

Pre-Feasibility Study

IT COLLEGE



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Ministry of Industries & Production

Government of Pakistan

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1 INTRODUCTION

1.1 Project Brief

This document describes the investment opportunity about setting up a college of providing educational & training services in Information Technology. The college can start mainly by offering short courses and with the passage of time can venture to develop into a proper degree awarding authority. The institute can be established in any of the major cities of the country. However, with a phenomenal growth of IT colleges in Karachi, Lahore and Islamabad, a college offering quality education and wide course options, opened up in other large peripheral cities is expected to earn early recognition and student preference. The project will offer following short courses in the initial phase.

Visual Basic + SQL Server (Database)
3-D Graphics
CCNA (Networking)
Microsoft Certified Service Engineer (MCSE)
Applications Software (IT Office)
E-Commerce
Auto Cad

This combination is designed according to the needs of a particular target market and is by no means rigid. Each individual entrepreneur will have to carry out a market research and offer a course offer corresponding to the educational needs and requirement of his particular community and city.

1.2 Project Cost

The college is designed to provide high quality education services to IT industry. An optimum ration of one PC to one student has been used. The college will have two classrooms cum computer labs equipped with twenty-two¹ computers linked through a network, one media projector in each lab and proper air conditioning facilities. 24 hours free and unlimited Internet access to students is recommended. Total investment in the project is around Rs 1.9 million including a working capital requirement of Rs 0.46 million.

Total Investment (Rs)	1,960,206
Capital Cost	1,491,645
Working Capital	468,561

¹ This does not include three other PCs with admin.

1.3 Opportunity Rationale

Information Technology Sector has become the rapidly progressing and the focus of attention in the entire world. Since the last three years, the IT sector of Pakistan was growing at a rate of 50% since last three years. A marked increase in software export figures are an indication of this booming industry's potential. Due to fast pace growth of IT sector, 1, 00,000 young people were employed in the fiscal year of 2005-06². Pakistan earned \$108 million from software exports in 2005-06. Whereas, in contrast, our neighboring country India \$17.2 billion and China has a tremendous share from software export in the same year. The concept of Call Centers, Medical Transcription and outsourcing are rapidly developing in Pakistan.

This export of software opportunity cannot be tapped without a properly trained human resource base. The government has recently engaged itself towards provision of high quality IT education in the country and also encourages private sector to contribute its due share. All the income from such a venture is income tax free. In addition to this, various financial incentives offered by the government to software export houses are expected to result in a surge of demand for highly qualified software professionals in the next few years.

In addition to the existence of high market demand, the project economics are also healthy, portraying a reasonably positive profit margin.

Project	
IRR	44%
Payback Period (yrs)	4.17

1.4 Viable Economic Size

An IT college is a service offering business and there cannot be a standardized viable economic size. However for this particular set up, it is expected that a minimum of 6-7 course offerings and a minimum of 8-10 students per class will enable the entrepreneur to earn health returns on his/her investment.

1.5 Proposed Capacity

The capacity of the proposed IT College at any point in time is 20-25 students in the two classes. However, the capacity can be increased if the number of prospective students increase in future.

² Stated by Minister of State for Finance in budget Speech 2006-07

1.6 Proposed Courses

Following courses, suggested fees & expected number of students are proposed for the IT college.

	NAME OF THE COURSE	EXPECTED STUDENTS	SUGGESTED FEE	DURATION (MONTHS)	NO. OF COURSES/YEAR
1	Visual Basic	8	6,000	2	6
2	3D Graphics	8	10,000	3	4
3	CCNA	12	25,000	6	2
4	MCSE	8	12,000	7	1
5	IT Office	10	4,500	3	4
6	E-Commerce	10	6,000	3	4
7	AutoCAD	10	8,000	3	4

* Fees are subject to the admission fee.

2 CURRENT INDUSTRY STRUCTURE

According to an approximate figure, there are more than 400 IT institutes in Pakistan. Around 150 of these are in Lahore alone. There is a general trend moving towards IT studies in Pakistan that makes this industry even more attractive. The local market is divided into different tiers depending on the quality of faculty, training facilities and affiliation. Bulk of the market however is attracted towards recognized and established groups. Therefore a number of foreign IT institute chains are coming into Pakistan including, APTECH & APIIT.

In addition to these foreign affiliated institutions, local colleges with long established histories of quality education are also running as successful ventures. These include Nicon, Informatics, Petroman, Infologix etc.

3 MARKET ANALYSIS

3.1 Target Market

The target market for an IT College can be divided into subgroups depending on different criteria. These market segments will depend primarily on the city and locality in which this institute is to be established. However, for simplicity, this target market can be divided into two major groups.

1. Students
 - School/College going students taking part time courses
 - Full time IT Students
2. Professionals

Any IT college shall assess the need of each of the individual target group and design its course offer accordingly. General guidelines for course offer include enough demand in the area and availability of a qualified instructor. In addition to that, the product offer shall be well balanced to offer different selected segments of the market according to its demand. MS Office and Internet package can suffice for schools going children, but college students will demand certification-oriented courses like MCSE, C++, OCP, VB, & JAVA. Macro Media, E-Commerce and Graphic Designing would be the courses demanded by professionals looking for skill diversification and enhancement. Moreover, the college shall adopt a policy where there is a balanced mix amongst the specialized courses that can act as flag bearers for the college enhancing its image, as well as simple courses that can bring volumes to the college.

3.2 Competition

Competition for any new IT college comes both from private as well as public sector. However, the public sector colleges are until now engaged in provision of longer degree courses in IT education and are not very well recognized in short courses. In the market of short IT courses, there are different tiers of competition present in the market. IT education market in big cities are primarily dominated by well recognized branded IT colleges with long historic track record or a foreign affiliations. Some of the colleges in this group are Nikon, Informatics, APTECH, APIIT to name a few. However, along with this front line schools, there are numerous other schools providing economical/cheap educational facilities to growing number of IT students.

3.3 Strategic Plan

Mushroom growth of IT colleges in major cities of the country has left any new entrant in the business with limited viable options. One of these is to distinguish itself through provision of high quality education and that too in cities & places where quality education is not easily available. Good quality education would mean hiring qualified instructors and offering a reasonably wide range of education services in a technologically well equipped environment.

4 MAN POWER REQUIREMENTS

The primary human resources requirement for an IT College is the course instructors for different courses offered by the institute. The number of the instructors depends on the courses offered and their pay structure will also be determined by the quality of education that the institute is expected to provide. In larger cities, especially in federal and provincial capitals, good quality qualified computer professionals at competitive salaries are abundantly available. However, at second string cities like Sargodha, Sialkot and Faisalabad, this can be a serious management problem that will eventually determine the success of the venture. Qualified professionals for high-end computer programs are not easily available in these cities. The recommended option for such a venture is to hire visiting faculty members from adjoining bigger cities at attractive salary packages in the

initial phase. During this initial phase, the management can train own permanent staff or hire from among the qualified computer professionals passing out from its own college.

A detail of the required personnel is given in the table below.

POST	Number of Positions	Expected Salary (Rs/person/month)
Principal / CEO (Owner Manager)	1	25,000
Career Counselor	1	8,000
Faculty		
Visual Basic	1	5,000
3D Graphics	1	8,000
CCNA	1	8,000
MCSE	1	8,000
IT Office	1	6,000
E-Commerce	1	7,000
AutoCAD	1	6,000
Administration Staff		
Security Guards	2	4,000
Lab Supervisors	2	8,000
Receptionist	1	5,000
Office Boys	2	4,000
Total	18	

5 EQUIPMENT DETAILS

Major machinery and equipment required for an IT College includes computers and teaching aids like media projectors and printers. Moreover, it is also suggested that the whole college and its facilities should be networked. This will require networking equipment. In addition, for ensuring the safety of all electric equipment, UPS will also be required.

The preferred computer to user ratio is 1:1 for short courses but for courses like Microsoft Word, Excel, Power-point, Access, Internet Explorer, the computer to student ratio can be 1:3.

It is recommended that the entrepreneur buys Pentium IV's. These can also be bought either second hand or brand new. The preference should be brand new as the new machines have a 10-12 month warranty. The PCs need not be branded and are easily available in the local market.

The minimum specifications that these PCs should have:

- P-IV 3 GH
- 256 MB RAM
- 80GB Hard Disk
- 40X CD Drive
- 1.44 MB Floppy
- 15" monitor
- NIC (Network Interface Card)

Given below, is the list of all the major machinery and equipment required:

Equipment	Units	Cost	Total Cost
Computers	25	20,000	500,000
Printers	2	15,000	30,000
UPS (Local)	13	10,000	130,000
UPS (Imported)	1	60,000	60,000
Server	1	25,000	25,000
Networking			
Hubs	2	16,000	32,000
Nodes	10	500	5,000
Cabling (Feet)	1,000	5	5,000
Patch Cables	50	45	2,250
Panels	2	3,000	6,000
Total Machinery Cost			795,250

Office Equipment & Furniture

Media Projector	1	167,000	167,000
Multimedia Projector	1	96,000	96,000
Telephones	3	965	2,895
Total Office Equipment			265,895

The cost of a network terminal is equivalent to a normal PC as it can very easily be converted into network server.

6 LAND & BUILDING

The college will have two classrooms that will also act as computer labs. In addition to that, a separate IT room is required for hosting the server, the same IT room can also be utilized as a faculty room. The detail of required constructed land & building is given below:

Description	Space in Sq. ft
Management building	250
Class Rooms	480
Cafeteria	120
IT Room	320
Pavement/driveway	176
Total Space Requirement	1,346

(Should not be less than 15 Sq.ft per student)

Though ideally, a purpose built building can best suit an IT college, however any building with the required space in a peaceful environment can be rented out for the purpose. While selecting a suitable location, following points should be kept in mind:

- There should be sufficient parking available for students.
- The place should be conveniently accessible and within the reach of public transport route.
- An IT College should preferably be not located in a congested or commercial area.
- Telephone, electricity and Internet facility should be available.

7 FINANCIAL ANALYSIS

7.1 Project Cost

Capital Investment for purchase of equipment is the major component of total project cost of an IT college. While the detail of individual items is given above in the machinery section, a summary of the capital investment is given below.

Capital Investment	Rs
Machinery & equipment	797,750
Furniture & fixtures	365,000
Office equipment ³	270,895
Pre-operating costs ⁴	58,000
Total Capital Costs	1,491,645

In addition to capital investment, the project will also require working capital. This detail is given below:

³ includes 2 Multimedia projector & 3 Telephone sets.

⁴ includes Pre-operational Administrative expense & accrued interest.

Working Capital	Rs
Pre-paid building rent	192,000
Pre-paid insurance payment	39,888
Cash	236,673
Total Working Capital	572,057
Total Investment	2,119,323

7.2 Financing Arrangement

The project is assumed to be solely based on equity.

7.3 Project Economics

A comprehensive financial analysis & projections of the project show that the project has a potential to bring healthy positive returns to the investors. All estimates are conservative with minimal number of students in the initial phase.

Project	
IRR	44%
Payback Period (yrs)	4.17

8 KEY SUCCESS FACTORS

Ability to hire good quality faculty will eventually determine the success of the venture. Other critical success factors are the number of courses being offered in the institute and the environment and facilities offered.

8.1 Regulations

- ✓ Tax holiday for IT companies and institutions up to the year 2016.
- ✓ Low Custom Duty (5%) on import of IT related Equipment.
- ✓ Withholding Tax has also been brought down from 6% to 1%.

9 Financial Statements

9.1 Project Cost

Capital Investment	Rs. in actuals
Machinery & equipment	797,750
Furniture & fixtures	365,000
Office equipment	270,895
Pre-operating costs	58,000
Total Capital Costs	1,491,645

Working Capital	Rs. in actuals
Upfront building rent	192,000
Upfront insurance payment	39,888
Cash	236,673
Total Working Capital	468,561

Total Investment	1,960,206
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Initial Financing	Rs. in actuals
Debt	-
Equity	1,960,206
Export re-finance facility	-

9.2 Income Statement

Statement Summaries

SMEDA

Income Statement

	Rs. in actuals									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	2,044,000	2,637,600	3,446,415	4,415,182	5,761,500	7,083,363	8,289,832	9,106,754	9,757,116	10,282,203
Cost of goods sold	-	-	-	-	-	-	-	-	-	-
Gross Profit	2,044,000	2,637,600	3,446,415	4,415,182	5,761,500	7,083,363	8,289,832	9,106,754	9,757,116	10,282,203
<i>General administration & selling expenses</i>										
Administration expense	1,584,000	1,738,220	1,907,456	2,093,169	2,296,963	2,520,598	2,766,007	3,035,309	3,330,831	3,655,126
Rental expense	192,000	211,200	232,320	255,552	281,107	309,218	340,140	374,154	411,569	452,726
Utilities expense	380,102	418,112	459,923	505,915	556,507	612,158	673,373	740,711	814,782	896,260
Communications expense (phone, fax, etc.)	9,000	9,450	9,923	10,419	10,940	11,487	12,061	12,664	13,297	13,962
Office expenses (stationary, etc.)	15,840	17,382	19,075	20,932	22,970	25,206	27,660	30,353	33,308	36,551
Promotional expense	61,320	79,128	103,392	132,455	172,845	212,501	248,695	273,203	292,713	308,466
Insurance expense	39,888	26,592	13,296	46,175	30,783	15,392	53,453	35,635	17,818	61,879
Professional fees (legal, audit, etc.)	10,220	13,188	17,232	22,076	28,807	35,417	41,449	45,534	48,786	51,411
Depreciation expense	329,506	329,506	329,506	371,421	371,421	371,421	419,943	419,943	419,943	476,114
Amortization expense	11,600	11,600	11,600	11,600	11,600	-	-	-	-	-
Subtotal	2,633,475	2,854,378	3,103,723	3,469,714	3,783,943	4,113,397	4,582,782	4,967,506	5,383,048	5,952,494
Operating Income	(589,475)	(216,778)	342,692	945,468	1,977,557	2,969,966	3,707,050	4,139,248	4,374,068	4,329,709
Other income	30,983	28,938	85,888	158,334	201,873	238,215	276,501	319,979	360,334	407,743
Gain / (loss) on sale of assets	-	-	239,325	-	-	277,049	-	-	320,718	-
Earnings Before Interest & Taxes	(558,493)	(187,840)	667,905	1,103,802	2,179,429	3,485,230	3,983,551	4,459,227	5,055,120	4,737,452
Earnings Before Tax	(558,493)	(187,840)	667,905	1,103,802	2,179,429	3,485,230	3,983,551	4,459,227	5,055,120	4,737,452
Taxable earnings for the year	(558,493)	(746,333)	(78,427)	1,025,374	2,179,429	3,485,230	3,983,551	4,459,227	5,055,120	4,737,452
NET PROFIT/(LOSS) AFTER TAX	(558,493)	(187,840)	667,905	1,103,802	2,179,429	3,485,230	3,983,551	4,459,227	5,055,120	4,737,452

9.3 Balance Sheet

Statement Summaries Balance Sheet

SMEDA

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Rs. in Year 9	actuals Year 10
Assets											
<i>Current assets</i>											
Cash & Bank	412,673	206,983	371,785	1,345,981	1,820,692	2,216,762	2,547,545	2,982,472	3,417,115	3,789,567	4,365,287
Pre-paid building rent	16,000	17,600	19,360	21,296	23,426	25,768	28,345	31,179	34,297	37,727	-
Pre-paid insurance	39,888	26,592	13,296	46,175	30,783	15,392	53,453	35,635	17,818	61,879	-
Total Current Assets	468,561	251,174	404,441	1,413,452	1,874,901	2,257,922	2,629,343	3,049,287	3,469,230	3,889,173	4,365,287
<i>Fixed assets</i>											
Machinery & equipment	797,750	531,833	265,917	923,495	615,664	307,832	1,069,061	712,708	356,354	1,237,572	825,048
Furniture & fixtures	365,000	328,500	292,000	255,500	219,000	182,500	146,000	109,500	73,000	36,500	-
Office vehicles	-	-	-	-	-	-	-	-	-	-	-
Office equipment	270,895	243,806	216,716	189,627	162,537	135,448	108,358	81,269	54,179	27,090	-
Total Fixed Assets	1,433,645	1,104,139	774,633	1,368,622	997,201	625,779	1,323,419	903,476	483,533	1,301,162	825,048
<i>Intangible assets</i>											
Pre-operation costs	58,000	46,400	34,800	23,200	11,600	-	-	-	-	-	-
Training costs	-	-	-	-	-	-	-	-	-	-	-
Total Intangible Assets	58,000	46,400	34,800	23,200	11,600	-	-	-	-	-	-
TOTAL ASSETS	1,960,206	1,401,713	1,213,873	2,805,274	2,883,701	2,883,701	3,952,763	3,952,763	3,952,763	5,190,335	5,190,335
Liabilities & Shareholders' Equity											
<i>Shareholders' equity</i>											
Paid-up capital	1,960,206	1,960,206	1,960,206	2,883,701	2,883,701	2,883,701	3,952,763	3,952,763	3,952,763	5,190,335	5,190,335
Retained earnings	-	(558,493)	(746,333)	(78,427)	-	-	-	-	-	-	-
Total Equity	1,960,206	1,401,713	1,213,873	2,805,274	2,883,701	2,883,701	3,952,763	3,952,763	3,952,763	5,190,335	5,190,335
TOTAL CAPITAL AND LIABILITIES	1,960,206	1,401,713	1,213,873	2,805,274	2,883,701	2,883,701	3,952,763	3,952,763	3,952,763	5,190,335	5,190,335

9.4 Cash Flow Statement

Statement Summaries

SMEDA

Cash Flow Statement

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Rs. in Year 9	actuals Year 10
<i>Operating activities</i>											
Net profit	-	(558,493)	(187,840)	667,905	1,103,802	2,179,429	3,485,230	3,983,551	4,459,227	5,055,120	4,737,452
Add: depreciation expense	-	329,506	329,506	329,506	371,421	371,421	371,421	419,943	419,943	419,943	476,114
amortization expense	-	11,600	11,600	11,600	11,600	11,600	-	-	-	-	-
Pre-paid building rent	(16,000)	(1,600)	(1,760)	(1,936)	(2,130)	(2,343)	(2,577)	(2,834)	(3,118)	(3,430)	37,727
Advance insurance premium	(39,888)	13,296	13,296	(32,879)	15,392	15,392	(38,061)	17,818	17,818	(44,061)	61,879
Cash provided by operations	(55,888)	(205,691)	164,802	974,197	1,500,085	2,575,500	3,816,013	4,418,477	4,893,870	5,427,573	5,313,171
<i>Financing activities</i>											
Issuance of shares	1,960,206	-	-	923,495	-	-	1,069,061	-	-	1,237,572	-
Cash provided by / (used for) financing activities	1,960,206	-	-	923,495	-	-	1,069,061	-	-	1,237,572	-
<i>Investing activities</i>											
Capital expenditure	(1,491,645)	-	-	(923,495)	-	-	(1,069,061)	-	-	(1,237,572)	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(1,491,645)	-	-	(923,495)	-	-	(1,069,061)	-	-	(1,237,572)	-
NET CASH	412,673	(205,691)	164,802	974,197	1,500,085	2,575,500	3,816,013	4,418,477	4,893,870	5,427,573	5,313,171