

PROJECT PROFILE ON PAY PHONE

1. INTRODUCTION

The Coin operated pay phone, either table top or with Wall Mounting facility is mainly used as a public telephone in various public places like Railway Stations, Markets, hotels, Airports and other Important public places. The phones are very convenient for operating and is very widely accepted as public pay phone. The profile is about the manufacturing of various coin operated telephones now available in the market.

2. MARKET POTENTIAL

The coin operated pay phones are very widely used as a public telephone as it is very popular and Government is promoting the usage of this type of coin phones. The public and private service providers are increasingly installing the coin operated pay phones at different places like Railway Stations, Airports, Important public places, markets, government offices, bus stands, hotels, educational institutions and all other public places. As the communication network gets expanded in a rapid pace, there is enough scope for more number of units to manufacture coin operated telephones.

3. Basis & presumptions:

- i) The basis for calculation of production capacity has been taken on a single shift basis on 75% efficiency,
- ii) The maximum capacity utilization on single shift basis, for 300 days in a year. During the 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, rent, etc. are based on the prevailing rates in and around Thrissur. These cost factors are likely to vary with time and location,
- iv) Interest on term loan and working capital has been taken @ 16% on an average. This rate may vary depending upon the policy of financial institutions/ agencies from time to time,
- v) The cost of machinery and equipments refer to a particular make/model and the 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 the pre-operative expense,
- viii) The essential machinery and equipments required for the project have been indicated. The unit may also utilize common facilities available at Electronics Test &

Development Centres (ETDC) and Electronic Regional Test Laboratories (ERTLs) set up by state Governments and STQC Directorate of 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 have been listed and the average time for implementation of the project is estimated at 12 months:

| | | Period (in months) Suggestive |
|----|---|--------------------------------------|
| 1. | Preparation of project report | 1 |
| 2. | Registration & other formalities | 1 |
| 3. | Sanction of loan by financial institution | 3 |
| 4. | Plant & machinery: | |
| | a. Placement of orders | 1 |
| | b. Procurement | 2 |
| | c. Electrification & installation | 2 |
| 5. | Procurement of raw materials | 2 |
| 6. | Recruitment of technical personnel | 2 |
| 7. | Trial operation | 11th month, |
| 8. | Commercial operation | 12th month, |

Note:

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:

1. PROCESS OF MANUFACTURE

The incoming raw materials and components are tested for required quality and specifications. The components are formed, shaped and soldered on pre-designed printed circuit boards and programmed using microcontroller programmer for desired performance.

The PCBs and other electromechanical components are mounted inside the plastic/powder coated enclosure, electrical wirings are made. The coin operated pay phones are tested for required performance.

2. QUALITY STANDARDS : As per customer's specification

3. PRODUCTION CAPACITY PER ANNUM

Qty : 9,000 Nos.

Value :Rs. 1,14,00,000/-

4. MOTIVE POWER

5 KVA

5. Pollution Control

Government accords utmost importance to control environmental pollution. The small scale entrepreneurs should have an environmental friendly attitude and adopt pollution control measures by process modification and technology substitution.

India having acceded to the Montreal Protocol in September, 1992, the production and use of Ozone Depleting Substances (ODS) like Chlorofluoro Carbon (CFC), Carbon Tetrachloride, Halons and Methyl Chloroform etc. need to be phased out immediately with alternative chemicals/solvents. A notification for detailed rules to regulate ODS phase out under the environment Protection Act, 1986 have been put in place with effect from 19th July, 2000.

The following steps are suggested which may help to control pollution in electronics industry wherever applicable:

- i) In electronic industry fumes and gases are released during hand soldering/wave soldering/dip soldering, which are harmful to people as well as environment and the end products. Alternate technologies may be used to phase out the existing polluting technologies. Numerous new fluxes have been developed containing 2 - 10% solids as opposed to the traditional 15-33% solids.
- ii) Electronic industry uses CFC, Carbon Tetrachloride and Methyl Chloroform for Cleaning of printed circuit boards after assembly to remove flux residues left after soldering, and various kinds of foams for packaging.

Many alternative solvents could replace CFC-113 and Methyl Chloroform in electronics cleaning. Other Chlorinated solvents such as Trichloroethylene, Perchloroethylene and

Methylene Chloride have been used as effective cleaners in electronics industry for many years. Other organic solvents such as Ketones and Alcohols are effective in removing both solder fluxes and many polar contaminants.

6. 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 disordering 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

i) Land and Building

| | |
|------------------------|--------------|
| Built up Area | 300 sq.mtrs. |
| Office, stores | 100 sq.mtrs. |
| Assembly and Testing | 200 sq.mtrs. |
| Rent payable per annum | Rs. 84,000/- |

ii) Machinery & Equipments

| Sl. No. | Description | Ind/Imp | Qty.Nos. | Value (Rs.) |
|---------|-----------------------------------|---------|----------|-------------|
| 1. | Digital Multimeter, 3 ½ Digit | Ind | 4 | 48,000/- |
| 2. | Temp. Controlled Soldering Units, | Ind | 1 | 1,00,000/- |
| | Tools, kit, Test Bench etc. | | | |

| | | | | |
|-----|------------------------------------|---------------------|---|------------|
| 3. | Pneumatic controlled screw | Ind | 2 | 20,000/- |
| | drivers | | | |
| 4. | DC dual Power Pack | Ind | 2 | 26,000/- |
| 5. | Drilling machine | Ind | 2 | 16,000/- |
| 6. | Microcontroller programmer | Ind | 2 | 20,000/- |
| 7. | Oscilloscope | Ind | 1 | 40,000 - |
| | Total | | | 2,70,000/- |
| | Other fixed Assets | | | |
| 8. | Electrification charges @ 10% cost | | | 27,000/- |
| | of machinery & equipment | | | |
| 9. | office furniture, equipments | LS | | 50,000/- |
| | and working table etc. | | | |
| 10. | Pre-Operative expenses | | | 50,000/- |
| 11. | | Total Fixed Capital | | 3,97,000/- |

Working Capital per month

i) Staff & Labour

| Sl.No. | Designation | No. of person | Salary (Rs.) | Total salary/ month |
|--------|-------------------------------|---------------|--------------|---------------------|
| 1. | Manager-cum Technical Expert | 1 | 8,000 | 8,000/- |
| 2. | Skilled Worker | 4 | 3,000 | 12,000/- |
| 3. | Semi skilled Worker | 2 | 2,000 | 4,000/- |
| 4. | Assistant | 1 | 2,000 | 2,000/- |
| 5. | Accountant/ Office assistant | 2 | 2,500 | 5,000/- |
| 6. | Sales / customer support | 2 | 3,000 | 6,000/- |
| | + Perquisites @ 15% of salary | | | 5,550/- |
| | Total | | | 42,550/- |

ii) Raw material (for 750 Nos.) per month

| Sl. No | Particulars | Ind/ Imp | Qty. | Value (Rs) |
|--------|-------------------------|----------|------|-------------------|
| 1. | Motherboard | Ind | 750 | 2,25,000/- |
| 2. | Powder coated Metal | Ind | 250 | 75,000/- |
| | Cabinet | | | |
| 3. | Plastic Cabinet | Ind | 500 | 1,37,500/- |
| 4. | Key pad, handset, | Ind | 750 | 3,00,000/- |
| | Mechanical assembly and | | | |
| | other items | | | |
| 5. | Packing cartons | Ind | 750 | 15,000/- |
| 6. | Consumables-Solder & | Ind | | 2,500/- |
| | flux | | | |
| | Total | | | 7,55,000/- |

iii) Utilities per month

| | | |
|----|--------------|----------------|
| 1. | Power | 3,000/- |
| 2. | Water | 5,00/- |
| | Total | 3,500/- |

iv) Other contingent expenses per month

| | | |
|----|---------------------------------|-----------------|
| 1. | Rent | 7,000/- |
| 2. | Stationery, postage & printing | 1,000/- |
| 3. | Telephone | 3,000/- |
| 4. | Repair and Maintenance | 2,000/- |
| 5. | Transport and Conveyance | 5,000/- |
| 6. | Advertisement and Publicity | 10,000/- |
| 7. | Insurance | 1,000/- |
| 8. | Other Miscellaneous Expenditure | 3,000/- |
| | Total | 32,000/- |

Total Recurring Expenditure per month

Rs. 8,33,050/-

(i + ii + iii + iv)

Total Capital Investment

| | |
|------------------------------------|------------------|
| Fixed Capital | 3,97,000 |
| Working Capital for 3 months basis | 24,99,150 |
| Total | 28,96,150 |

Financial analysis

| | | |
|--|--------------|--------------------|
| Cost of production per annum | | |
| Total recurring expenditure | | 99,96,600 |
| Depreciation on machinery & equipment @ 10% | | 27,000 |
| Depreciation on office equipment & furniture @ 20% | | 10,000 |
| Interest on total capital investment @ 16% | | 4,63,384 |
| | Total | 1,04,96,984 |

Turnover per annum

| Item | Qty. (Nos.) | Rent/Unit | Total Sales (Rs.) |
|--|-------------|-----------|----------------------|
| Coin Operated pay phone (With Powder coated metal cabinet) | 3,000 | 1400 | 42,00,000 |
| Coin operated pay phones (Plastic Cabinet) | 6,000 | 1200 | 72,00,000 |
| | Total (Rs.) | | 1,14,00,000 |

Profit per annum (Before taxes) = (Turnover/annum - cost of prod./annum)

Profit ratio = $\frac{\text{profit} \times 100}{\text{Total Turnover}}$ $\frac{1,14,00,000 - 1,04,96,984}{1,14,00,000} = 903016 = 7.9\%$

Rate of Return = $\frac{\text{Net profit} \times 100}{\text{Total Capital Investment}}$ $= \frac{9,03,016}{28,96,150} \times 100 = 31.1\%$

Break-Even Point

Fixed cost per annum

Rs.

| | |
|--|----------|
| Rent | 84,000 |
| Depreciation on machinery & equipment @ 10% | 27,000 |
| Depreciation on office equipment, furniture @ 20% | 10,000 |
| Interest on total capital investment @ 16% | 4,63,384 |
| 40% salary & wages | 2,04,240 |
| 40% of other contingent expenses and utilities (excluding rent and insurance) | 1,32,000 |
| Insurance | 12,000 |
| Total fixed cost | 9,32,624 |

$$\text{Break-even point} = \frac{\text{fixed cost} \times 100}{\text{Fixed cost} + \text{net profit}} = \frac{9,32,624 \times 100}{9,32,624 + 9,03,016} = 50.8\%$$

Additional Information:

- The project may be modified/tailored to suit the individual entrepreneurship qualities/capacity, production programme and also to suit the locational characteristics, wherever applicable,
- The technology in this sector is undergoing rapid strides of change and there is a need for regular monitoring of the national and international technology scenario. The unit, may therefore, keep abreast with new technologies in order to keep them in pace with the developments for global competition,
- 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 system and ISO 14001 defines standards for environmental management system for acceptability at international level. The unit may therefore adopt these standards for global competition,
- The margin money recommended is 25% of the working capital at an average. However the percentage of margin money vary as per bank's discretion,

**NAME AND ADDRESSES OF MACHINERY &
EQUIPMENT SUPPLIERS**

| | | |
|----|--|------------------------------|
| 1. | S.S Engineers | |
| | RZ 27 A Narsing Garden, Khyala village, | |
| | New Delhi-18 | Cabinet |
| | Ph : 011 25986432 , 25986234 | |
| | E Mail: catmech60@yahoo.co.in | |
| 2. | S.S Engineers | |
| | RZ 27 A Narsing Garden, Khyala village, | |
| | New Delhi 18 | |
| | Ph : 011 25986432 ,25986234 | Cabinet |
| | E Mail: catmech60@yahoo.co.in | |
| | | |
| 3. | Itel Inc. 116, | |
| | Sundaram Estate, Govandi, | Mother board |
| | Mumbai – 88 | |
| | Ph: 022 69900084, 9820239127 | |
| | | |
| 4. | Mercytel Electronics | |
| | Mysore Road, Sulthan Bathery, Kerala | For mother board and fully |
| | Ph: 09947474996, 09847864679 | assembled Kit |
| | | |
| 5. | Kerala sales corporation | |
| | Post Office Road, | |
| | Chettiyagadi, | Machinery, Tools, components |
| | Thrissur. | |
| | Kerala. | |
| | | |
| 6. | Starson Electronics | |
| | 29/1514 B, Jawahar Road, Vytilla, | |
| | Ernakulam - 682 019 | Machinery, Tools, components |
| | Phone: + (91)-(484)-2307705 Fax: | |
| | + (91)-(484)-3218300 | |
| | | |
| 7. | Kamal Electronics | |
| | 14, Lakshmi Building, | TESTING EQUIPMENTS |

| | | |
|----|--|--------------------|
| | J.C. Road, Bangalore- | |
| | 560002 | |
| | | |
| 8. | Aplab Limited | |
| | XL 1/583, II Floor | |
| | Krishna Nivas | |
| | Adv. Eashwara Iyer Road, | TESTING EQUIPMENTS |
| | Kochi- 682 035 Phone: 0484 2361623 | |
| | Email aplabkochi@vsnl.net . | |
| | | |
| 9. | Guru Agencies, | |
| | M.G. Road, | TESTING EQUIPMENTS |
| | Ernamkulam, | |
| | Kerala. | |