

Medical Transcription

PRODUCT CODE (ASICC)	: 97720
QUALITY AND STANDARDS	: N.A.
PRODUCTION CAPACITY	: Qty. : 27,00,000 Nos. of lines (per annum) Value : Rs. 67,50,000
YEAR OF PREPARATION	: 2002–2003
PREPARED AND UPDATED BY	: Small Industries Service Institute Bamunimaidan, Guwahati And Office of the Development Commissioner (Small Scale Industries), Electronics and Electrical Division, 7th Floor, Nirman Bhavan, New Delhi –1100 11.

INTRODUCTION

Medical Transcription is one of the highly professional IT related services. It involves highly skilled data processing job for medical field. Doctors maintain the medical records for each patient's follow-up action and future reference. The medical records are also useful for better treatment i.e. health care, insurance claim and for medical research purposes. An accurate computerized medical record helps in avoiding chances of omission of some of the important findings in the records. As the manpower (Computer operator-cum-typist) is very costly abroad Medical Transcription with the internet growing popular, has emerged into a solution to utilize the manpower around the globe.

In this process the Doctor at overseas (say USA) dictates case history and recommendations etc. of a patient

directly to a computer, where information is stored as voice files. These files are transmitted to the server from Doctor's end.

The server of medical Transcription Company at India is connected to overseas company through V-sat. The voiced files are downloaded and converted to readable MS word files and uploaded back to overseas server so that overseas Doctor can maintain them as record.

MARKET POTENTIAL

India has emerged as a leading global partner for the growth of Information Technology and IT related services. Already there are many companies engaged in Medical transcription services. One of the factors for this growth is availability of highly skilled computer literate, good English speaking

professionals at a cheaper cost compared to those in developed countries. The time difference of 8 hrs. to 12 hrs. is also an encouraging factor for medical transcription services. Internet has reached in almost every corner of India via BSNL or ISPs.

There are a few Training institutes, which can cater to the training of Medical Transcription services. BSNL and Internet Service Providers can provide good internet connectivity. The speed for data transmission has increased a lot through broad band. The computer hardware and software is available locally.

The many States Government has already announced implemented separate IT policy to encourage IT and IT enabled services. The new entrepreneur has to explore overseas market before starting Medical transcription services.

BASIS AND PRESUMPTIONS

- i) The basis for calculation of production capacity has been taken on single shift basis on 75% efficiency.
- ii) The maximum capacity utilization on single shift basis for 300 days a year. During first year and second year of operations the capacity utilization is 60% and 80% respectively. The unit is expected to achieve full capacity utilization from the third year onwards.
- iii) The salaries and wages, cost of raw materials, utilities, rents, etc. are based on the prevailing rates in and around Uttaranchal. These

cost factors are likely to vary with time and location.

- iv) Interest on term loan and working capital loan has been taken at the rate of 16% on an average. This rate may vary depending upon the policy of the financial institutions/agencies from time to time.
- v) The cost of machinery and equipments refer to a particular make / model and prices are approximate.
- vi) The break-even point percentage indicated is of full capacity utilization.
- vii) The project preparation cost etc. whenever required could be considered under pre-operative expense.
- viii) The essential production machinery and test equipment required for the project have been indicated. The unit may also utilize common test facilities available at Electronics Test and Development Centres (ETDCs) and Electronic Regional Test Laboratories (ERTLs) set up by the State Governments and STQC Directorate of the Department of Information Technology, Ministry of Communication and Information Technology, to manufacture products conforming to Bureau of Indian Standards.

IMPLEMENTATION SCHEDULE

The major activities in the implementation of the project has been listed and the average time for implementation of the project is estimated at 12 months:

Sl. No.	Name of Activity	Period in Months (Estimated)
1.	Preparation of project report	1
2.	Registration and other formalities	1
3.	Sanction of loan by financial institutions	3
4.	Plant and Machinery:	
	(a) Placement of orders	1
	(b) Procurement	2
	(c) Power connection/ Electrification	2
	(d) Installation/Erection of machinery/Test Equipment	2
5.	Procurement of raw materials	2
6.	Recruitment of Technical Personnel etc.	2
7.	Trial production	11
8.	Commercial production	12

Notes

1. Many of the above activities shall be initiated concurrently
2. Procurement of raw materials commences from the 8th month onwards.
3. When imported plant and machinery are required, the implementation period of project may vary from 12 months to 15 months.

TECHNICAL ASPECTS

Medical Transcription Service Process

The Doctor at overseas (say USA) dictates case history of a patient to a computer, where information is stored as voice files. Then they are stored in overseas server.

The server of medical Transcription Company at India is connected to

overseas company through V-sat. The voiced files are down loaded and converted to readable MS word files and up loaded back to overseas server so that overseas Doctor can maintain them as a records. Generally for medical transcription services there will be overseas agents between Doctor and the company. The service charges depend on the number of lines transcribed. The transcription will be done in shifts and will be at peak between 9 p.m. to 6 a.m.

The Medical transcription service centre has good scope with all the above facilities. The centre will not only help in promotion of IT services but also provides employment to many people of the region. The centre may also take up the computer related DTP jobs and training activities in idle time schedule.

Production Capacity (per annum)

Quantity	Value (Rs.)
27,00,000 No. of lines	67,50,000
	(@ Rs. 2.50 per line)

Motive Power 15 HP (approx.)

Pollution Control

Medical Transcription Services is not characterized as polluting industry and is free from pollution control.

Energy Conservation

With the growing energy needs and shortage coupled with rising energy cost, a greater thrust in energy efficiency in industrial sector has been given by the Govt. of India since 1980s. The Energy Conservation Act, 2001 has been enacted on 18th August 2001, which provides for efficient use of energy, its conservation and capacity

building of Bureau of Energy Efficiency created under the Act.

The following steps may help for conservation of electrical energy:

- i) Adoption of energy conserving technologies, production aids and testing facilities.
- ii) Efficient management of process/manufacturing machineries and systems, QC and testing equipments for yielding maximum Energy Conservation.
- iii) Optimum use of electrical energy for heating during soldering process can be obtained by using efficient temperature controlled soldering and desoldering stations.
- iv) Periodical maintenance of motors compressors etc.
- v) Use of power factor correction capacitors. Proper selection and layout of lighting system; timely switching on-off of the lights; use of compact fluorescent lamps wherever possible etc.

FINANCIAL ASPECTS

A. Fixed Capital

(i) Land and Building

Built up area	500 sq. Mts.
Rent (per annum)	Rs. 96,000

(ii) Machinery and Equipments

Sl. No.	Description	Ind/ Imp	Qty. (Nos.)	Total (Rs.)
1.	Computer System (Pentium IV, Intel IV1.7 /1.8/1.9 GHz and above, 256 Cashe/128 DDR RAM/ Intel 845 Chipset based Mother Board/AGP 4 × 32 MB Graphicx/ 40 GB HDD/1.44 MB FDD/ 52X CD ROM with Multi Media Kit with speakers/	Ind.	15	6,75,000

Sl. No.	Description	Ind/ Imp	Qty. (Nos.)	Total (Rs.)
	Scroll Mouse/Multimedia 107 Keys Keyboard/15" VGA Coloured Monitor (Digital) and Internal 56.6 KBPS Modem, 10/100 MBPS Ethernet Card, Mini Tower Cabinet/2 Serial, 2USB, 1 parallel, 1PS/2 Mouse Ports with preloaded software- Window 2000/ XP Home and Antivirus			
2.	Server (C 12 GB, Window NT) (File Transfer Software, Digital Transcription and Dictation Voice Ware Distribution Server, Complete Medical Spell Checker, Keyboard Abbreviation Expanders Line Count Software for Microsoft Word 97/2000/ 2002XP, Windows 98/ 2000/ME/NT/2002XP	Ind.	1	5,00,000
3.	Hub and Networking Computers	Ind.	LS	1,00,000
4.	Printer	Ind.	3	70,000
5.	UPS (ON Line 10 KVA)	Ind.	1	1,50,000
6.	V-sat	Ind.	1	2,00,000
	Total			16,95,000

(iii) Other Fixed Assets	(Rs.)
Electrification charges @10% cost of machinery and equipment	- - 1,69,500
Site Preparation (Flooring, Ceiling, Glass panel etc.)	- LS 1,00,000
Office furniture and equipment , Air conditioners, DG Set etc.	- - 4,05,000
Pre-operative expenses	1,00,000
Total	7,74,500
Total	24,69,500

B. Working Capital (per month)

(i) Man Power Requirement (per month)

Sl. No.	Designation	No. of persons monthly	Salary	Total (Rs.)
1.	Manager	1	18,000	18,000
2.	Hardware Maintenance Engineer	1	9,000	9,000

Sl. No.	Designation	No. of persons	Salary monthly	Total (Rs.)
3.	Medical Transcriptionist	20	6,000	1,20,000
4.	Accountant	1	4,000	4,000
5.	Clerk/Typist	2	3,000	6,000
6.	Peon	2	2,000	4,000
7.	Watchman	3	2,000	6,000
8.	Cleaner	1	2,000	2,000
	Total			1,69,000
	Add perquisites @ 15% of salary			25,350
	Total			1,94,350
	or Say			1,95,000

(ii) Raw Material Required (per month)

Particulars	Ind./ Imp.	Qty.	Total (Rs.)
Computer stationery (like paper, ribbon, Cartridge, Floppy, CDs)	Ind.	LS	15,000
Total			15,000

(iii) Utilities (per month)	(Rs.)
Power and Fuel	45,000
Water	1,000
Total	46,000

(iv) Other Contingent Expenses (per month) (Rs.)	(Rs.)
1. Rent	8,000
2. Postage and stationery	1,000
3. Telephone/ Fax charges	20,000
4. Internet fees	11,000
5. Repair and Maintenance	10,000
6. Transport and conveyance charges	10,000
7. Insurance	3,000
8. Miscellaneous expenditure	2,000
Total	65,000

(v) Total Working Capital (per month) (i)+ (ii) + (iii) + (iv) Rs. 3,21,000

C. Total Capital Investment

Fixed Capital	Rs. 24,69,500
Working Capital on 3 months basis	Rs. 9,63,000
Total	Rs. 34,32,500

FINANCIAL ANALYSIS

(1) Cost of Production (per annum)	(Rs.)
Total recurring expenditure	38,52,000
Depreciation on machinery and equipment @ 10 %	1,69,500
Depreciation on office equipment, furniture @ 20%	81,000
Interest on total capital investment @ 16%	5,49,200
Total	46,51,700

(2) Turnover (per annum)

Description	Total No. Lines	Rate/ Lines(Rs.)	Total (Rs.)
Medical Transcription	27,00,000	2.50	67,50,000

(3) Profit (per annum) (Before Taxes) Rs. 20,98,300

$$\begin{aligned}
 (4) \text{ Net Profit Ratio} &= \frac{\text{Profit (per annum)} \times 100}{\text{Sales (per annum)}} \\
 &= \frac{20,98,300 \times 100}{67,50,000} \\
 &= 31.08\%
 \end{aligned}$$

$$\begin{aligned}
 (5) \text{ Rate of Return} &= \frac{\text{Profit (per annum)} \times 100}{\text{Total capital investment}} \\
 &= \frac{20,98,300 \times 100}{34,32,500} \\
 &= 61.13\%
 \end{aligned}$$

(6) Break-even Point

Fixed Cost (per annum)	(Rs.)
Rent	96,000
Depreciation on machinery and equipment @ 10 %	1,69,500
Depreciation on office equipment, furniture @ 20%	81,000
Interest on total capital investment @ 16%	5,49,200
Insurance	36,000
40% of Salaries and wages	9,36,000
40% of other contingent expenses and utilities (excluding rent and insurance)	4,80,000
Total	23,47,700

B.E.P.

$$\begin{aligned}
 &= \frac{\text{Fixed cost} \times 100}{\text{Fixed cost} + \text{Profit}} \\
 &= \frac{23,47,700 \times 100}{23,47,700 + 20,98,300} \\
 &= 52.80\%
 \end{aligned}$$

Additional Information

- (a) The Project Profile may be modified/tailored to suit the individual entrepreneurship qualities/capacity, production programme and also to suit the locational characteristics, wherever applicable.
- (b) The Electronics Technology is undergoing rapid strides of change and there is need for regular monitoring of the national and international technology scenario. The unit may, therefore, keep abreast with the new technologies in order to keep them in pace with the developments for global competition.
- (c) Quality today is not only confined to the product or service alone. It also extends to the process and environment in which they are generated. The ISO 9000 defines standards for Quality Management Systems and ISO 14001 defines standards for Environmental Management System for acceptability at international level. The unit may therefore adopt these standards for global competition.
- (d) The margin money recommended is 25% of the working capital requirement at an average. However, the percentage of margin money may vary as per bank's discretion.

Addresses of Machinery and Equipment Suppliers

1. M/s. Assam Electronic Development Corporation Ltd.
Industrial Estate, Bamunimaidan, Guwahati - 21
2. M/s. Integrated Systems and Services UNN. Bezbaruah Road, Silpukhuri, Guwahati - 3
3. M/s. Swift Systems
Tayebulla Compound, Dighlipu-khuripar (East), Guwahati
4. M/s. MICROTEK International Limited
MICROTEK House, H-57, Udyog Nagar, Rohtak Road, Delhi-110041
5. M/s. Vintron Informatics Ltd.
F-90/1A, Okhla Indl. Area, Phase-I, New Delhi-110020
(HCL, IBM, COMPAQ etc. leading branded computer manufacturers have their broad network and hence the nearest dealer may be contacted for Computer Hardware related items.)

Computer Software Suppliers

1. M/s. Web. Com (India) Pvt. Ltd.
2nd Floor, Voltas Building Chandmari, Guwahati-3
2. M/s. Third Eye Infosys (P) Ltd.
H.B. Road, Panbazar (Above Kalpataru), Guwahati - 1
3. M/s. Quadra Soft Tech (P) Ltd.
Opp. CBZ, Silpukhuri Br., Guwahati-3
4. M/s. Soft Mart
D-1072, New Friends Colony, New Delhi-110065