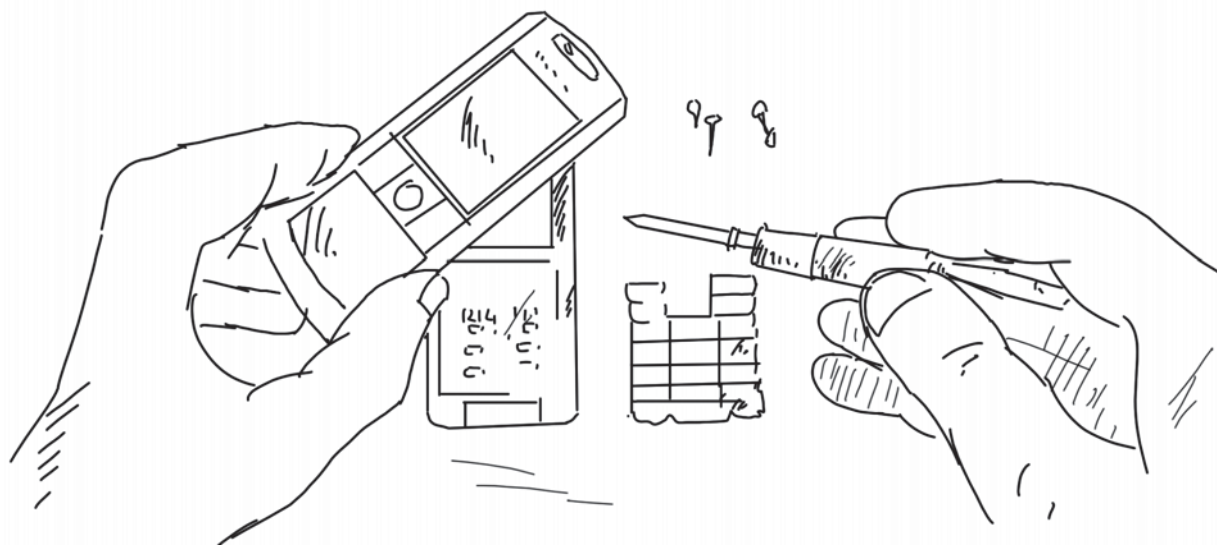


# MOBILE REPAIRING SERVICE



## 1.0 INTRODUCTION

From the slow start in 1995, the Indian mobile phone industry has come a long way. The Indian mobile market has been witnessing rapid increase in its subscriber base over the past few years, largely due to the declining mobile tariffs and availability of low cost handsets in the country. After successful market penetration in urban India, mobile operators in the country are now vying rural India as their next area for growth in the near future. Meanwhile, a number of mobile handset manufacturers have been working to cover the untapped rural mobile market, which will be the major driver for Indian mobile market in coming years. As the mobile hand set market is growing similarly the demand of servicing of handsets is also growing.

This project profile is for setting up of a Mobile repairing service unit, based on 300 working days per annum and 8 working hours per day. The installed capacity of the unit per annum is as follows;

Repairing of Mobile Handset	-	3000 Sets
Selling of Mobile Handset	-	1200 Nos.

## 2.0 MARKET POTENTIAL

Electronic products like Mobile phone are sensitive, vulnerable and are likely to be out of order in its day to day

usage. The branded companies like Nokia and Samsung etc. have their own service centres in the metros and big cities but due to a gap in between demand and service provided, alternative servicing centres with qualitative service at optimum price are also highly in demand. This demand is more at town level since rarely available branded companies servicing centres while use of mobile hand set increasing day by day. So enough potential is available for setting up of mobile servicing units in the SSI sector.

## 3.0 PROCESS DETAILS

The servicing of mobile hand set usually depends on the brand & model no. of handset due to different design concept used by companies in manufacturing and fast technological changes in recent time. Minor fault may be rectified with little experiences however major fault repairing require knowledge and experience both. The repairing basically consist of hard ware & Software repairing. Hardware faults may be rectified either by replacing the PCB module in which fault occurred or by identifying the section inside the PCB module where the fault occurred and replace the faulty SMD components/ Chips/Microprocessor. The software fault may be rectified by using standard software CD for particular brand and model no., cable & a complete computer with appropriate software package.

#### 4.0. COST OF THE PROJECT

The estimated project cost is given below:

(Rs. in lacs)	
Particulars	Amount (Rs)
Land & Site Development	Rented
Building & Civil works	Rented
Plant & Machinery	1.64
Misc. Fixed assets	0.77
Preliminary & pre-operative expenses	0.35
Contingencies & escalation @ 3%	0.07
Working capital	1.00
<b>TOTAL</b>	<b>3.83</b>

**4.1 Land & Site Development:** Nil. Covered Area: 500 Square Feet

**4.2 Building & Civil Works:** Nil.

**4.3 Plant & Machinery:** Details of plant & machinery are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Computer with Accessories	1	35000	35000
Card Reader	2	10000	20000
Digital Multimeter	2	2000	4000
BGA Kit	2	5000	10000
Software	2	15000	30000
Miscellaneous Tools and Equipments	LS	–	50000
<b>Sub total</b>			<b>149000</b>
Add: Installation, transportation, etc @ 10%			14900
<b>TOTAL</b>			<b>163900</b>
<b>Say (Rs. in lacs)</b>			<b>1.64</b>

**4.4 Misc. Fixed assets:** Details of miscellaneous fixed assets are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Air Conditioner	1	30,000	30000
Furniture & fixtures	LS	--	25000
Miscellaneous items	LS	--	15000
<b>Sub total</b>			<b>70000</b>
Add: Installation, transportation, etc @ 10%			7000
<b>TOTAL</b>			<b>77000</b>
<b>Say (Rs. in lacs)</b>			<b>0.77</b>

**4.5 Contingencies & escalation:** Contingencies & escalation has been assumed at 3% of the cost of land & site development, building & civil works, plant & machinery and miscellaneous fixed assets.

**4.6 Preliminary & pre-operative expenses:** Details of preliminary & pre-operative expenses are given below.

(Rs. In lacs)	
Particulars	Amount (Rs)
Travelling expenses	5000
Professional & other fees	10000
Interest during implementation	4818
Miscellaneous expenses	15000
<b>TOTAL</b>	<b>34818</b>
<b>Say (Rs. in lacs)</b>	<b>0.35</b>

**4.7 Working capital:** Details of working capital are given below.

(Rs. in lacs)

	Period (Days)	Total Current Assets		
		Year 1	Year 2	Year 3
Raw materials	15	0.68	0.79	0.91
Power & utility	30	0.01	0.02	0.02
Salary	30	0.18	0.18	0.18
Finished Goods	15	0.79	0.91	1.03
Receivables	15	0.83	0.97	1.10
<b>Total</b>		<b>2.49</b>	<b>2.87</b>	<b>3.24</b>
<b>Working capital margin in Year 1 (40%)</b>	<b>1.00</b>			

**5.0 MEANS OF FINANCE**

The means of finance for the project is estimated as below.

(Rs. in lacs)

Particulars	Percent	Amount
<b><u>EQUITY</u></b>		
A. Equity from Promoters	40%	1.53
B. Subsidy from Central/State Govt.	-	
<b><u>DEBT</u></b>		
Term Loan from Banks/Financial Institutions	60%	2.30
<b>TOTAL</b>	<b>100%</b>	<b>3.83</b>

**6.0 PROFITABILITY STATEMENT**

(Rs. in lacs)

Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
<b><u>A. INCOME</u></b>					
Production Capacity (Services/annum)	4200	4200	4200	4200	4200
Capacity utilisation	60%	70%	80%	80%	80%
Production/annum at capacity utilisation	2520	2940	3360	3360	3360
Total income/annum	20.16	23.52	26.88	26.88	26.88
<b><u>B. OPERATING EXPENSES</u></b>					
Raw Materials	16.56	19.32	22.08	22.08	22.08
Power & Utility	0.17	0.19	0.22	0.22	0.22
Salary	2.16	2.17	2.18	2.19	2.20
Repair & Maintenance	0.04	0.05	0.05	0.05	0.05
Other Expenses	0.40	0.47	0.54	0.54	0.54
<b>Total Operating Expenses</b>	<b>19.33</b>	<b>22.20</b>	<b>25.07</b>	<b>25.08</b>	<b>25.09</b>
<b>Operating profit</b>	<b>0.83</b>	<b>1.32</b>	<b>1.81</b>	<b>1.80</b>	<b>1.79</b>
<b><u>C. FINANCIAL EXPENSES</u></b>					
Depreciation	0.14	0.14	0.14	0.14	0.14
Interest on Term Loan	0.18	0.14	0.10	0.06	0.02
Interest on Working Capital Loan	0.12	0.14	0.16	0.16	0.16
<b>Net Profit</b>	<b>0.39</b>	<b>0.90</b>	<b>1.42</b>	<b>1.45</b>	<b>1.48</b>
Net cash accruals	0.53	1.04	1.55	1.58	1.61
Principal Repayment	0.26	0.51	0.51	0.51	0.51

**6.1 Production capacity and Sales Realisation:** Total Mobile Repairing and Sale Service at 100% capacity utilization is estimated as below.

Repairing of Mobile Handsets	3000 Nos.
Selling of Mobile Handsets	1200 Nos.
<b>Total production per annum at 100% capacity</b>	<b>4200 Nos.</b>

Products	Qty	Average Rate (Rs.)	Amount (Rs)
Repairing of Mobile Handsets	3000	200	600000
Selling of Mobile Handsets	1200	2300	2760000
<b>Total Sale Turnover per annum at 100% capacity</b>			<b>3360000</b>

**6.2 Raw materials:** Total expenses on raw materials at 100% capacity utilization are estimated as below.

Particulars	Qty	Average Rate (Rs.)	Amount (Rs)
SMD Components, Soldering Pastes, Buzzer etc.	LS	--	240000
Spare Parts for Mobile	LS	--	120000
Mobile Handsets	1200	2000	2400000
<b>Expenses on raw material at 100% capacity (Rs)</b>			<b>2760000</b>

**6.3 Power & Utility:** Total expenses on power & utility at 100% capacity utilization is estimated as below.

Particulars	Quantity	Power (Kw)	Total (Kw)
Plant & Machinery	--	2.50	2.50
General Lighting	5	0.10	0.50
Total power requirement/ day (Kw)			3.00
No. of hrs/day	8		
No. of days/annum	300		
Annual power requirement (kwh)	7200		
Rate per unit (Rs)	3.50		
Expenses on power (Rs)	25200		
Expenses on other utility (Rs)	2400		
<b>Expenses on power &amp; utility at 100% capacity (Rs)</b>	<b>27600</b>		

**6.4 Salary:** Total expenses on salary in the 1<sup>st</sup> year are estimated as given below. It is assumed that salary expenses will increase @ 0.5% every subsequent year.

Particulars of Employees	Numbers	Salary/ Month (Rs)	Cost/ annum (Rs)
Manager	1	5000	60000
Skilled Workers	2	4000	96000
Unskilled workers	2	2500	60000
<b>Expenses on salary in the 1st year (Rs)</b>			<b>216000</b>

- 6.5 Repair & Maintenance:** Total expenses on repair & maintenance in the 1<sup>st</sup> year is estimated as given below. It is assumed that expenses on repair & maintenance will increase @ 2% every subsequent year.

(Rs. in lacs)

Particulars	Cost (Rs)	Rate	Amount (Rs)
Building & Civil works	0.00	1.00%	0.00
Plant & Machinery	1.64	2.00%	0.03
Misc. Fixed assets	0.77	1.50%	0.01
<b>Expenses on repair &amp; maintenance in year 1</b>			<b>0.04</b>

- 6.6 Other Expenses:** Other expenses have been assumed at 2% of sales realisation.

- 6.7 Depreciation:** Depreciation has been calculated by straight line method. The details of calculation are given below.

(Rs in lacs)

Description	Cost (Rs)	Rate	Amount/ annum (Rs)
Building & Civil works	0.00	3.34%	0.00
Plant & Machinery	1.64	5.28%	0.09
Misc. Fixed assets	0.77	6.33%	0.05
<b>TOTAL</b>			<b>0.14</b>

- 6.8 Interest on term loan & principal repayment:** Interest rate has been assumed at 8%. Duration of Loan repayment has been considered for a period of 5 years including moratorium period of 6 Months with equal monthly instalments. The details of calculation are given below.

(Rs in lacs)

Month	Year	1	2	3	4	5
Month 1	Opening balance	2.30	2.04	1.53	1.02	0.51
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest (8%)	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.30</b>	<b>2.00</b>	<b>1.49</b>	<b>0.98</b>	<b>0.47</b>
Month 2	Opening balance	2.30	2.00	1.49	0.98	0.47
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.30</b>	<b>1.96</b>	<b>1.45</b>	<b>0.94</b>	<b>0.43</b>
Month 3	Opening balance	2.30	1.96	1.45	0.94	0.43
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.30</b>	<b>1.91</b>	<b>1.40</b>	<b>0.89</b>	<b>0.38</b>
Month 4	Opening balance	2.30	1.91	1.40	0.89	0.38
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.30</b>	<b>1.87</b>	<b>1.36</b>	<b>0.85</b>	<b>0.34</b>
Month 5	Opening balance	2.30	1.87	1.36	0.85	0.34
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.30</b>	<b>1.83</b>	<b>1.32</b>	<b>0.81</b>	<b>0.30</b>
Month 6	Opening balance	2.30	1.83	1.32	0.81	0.30

	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.30</b>	<b>1.79</b>	<b>1.28</b>	<b>0.77</b>	<b>0.26</b>
Month 7	Opening balance	2.30	1.79	1.28	0.77	0.26
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.01	0.00
	<b>Closing balance</b>	<b>2.25</b>	<b>1.74</b>	<b>1.23</b>	<b>0.72</b>	<b>0.21</b>
Month 8	Opening balance	2.25	1.74	1.23	0.72	0.21
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.02	0.01	0.01	0.00	0.00
	<b>Closing balance</b>	<b>2.21</b>	<b>1.70</b>	<b>1.19</b>	<b>0.68</b>	<b>0.17</b>
Month 9	Opening balance	2.21	1.70	1.19	0.68	0.17
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	<b>Closing balance</b>	<b>2.17</b>	<b>1.66</b>	<b>1.15</b>	<b>0.64</b>	<b>0.13</b>
Month 10	Opening balance	2.17	1.66	1.15	0.64	0.13
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	<b>Closing balance</b>	<b>2.13</b>	<b>1.62</b>	<b>1.11</b>	<b>0.60</b>	<b>0.09</b>
Month 11	Opening balance	2.13	1.62	1.11	0.60	0.09
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	<b>Closing balance</b>	<b>2.08</b>	<b>1.57</b>	<b>1.06</b>	<b>0.55</b>	<b>0.04</b>
Month 12	Opening balance	2.08	1.57	1.06	0.55	0.04
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	<b>Closing balance</b>	<b>2.04</b>	<b>1.53</b>	<b>1.02</b>	<b>0.51</b>	<b>0.00</b>
<b>Principal Repayment</b>		<b>0.26</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>	<b>0.51</b>
<b>Interest</b>		<b>0.18</b>	<b>0.14</b>	<b>0.10</b>	<b>0.06</b>	<b>0.02</b>

## 7.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5
Profit After Tax (Net Profit)	0.39	0.90	1.42	1.45	1.48
Depreciation	0.14	0.14	0.14	0.14	0.14
Interest	0.18	0.14	0.10	0.06	0.02
<b>Total</b>	<b>0.71</b>	<b>1.18</b>	<b>1.66</b>	<b>1.65</b>	<b>1.63</b>
Interest	0.18	0.14	0.10	0.06	0.02
Loan repayment	0.26	0.51	0.51	0.51	0.51
<b>Total</b>	<b>0.43</b>	<b>0.66</b>	<b>0.61</b>	<b>0.57</b>	<b>0.53</b>
<b>DSCR</b>	<b>1.63</b>	<b>1.81</b>	<b>2.70</b>	<b>2.87</b>	<b>3.07</b>

Average DSCR = 2.43

## 8.0 BREAK EVEN POINT (BEP)

(Rs. in lacs)

Year	1	2	3
<b>A. Net sales</b>	<b>20.16</b>	<b>23.52</b>	<b>26.88</b>
<b>B. Variable cost</b>			

Raw Materials	16.56	19.32	22.08
Power & Utility	0.17	0.19	0.22
Other expenses	0.40	0.47	0.54
Interest on Working Capital Loan	0.12	0.14	0.16
<b>Total variable cost</b>	<b>17.25</b>	<b>20.12</b>	<b>22.99</b>
<b>C. Contribution (A-B)</b>	<b>2.91</b>	<b>3.40</b>	<b>3.89</b>
<b>D. Fixed &amp; Semi-fixed Costs</b>			
Salary	2.16	2.17	2.18
Repair & maintenance	0.04	0.05	0.05
Interest on Term Loan	0.18	0.14	0.10
Depreciation	0.14	0.14	0.14
<b>Total fixed cost</b>	<b>2.52</b>	<b>2.50</b>	<b>2.47</b>
<b>E. BREAK EVEN POINT</b>	<b>86.53%</b>	<b>73.44%</b>	<b>63.48%</b>
<b>F. BEP at operating capacity</b>	<b>51.92%</b>	<b>51.41%</b>	<b>50.78%</b>
<b>G. Cash BEP</b>	<b>49.13%</b>	<b>48.62%</b>	<b>48.00%</b>

## 9.0 INTERNAL RATE OF RETURN (IRR)

(Rs. in lacs)

Year	0	1	2	3	4	5
<b>CASH OUTFLOW</b>						
Capital Expenditure	2.48	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	2.49	0.37	0.37	0.00	0.00
<b>Total (A)</b>	<b>2.48</b>	<b>2.49</b>	<b>0.37</b>	<b>0.37</b>	<b>0.00</b>	<b>0.00</b>
<b>CASH INFLOW</b>						
Profit After Tax		0.39	0.90	1.42	1.45	1.48
Add: Depreciation		0.14	0.14	0.14	0.14	0.14
Add: Interest		0.18	0.14	0.10	0.06	0.02
Add: Salvage Value						
<b>Total (B)</b>	<b>0.00</b>	<b>0.71</b>	<b>1.18</b>	<b>1.66</b>	<b>1.65</b>	<b>1.63</b>
<b>NET FLOW (B-A)</b>	<b>-2.48</b>	<b>-1.79</b>	<b>0.81</b>	<b>1.29</b>	<b>1.65</b>	<b>1.63</b>

IRR = 24%