion activities 																													
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Selection of SEO firm ▪ Selection of PR Firm ▪ Opening of Overseas Offices <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Increase in number of unique visitors per month to website 																													
Budget	<table border="1"> <thead> <tr> <th>Category</th> <th>Sub-Category</th> <th>Unit Cost (USD)</th> <th>Units</th> <th>Years</th> <th>Sub-Total (USD)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">External Promotion: Internet, PR Firms & Local Offices</td> <td>Internet</td> <td>\$100,000 for SEO, Social Media Marketing, Internet advertising</td> <td>Lump sum estimate</td> <td>Once over 2 years</td> <td>\$200,000</td> </tr> <tr> <td>Print</td> <td>\$400,000 for advertisement fees in relevant newspapers, magazines, conference publications, etc.</td> <td></td> <td>Multiple over 2 years</td> <td>\$400,000</td> </tr> <tr> <td>External Promotion using Embassy Network</td> <td>On-site</td> <td>\$25,000 per embassy for promotional activities</td> <td>2 (U.S. & U.K)</td> <td>2</td> <td>\$100,000</td> </tr> <tr> <td colspan="5" style="text-align: right;">Total</td> <td>\$700,000</td> </tr> </tbody> </table>	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)	External Promotion: Internet, PR Firms & Local Offices	Internet	\$100,000 for SEO, Social Media Marketing, Internet advertising	Lump sum estimate	Once over 2 years	\$200,000	Print	\$400,000 for advertisement fees in relevant newspapers, magazines, conference publications, etc.		Multiple over 2 years	\$400,000	External Promotion using Embassy Network	On-site	\$25,000 per embassy for promotional activities	2 (U.S. & U.K)	2	\$100,000	Total					\$700,000
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Responsibility	PPP																													
Timing	Ongoing after the initial launch in 1 st quarter Year 2.																													



Action # 6.2.3 Fund industry associations for industry promotion using a PPP approach

Rationale Industry associations have been helpful in organizing industry thinking, harmonizing goals and approaches, driving operational excellence in companies, and creating excitement about the country and its potential; e.g. in –India and Philippines. Industry associations like NASSCOM (in India) have helped in the development of the sector by creating a clear strategy, aligning industry around it, communicating clearly to government what is critical to success and in marketing the national brand to investors worldwide.

Details PPP should be adequately funded and vitalized to:

- Conduct conferences and for ITES/BPO professionals from the region as well as globally
- Prepare marketing materials, such as DVD’s, brochures and sales collaterals for distribution at major worldwide IT/ITES events, embassies and other events
- Conduct industry promotion events bringing key clients for BPO/ITES services from North America, Europe, India and other interested countries.
- Arrange business linkage trips for the local industry representatives and ensure follow up with potential customers and facilitate relationship building.

It is recommended that Nepal conduct 6 to 7 delegations to the key markets and hold 1 to 2 conferences in Nepal, and for the cost to be split equally between PPP and the private sector.

Key Activities-Metrics

Key Activities

- Date selections for events and trips

Key Metrics

- Number of conferences held.
- Number of attendees including international delegates
- Number of Senior executives from client companies that have visited
- Number of deals closed and their value

Responsibility PPP

Timing Ongoing after the initial launch in 1st quarter Year 2.

Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	External Promotion: Conferences, Marketing Materials & Events	International Conferences	\$100,000/Conference	1 per year	2	\$200,000
		National Conferences	\$10,000/Conference	1 per year	2	\$20,000
		Marketing Material: all media including web	\$200,000	Lump sum estimate for 2 years	N.A.	\$200,000
		Industry Promotion Events	\$10,000 per visitor	50 visitors over 2 years		\$500,000
		Admin Overhead	\$100,000	Lump sum estimate for 2 years		\$100,000
		Total				

Action # 6.2.4 PPP to develop relationships with IT/ITES analysts and advisory groups to validate Nepal’s capability in servicing BPO/ITES requirements, and to place Nepal on key off-shoring indexes



Rationale	International clients and publications give weight to a country's placement on key indices and do their secondary research on companies and countries on the web. A number of mid size companies research potential off-shore partners on the web.					
Details	Type: Study Facilitate IT/ITES data collection in order to position country favorably on key off-shoring indexes e.g. A.T. Kearney's Global Services location Index, Global IT Report of the World Economic Forum, Gartner, and other off-shoring indexes and search engines. Studies would need to be conducted to provide data for international studies.					
Key Activities-Metrics	Key Metrics <ul style="list-style-type: none"> ▪ Number of sites/search engines identified ▪ Number of foreign indexes that have been provided data. ▪ Increase in rating due to initiative 					
Responsibility	PPP and other trade bodies					
Timing	Ongoing after the initial launch in 1st quarter Year 2.					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	External Promotion: Placement in Key Off-shoring Indices	Study on Key IT/ITES Indices	\$60,000 / year	Lump sum estimate	1	\$60,000
		Marketing	\$20,000 / year	Lump sum estimate		\$30,000
		Admin, Overhead	\$10,000 / year	Lump sum estimate		\$10,000
					Total	\$100,000

Action # 6.2.5 **Leverage proximity with established neighbors in IT/ITES. Incent a pioneer MNC in the banking sector to establish operations in Nepal. Also, incent a regional company to establish presence in Nepal. Offer negotiated investment incentives for companies that create immediate employment in excess of 500. One such incentive could be free land to the first 10 companies that bring in employment in excess of 500 each over three years. This will reduce the need for a larger IT park. Reduce or eliminate 15% tax on technical services for regional outsourced work to Nepal.**

Rationale	<ul style="list-style-type: none"> ▪ Special incentives to attract a desirable business are a standard practice in the industry. For example, Dell was offered free land (leased for 30 years at no cost) in Andhra Pradesh in India. Apple was offered a similar deal by another state. ▪ It will give Nepal visibility in the outsourcing segment. ▪ A large credible anchor company can be a catalyst and a role model. ▪ Anchor companies can catalyze growth in Nepal in four ways: <ul style="list-style-type: none"> ○ Build the country brand e.g., Nokia for Finnish companies in the telecom industry. ○ Drive venture creation: Anchor MNCs will create spin-offs e.g. Fairchild Semiconductors has spawned 37 firms including Intel. Provide work for sub-contractors ○ Drive innovation by investing in developing emerging technologies and standards e.g. Sweden has become a leading location for developing wireless Internet equipment and applications largely because of Ericsson. ▪ In addition, to attract outsourcing work from India, eliminate or reduce the 15% tax on services between the two countries.
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<p>Details</p>	<ul style="list-style-type: none"> Focus on a company in the financial sector with \$5 to \$10 billion in revenues. Companies this size are largely under penetrated. The larger ones may already have either captive or third party relationships. A key success determinant will be the identification of “coaches” within each targeted firm. “Coaches” are described as Miller-Heimann, the premier Marketing Series, as individuals who are not decision makers within client companies, but rather provide critical information and guidance to the seller. Such coaches may be expatriates or friends of Nepal. To launch the program exclusive well-marketed conferences would be held with 30 or so leading expatriates and other “Friends of Nepal” in New York City, San Francisco, and London. The Prime Minister or else the Minister of IT and other Ministers would ideally chair these conferences. The Program would be introduced to expats and their feedback solicited. Expats would sign up to become coaches and commit time for one or two targeted firms. They could be provided recognition and an exclusive audience with the Prime Minister on success. <p style="text-align: center;">BPO Potential by buyer segment</p> <div style="text-align: center;"> <table border="1" style="margin: auto;"> <caption>BPO Potential by Buyer Segment</caption> <thead> <tr> <th>Segment</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>\$10-50B</td> <td>46%</td> </tr> <tr> <td>Greater than \$50B</td> <td>31%</td> </tr> <tr> <td>\$5-10B</td> <td>13%</td> </tr> <tr> <td>Less than \$5B</td> <td>10%</td> </tr> </tbody> </table> </div> <ul style="list-style-type: none"> Focus on the banking industry. It is the largest BPO opportunity, covers a number of sub-segments and Nepal already has expertise in most of them. 	Segment	Percentage	\$10-50B	46%	Greater than \$50B	31%	\$5-10B	13%	Less than \$5B	10%		
Segment	Percentage												
\$10-50B	46%												
Greater than \$50B	31%												
\$5-10B	13%												
Less than \$5B	10%												
<p>Key Activities- Metrics</p>	<p>Key Metrics</p> <ul style="list-style-type: none"> Number of Employees of Targeted Foreign Corporation Off-shore revenue from Nepal Operations, if available Number of corporations targeted and qualified Number of corporations that established off-shore offices in Nepal as a result of initiative <p>Key Activities</p> <ul style="list-style-type: none"> Preparation of Incentive Package Development of target company and qualification criteria Identify and Qualify Targeted Companies Identify and establish rapport with “coaches” within each target organization Meet with Qualified companies and Revise Incentive Packages as necessary Sign Contract 												
<p>Responsibility</p>	<p>PPP</p>												
<p>Timing</p>	<p>2nd quarter Year 2.</p>												
<p>Budget</p>	<table border="1"> <thead> <tr> <th>Category</th> <th>Sub-Category</th> <th>Unit Cost (USD)</th> <th>Units</th> <th>Years</th> <th>Sub-Total (USD)</th> </tr> </thead> <tbody> <tr> <td>Investment</td> <td>Study to</td> <td>\$15,000</td> <td>Lump sum</td> <td>N.A</td> <td>\$15,000</td> </tr> </tbody> </table>	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)	Investment	Study to	\$15,000	Lump sum	N.A	\$15,000
Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)								
Investment	Study to	\$15,000	Lump sum	N.A	\$15,000								



	Promotion: Incentives for MNC or Global Software Company	Develop Incentive Package, Qualification Criteria & Targeted Company		estimate		
		Target Company Identification	\$15,000			\$15,000
		Admin, Travel and Follow-up	\$150,000			\$150,000
		Special Incentives	\$100,000 - \$300,00			\$100,000 - \$300,00
						Total

Action # 6.2.6 Develop IT/ITES champion, and increase IT/ITES business development capacity in Government.

Rationale	The government should identify and develop a high-level official to champion the industry for the country. In addition, it should set up an IT/ITES business development unit with at least 2 dedicated business development representatives for lead generation, direct engagement with clients, solutioning of offerings to match clients' needs, and following up with potential investors.					
Details	<p>Type: Business development</p> <p>A high-level government champion to drive support within the government for the IT/ITES industry, and act as the government's high-level representation for large potential clients as needed.</p> <p>Two professional business development persons with proven experience in international sales could be hired to focus on representing the government for direct engagement with investors, and to support the local companies in their sales processes. These persons could be sited at a new industry promotion organization as discussed above, or within the government's existing investment promotion agency as a unit responsible solely for IT/ITES. They would also catalyze and orchestrate the government responses to opportunities and prospects.</p>					
Key Activities-Metrics	<p>Key Metrics</p> <p>Number of qualified prospects/investors</p> <p>Number of best few prospects in the "sales funnel"</p> <p>Number and value of deals under negotiation and closed</p>					
Responsibility	PPP and other trade bodies					
Timing	Ongoing after the initial launch in 1st quarter Year 2.					
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)
	IT/ITES Business Development	Two Business Development persons for public sector	\$60,000 / year (Including overheads)	1	2	\$ 240,000
					Total	\$ 240,000



6.3 Infrastructure

Action # 6.3.1		Provision of telecommunications redundancy on fibre with end-to-end connectivity, and service level agreements with at least 99.996 percent uptime					
Rationale	Modest bandwidth seems to exist but Nepal needs to enforce adherence to strict service level agreements (SLAs) and ensure 99.996 percent uptime as per international standards to support BPO industry. This is requirement for mission critical, real time applications.						
Details	<p>Type: Telecommunications Study</p> <p>Adequate bandwidth and redundancy are vital to attract this industry. Nepal has gradually brought down the 2 Mb connectivity costs from \$5,000 to \$1,200 over two years, but will need to further expand availability and affordability. The country also needs to enforce adherence to strict SLAs and regulation of prices in line with prevailing international prices. A further study may need to be undertaken to identify:</p> <ul style="list-style-type: none"> ▪ SLA levels required, ▪ Projected increase in bandwidth usage over time, ▪ Currently projected service quality, ▪ Cost of additional backup quality satellite connectivity required, ▪ Ability of IT/ITES companies to bear cost and amount of study required 						
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Consultant selected to conduct study ▪ Study Completed ▪ Contract signed with Communications Provider ▪ Backup Service initiated <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ New Service Levels ▪ New Rates 						
Responsibility	PPP						
Timing	Start 1Q10,						
Budget	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)	
	Infrastructure: Bandwidth	Study: To confirm bandwidth requirement	\$15,000	Lump sum estimate	N.A.	\$15,000	
		Subsidy of 50% for Connectivity	\$1,000,000 initial allocation	Lump sum estimate		\$1,000,000	
					Total	\$1,015,000	



Action # 6.3.2 Study on strengthening general power infrastructure																							
Rationale	Uninterrupted power supply is essential for service delivery. Scheduled and unscheduled load shedding in Nepal are affecting service quality and cost.																						
Details	<p>Power</p> <ul style="list-style-type: none"> ▪ Ensure augmentation of the existing power infrastructure, if required, for provision of un-interrupted power supply. ▪ Exemption from statutory power cuts or load shedding for ITES-BPO establishments. ▪ Classification of ITES-BPO industry as 'essential or public utility services' enabling 24 x 7 x 365 operations for ITES-BPO companies ▪ Guaranteed supply of fuel/gas for in-house power generation. ▪ Special industrial rates for IT Companies in IT Parks <p>A study is required to a) assess gap between power demand and supply, b) assess cost structure of generators and UPS (Uninterruptable Power Supplies), c) devise and propose policy measures to alleviate power-related problems for IT/ITES industry including exemptions from load shedding, tax and duty rebates on purchase of generators and UPS, d) Policy implementation mechanism to ensure transparency and observance</p>																						
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Selection of Consultant to undertake study ▪ Study Completion and Preparation of Policy Package ▪ Approval of proposed Policy by Competent authority ▪ Incentive Policy implementation <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Power up time ▪ Cost of Power 																						
Responsibility	PPP																						
Timing	Start 3Q09,																						
Budget	<table border="1"> <thead> <tr> <th>Category</th> <th>Sub-Category</th> <th>Unit Cost (USD)</th> <th>Units</th> <th>Years</th> <th>Sub-Total (USD)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Infrastructure: Power</td> <td>Initial Study</td> <td>\$20,000</td> <td>Lump sum estimate</td> <td rowspan="2">N.A.</td> <td>\$20,000</td> </tr> <tr> <td>Admin & Incentive Policy Approval</td> <td>\$5,000</td> <td>Lump sum estimate</td> <td>\$5,000</td> </tr> <tr> <td colspan="4"></td> <td>Total</td> <td>\$25,000</td> </tr> </tbody> </table>	Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)	Infrastructure: Power	Initial Study	\$20,000	Lump sum estimate	N.A.	\$20,000	Admin & Incentive Policy Approval	\$5,000	Lump sum estimate	\$5,000					Total	\$25,000
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				Total	\$25,000																		

Action # 6.3.3 Study to establish ICT incubator facilities, as a part of leading large universities to provide necessary support infrastructure and advisory services to ITES-BPO start-ups.	
Rationale	In countries like Turkey and China, university-based incubators have become important centers of innovation and commercialization of research.
Details	<ul style="list-style-type: none"> ▪ Universities we spoke with, are interested in establishing incubators / IT Parks ▪ Activities would include: <ul style="list-style-type: none"> ○ Feasibility Study ○ Project Financing through Debt/Equity
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Universities Selected, ▪ Debt Financing



	<ul style="list-style-type: none"> Construction Initiated, Construction Completed Tenancy initiated <p>Key Metrics</p> <ul style="list-style-type: none"> Floors Constructed, Floors Finished, Square footage completed; Square footage rented to PPP member companies; Rental rate 																		
Mechanism	Special Purpose Vehicle with ownership by investors, developers, and University on PPP model																		
Responsibility	PPP to lead																		
Timing	Start 4Q10, End 4Q11																		
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Category	Sub-Category	Unit Cost (USD)	Units	Years	Sub-Total (USD)														
Financing: ICT Incubators	Feasibility Study	\$100,000	Lump sum estimate	N.A.	\$100,000														
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6.4 Enabling Environment

Action # 6.4.1 Implement standards for data security and intellectual property at multiple levels to alleviate security concerns associated with Nepal

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Details	<p>Type: Promotion Program</p> <p>The Data Confidentiality Act needs to be clarified. This will enable criminal persecution for data theft.</p> <p>These initiatives need adequate publicity and require a marketing campaign.</p>																				



Key Activities-Metrics	Key Activities: <ul style="list-style-type: none"> ▪ Passage of Data Confidentiality Act by Competent Authority ▪ Marketing Campaign on Data Confidentiality Act ▪ Marketing Campaign on Intellectual Protection
Responsibility	PPP
Timing	2nd quarter Year 2.
Budget	Marketing Campaign on Data Confidentiality Act and Intellectual Property Protection: USD 100,000 (lump sum estimate)

Action # 6.4.2 Apply favorable industry and labor law provisions to the IT/ITES industry.

Rationale	Most of these already exist for many industries but need to be stressed or applied to the IT/ITES sector. <ol style="list-style-type: none"> 1. Ensure flexibility with respect to both weekly and national holidays for ITES-BPO employees in compliance with labor laws. 2. Relaxation of laws relating to labor unions for the ITES-BPO industry (refer to box on labor laws in India and Singapore)
Details	Even though there is no known union formation in the IT/ITES industry, the incumbents have concerns about employee bandhs and strikes. <p>Employee security is essential given frequent bandhs– particularly that of female employees. Some possible actions include ensuring all ITES-BPO establishments comply with relevant security measures for transportation provided to employees working in different shift timings, and in particular those relating to female employees</p>
Key Activities-Metrics	Key Activities <ul style="list-style-type: none"> ▪ Select Consultant to Conduct Study ▪ Completion of Study ▪ Passage of Legislation
Responsibility	PPP
Timing	1st quarter Year 2.
Budget	Study USD 35,000 (lump sum estimate)



6.5 Financing

Action # 6.5.1		Establish infrastructure to attract VC funds																												
Rationale	IT/ITES start ups need funding for growth and innovation.																													
Details	<p>1. Create a VC advisory board (VCAB) leveraging the large Ex-pat community in North America, Europe and Middle East. The membership should include experienced executives from VC, high tech, M&A and private equity sectors.</p> <p>Members should be officially notified and recognized. They should be asked to make formal commitments on time investment. VCAB can have around 10 members.</p> <p>VCAB would assist in strategy finalization, networking, and deal closure.</p> <p>2. Develop a program to help the local banking industry understand how to assess the risk/returns for the IT/ITES industry.</p> <p>3. Once the IT/ITES industry is established, invite a large PE/VC fund to establish a Nepal fund with some investments from the local limited partners or Nepal government.</p> <p>The main cost component in this activity would be at the international travel.</p>																													
Key Activities-Metrics	<p>Key Activities</p> <ul style="list-style-type: none"> ▪ Establishment of VCAB ▪ VCAB Strategy Formulation and Networking ▪ VC Fund Establishment <p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of Business Plans Reviewed ▪ Number of Workshops conducted for banks ▪ Number of proposals submitted to VC, PE and Sovereign Funds 																													
Responsibility	PPP																													
Timing	4 th quarter Year 2.																													
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Action # 6.5.2 Promote a program for entrepreneurial initiatives																												
Rationale	IT/ITES start ups need funding for growth and innovation																											
Details	<p>Hold Business Plan review forums, may be in a speed dating format, with the top few receiving seed capital and mentor support. These can be either through collaborations with the universities or through associations like CAN.</p> <p>Fund IT companies who want to go public for due diligence. Conduct audits (through KPMG, PWC, others) to improve processes for companies to successfully go public.</p> <p>Once a success record is established, enable a \$30M VC fund without government funding.</p>																											
Key Activities-Metrics	<p>Key Metrics</p> <ul style="list-style-type: none"> ▪ Number of Business Plans Reviewed ▪ Number of Workshops conducted for banks ▪ Number of proposals submitted to VC, PE and Sovereign Funds ▪ Number of companies funded 																											
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