

PROJECT PROFILE
ON
COMPUTER BASED TUTORIAL

Month & Year
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COMPUTER BASED TUTORIAL

INTRODUCTION

Computer based tutorial is a new method to enhance the learning capabilities by adopting modern technology to the educational arena. Different methods of approach to provide better learning methods by students have to be provided. According to the level of the learner, under graduate, post graduate, national and international should be logically arranged. The material presentation should be accurate and proof reading should be impeccable.

PRODUCT SPECIFICATIONS

The material developed for learning should have the following features:

Flexibility: There should be a provision for presenting as much as material for gifted learners and as small as possible for slow learners, flexible access to different parts of a course, which means, a provision to navigate, to go backward / forward; to pause; to exit or change to any other module as needed by the learner.

Structure and Organization of Modules: Each module content should be precisely defined; the sequence should be logically developed, not in jumps and bits and each module should naturally end up in the beginning of the succeeding one. Links between the modules and guided learning posts should be based on learner's responses. There should be suggestions for advanced areas of the subject matter.

Learner Control: The learner should have a control on what he learns and how he learnt for which interface design between the computer and the learner, should be user- friendly, the software used should not complicate the learner. The screen format should be in few lines, good fonts, and colour contrast suitable for the topic, graphic, images, dynamic pictures with animation in 2D, 3D wherever necessary, video and suitable audio guiding the learner.

Links: Optional linking routes and guided learning posts and freedom of movement, links with menus, control navigational buttons, diagrams, route maps. Zooming for picture, sound, as needed, overview through video and audio, instructions on how to use the program sign posting through help should all be provided for.

System Performance: Response should not be too slow or too fast. Learner response should be stored until asked for removal.

Support Material: CBT developed should integrate with other resource in the field.

Production quality: Graphics, images, pictures, graphs should be clear and the explanation should be proper with necessary mathematical back up, simulation should be used, and not line drawings.

Effective Presentations: Simple language, clarity in explanation; avoidance of complex jargon and unnecessary information examples from real life; short sentences and paragraphs and explanation in all technical terms and notational derivations.

Interactivity: Allow for two-way interaction through links.

Testing and monitoring: This is very much needed at the end of each chapter through, quiz, questionnaire and evaluation exercise.

MARKET POTENTIAL

IT enabled services such as computer based Tutorial has good scope to be developed in India on account of several advantages such as large English speaking population and well connected telecommunication system. Cost benefits such as low man power cost etc. persons with good knowledge in academic and other subjects are abundant. CBT can be developed for several foreign customers.

TECHNICAL ASPECTS

INSTALLED CAPACITY

The small unit for developing CBT can develop 24 titles per annum at the rate of 2 titles per month.

EQUIPMENT

The following infrastructure is required.

	Qty.	[Rs.lakhs]
Servers	1 no	1.00
Computers	5 nos.	1.50
Cabling in meters	20 mt.	0.05
Interiors		1.50
Connectivity		0.20
UPS		0.10
		4.35

PROCESS OF DEVELOPMENT

On receipt of orders for development of CBT on various subjects from overseas buyers, the unit has to engage professors on different subjects on a retainer basis for development of the learning material. The materials have to be checked for quality control. The approval has to be obtained from quality control authority for developed programmes. A security deposit of \$ 500 per title is to be paid to the overseas client for successful completion of the project. On successful completion this amount will be refunded. This will be revolving in nature. A commission equivalent to 25% will be to be paid to overseas agent who obtains the order. The commission can also be included in the invoice.

LAND & BUILDING

An area of 500 sq. ft will be sufficient. This can be arranged on lease basis, Rent of Rs.5000 p.m., with an advance of Rs.50,000.

UTILITIES

POWER:

Normal electricity connection is required for office.

MAN POWER:

Category	Nos.	Monthly	Total
Project Manager	1	25000	25000
Programmer	3	15000	45000
Designer	1	12000	12000
Admin. Assistant	1	7000	7000
			89000

Total salary per annum (Rs.lakhs) Rs.10.68 lakhs

Professors - on retainer basis, Contract.

IMPLEMENTATION SCHEDULE

The machines are obtainable from local supplier within two weeks period. The project can be implemented within one month period.

ASSUMPTIONS

- Installed capacity is 24 No. of titles per annum (2 titles Per month) (installation 1st year 60%, 2nd year 70%, 3rd year 80%).
- Selling price is assumed at Rs.1.20 lakhs per title,
- Electricity charge is calculated at Rs.1.20 lakh per annum at 100% capacity.
- Wages & Salaries is estimated at Rs.10.68 lakhs per annum as per breakup given above with annual increase of 5%.
- Rent is provided at Rs.120000 per annum.

- Repairs & Maintenance is estimated at Rs. 0.60 lakh per annum Rs.5000 per month with annual increase of 5%.
- Professors' fees is provided at Rs.1.40 lakhs per annum.
- Depreciation is calculated on WDV method at 15% plant on machinery.
- Selling, General & Adm. Expenses is Rs. 2.40 lakhs per annum Rs.20000 per month with annual increase of 5%.
- Interest on Term loan is calculated at 12% p.a.
- Income tax is provided at 33.22% on taxable income.

MACHNERY SUPPLIERS:

All leading computer and Server suppliers

1. COST OF PROJECT

	[Rs.lakhs]
Building (Advance)	0.50
Plant & Machinery	5.15
Pre-Operative expenses	1.00
Margin for WC	3.00
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	9.65

2. MEANS OF FINANCE

Capital	5.79
Term Loan	3.86
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	9.65

3. COST OF PRODUCTION & PROFITABILITY STATEMENTS

Years	1	2	3
Installed Capacity			
No. of Titles p.a.	24	24	24
Utilisation	60%	70%	80%
No. of Titles to be sold	14	17	19
Selling price per tittle	Rs.1.20	lakhs	
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Income p.a (Rs.lakhs)	16.80	20.40	22.80
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Power	0.72	0.84	0.96
Rent	0.60	0.63	0.66
Wages & Salaries	10.68	11.21	11.77
Professor fee	1.40	1.54	1.69
Maintenance	0.06	0.07	0.08
Depreciation	0.92	0.78	0.67
Cost of Production	14.38	15.07	15.83
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Admin. & General expenses	2.40	2.52	2.65
Selling expenses	0.00	0.00	0.00
Interest on Term Loan	0.46	0.41	0.29
Interest on Working Capital	0.00	0.00	0.00
Total	17.24	18.00	18.77
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Profit Before Tax	-0.44	2.40	4.03
Provision for tax	0.00	0.80	1.34
Profit After Tax	-0.44	1.60	2.69

Add: Depreciation	0.92	0.78	0.67
Cash Accruals	0.48	2.38	3.36

4. WORKING CAPITAL:

	Months	Values	%	Margin	Bank
	Consumptions			Amount	Finance
Raw Materials	0.00		25%	0.00	0.00
Consumables	0.00		25%	0.00	0.00
Finished goods	0.00		25%	0.00	0.00
Debtors	0.00		10%	0.00	0.00
Expenses	3.00	3.00	100%	3.00	0.00
		<u>3.00</u>		<u>3.00</u>	<u>0.00</u>

5. PROFITABILITY RATIOS BASED ON 80% UTILISATION

<u>Profit after Tax</u>	<u>2.69</u>	12%
Sales	22.80	
<u>Profit before Interest and Tax</u>	<u>4.32</u>	45%
Total Investment	9.65	
<u>Profit after Tax</u>	<u>2.69</u>	46%
Promoters Capital	5.79	

6. BREAK EVEN LEVEL

Fixed Cost (FC):

	[Rs.lakhs]
Wages & Salaries	11.77
Rent	0.66
Repairs & Maintenance	0.08
Depreciation	0.67
Admin. & General expenses	2.65
Interest on TL	0.29
	<u>16.12</u>

Profit Before Tax (P) 4.03

$$BEL = \frac{FC \times 100}{FC + P} = \frac{16.12}{20.15} \times \frac{80}{100} \times 100$$

64% of installed capacity